ClassRoom Manager
User Guide

2015.5.5
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1　　　Copyright Notice

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The User Guide

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3.1 MUSAC Limited Software Licensing Agreement

PARTIES

1   MUSAC Limited ("the Licensor")

2   You ("the Licensee")

BACKGROUND

A   The Licensor is the exclusive owner of the Software.

B   The Licensor has agreed to grant a license to the Licensee to use the Software upon the terms and conditions contained in the Software Licensing Agreement and any schedules attached.

The Classic User Guide has the full Agreement and Warranty with MUSAC Ltd. See from your most recent Classic MUSAC side bar, the Classic User Guide.

3.2 Software Warranty

This warranty covers any physical defect in the software distribution media.

MUSAC Ltd agrees to replace defective DVD/CDROMS by return post, without charge.

MUSAC Ltd is not responsible for problems caused by computer hardware or computer operating systems.

All warranties or merchantability and fitness for a particular purpose are disclaimed and excluded. MUSAC Ltd shall not in any case be liable for special, incidental, consequential, indirect, or other similar damages even if MUSAC Ltd has been advised of the possibility of such damages.

MUSAC Ltd is not responsible for any costs incurred as a result of lost profits or revenue, loss of use of the software, loss of data, cost of recreating lost data, the cost of any substitute program, claims by any other party other than the Licensee, or for other similar costs. MUSAC Ltd's aggregate liability arising from or relating to this Agreement or the software or the documentation is limited to the license price paid by the Licensee.

The agents, distributors, and dealers of MUSAC Ltd software may not modify the Limited Warranty nor make additional warranties binding on MUSAC Ltd.

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Conventions used

Example	Description
<Enter>	Means 'Press the Enter key'
Ctrl	Refers to the Control key, usually displayed as Ctrl on your keyboard
Alt+S	Press and hold the Alt key then press the 'S' key at the same time
Click **Next**	Click on the screen button labelled **Next**
Double-click	Press the left mouse button twice in rapid succession
Type this	You are required to type or locate exactly as it is written Mono font also used to display files names and paths
Select or Highlight	Click at the end of text or to one side of an object and hold the left mouse button down while dragging back across the text or object.
MUSAC SM, CM, AB6	Refers to MUSAC Ltd existing product suite Student Manager, ClassRoom Manager, Absences
Start, Enter	Colour used to draw attention to text
	Indicates compliance with Ministry of Education requirements
	To indicate a school's MUSAC Administrator tasks

Information within this document may contain data from a school. Where this has occurred the identities have been rearranged and any visual data has been purposely distorted.

MUSAC Website Registration

The purchase of MUSAC Ltd products includes all the necessary files. Future update files are available for downloading by registered users of the MUSAC Ltd website (www.musac.co.nz). If not already registered on our website, visit the MUSAC Ltd website to register for downloads and support.

Figure 1: MUSAC Website
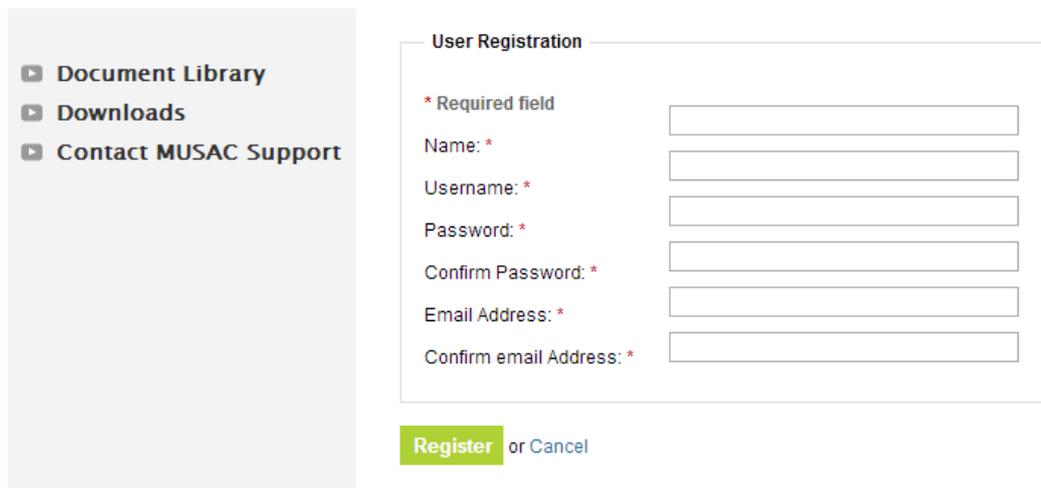
Figure 2: Registration Process

1   Complete all the basic details fields
2   Click Register

You will now receive an email with instructions on how to log on to the website.

4   Installation

MUSAC Ltd highly recommends that initial training is conducted so staff can receive full benefit from ClassRoom Manager's extensive list of features. Please contact your local product specialist for training – see www.musac.co.nz for North Island schools, or www.solutionsandservices.co.nz if you're in the South Island.

MUSAC Ltd strongly advises that an authorised agent completes the installation process. This will ensure that installation goes smoothly and efficiently. The MUSAC system files must be installed on every computer using MUSAC Classic software. They hold the overhead utilities and components which must form part of the system of each individual computer, and are part of MUSAC Ltd's mega installer.

If your file server is a 'dedicated' file server (ie. a computer used solely to manage the network and not used for running programs and data entry) then you do not need to install the system files on this machine.

It is also worth noting that the correct installation, configuration and maintenance of your systems are essential to a well-functioning computing environment. For this reason, use of the services of a MUSAC Ltd agent is recommended.

For further advice on your network, including infrastructure auditing, please contact MUSAC Ltd Software Support on telephone 0800 600 159. if you have queries about whether or not a specific hardware configuration is suitable for use with MUSAC Ltd software.

5 MUSAC Classic Installer

There are two sets of files involved in the MUSAC Classic installation process:

1 The MUSAC 32bit system files for all our software
2 The MUSAC program files
3 The Ministry's Wrapper and .Net 3.5 SP1 Framework are also necessary for interoperability with the Ministry's server for NSN, ENROL, roll returns, etc and School-links.

This installer installs or upgrades the core MUSAC Classic Products:

- Student Manager
- ClassRoom Manager
- Absences 6
- OneScreen
- Staff Manager
- Timetable (secondary and area schools only)

5.1 Installation Options

The installation of MUSAC Classic involves selecting the installation location (which the software will detect if the product has previously been installed on this machine).

When installing updates, you MUST ensure no users are currently running ClassRoom Manager (or other modules).

From CMAdmin > Other Utilities > School-links Export, filtered data can be exported to School-links via the saved .csv file prepared.

The following products are still installed and managed separately:

- Financial Manager (Accounts/Assets)
- Library Manager

CM Admin

5.3 Typical Network Configuration

Most schools will install MUSAC software on a network, with pc's in the school and 'remote' computers eg. a teacher's laptop and a home machine.

1   CMAdministrator

CMAdministrator (or CMAdmin for short) is the administration module and must only be installed on one machine—the fileserver. It must NOT be installed on remote machines.

The name of this program is **cmadmin.exe**

2   CMTeacher

CMTeacher (or CM for short) is the part of ClassRoom Manager which the classroom teacher uses to enter information relating to their students, and to design and/or print documents relating to that information.

If you are on a school-wide network then it need only be installed on the fileserver, as each teacher can access it from there. The name of this program is **cm.exe.**

Note: Teacher's laptop or home computer (ie. a remote computer) can be used. Files of data can be accessed via a terminal server, please discuss with your MUSAC/IT administrator, or MUSAC agent.
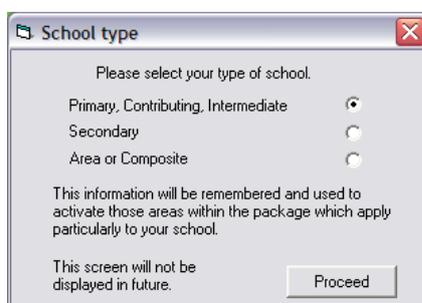
Figure 3: CMAdmin school type

For this example we were installing for a secondary school. Click **Secondary** then **Proceed.**
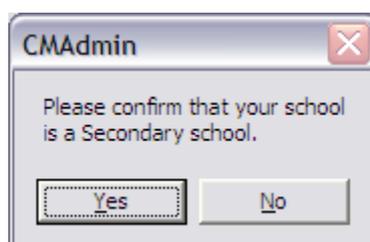
Figure 4: School type confirmation

Click **Yes.**

One or two other things may happen the very first time you run the ClassRoom Manager:

1   A test that ensures several subdirectories (eg. /backup, /nzqa, /natcols) have been created. If they are not found then they are created

2   Tests are also carried out to ensure that the databases upon which the various packages are based do, in fact, exist. If they are found to be missing then a copy of each database is created

5.4 Unc Pathnames

A UNC pathname is a file address which refers to a computer by its network name, rather than by a drive letter.

eg. **\\IT12345\cm** rather than **M:\cm**

MUSAC software prefers the use of drive letters. If the CM directory is submerged five subdirectories deep then it's very useful to allocate a drive letter to the level above the CM folder.

eg. **\\IT12345\apps\MUSAC\cm** can be known as **M:\cm** much like a nickname

6   ClassRoom Manager Overview

6.1 Purpose of ClassRoom Manager

In ClassRoom Manager you can design high-quality documents to enter student-centric data, and print these documents. There are a range of national standards documents for the entry and reporting of OTJs and related comments. Under NCEA are a number of documents summarising and overviewing a student's NCEA profile. For schools which do not have customised documents set up by our agents for entering and analysing assessment data, a pre-configured solution is provided. These are configured in CMAdmin > MUSAC Assessments and Profiles to make these available in CM Teacher.

This software is a school-wide flexible administrative tool, potentially used by all teachers, assisted by a co-ordinator who takes responsibility for the management of the module on a school-wide basis. You are not restricted to data entries and reports which have been designed for you. Documents and sections of the database can be configured to meet your own needs. The database at the heart of the package is *cm.mdb,* similar to a large number of columns, and one row for each student in the school. Each time data is recorded in a cell it is 'date and teacher' stamped.

	Column 1	Column 2	Column 3	Column 4	Column 5	.....
Student 1						
Student 2						
Student 3		Data cell				
Student 4				Data cell		
Student 5						
Student 6						
.....			Data cell			

Figure 5: CM is like spreadsheet

Documents are designed to show the data held in a cell for a generic student. When the document is viewed then the data belonging to the current student is not only displayed on the document but may also be entered or edited via the document.
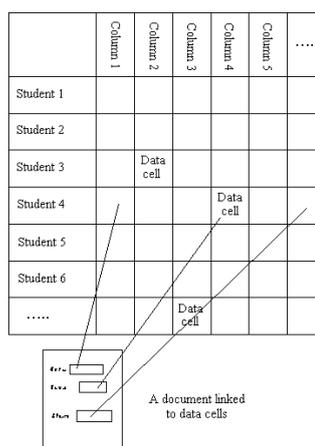
Figure 6: A document linked to data cells

Some documents are designed for data entry, and others for reports to parents, the Principal or to the Board of Trustees. Each is linked to data in cells.

Each teacher will wish to view just his or her students rather than the whole school, and select from one or two documents rather than all those the school has designed. Dossiers provide this person-centric marginalised view. A dossier is a selection of students and columns (a subset of the database), and a document or two used to view/access the data.

Once set up, a teacher may have one or more dossiers.
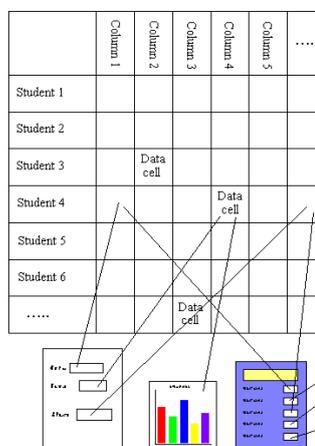
Figure 7: Several documents linked to data cells

You can also design graphs, tables, comment banks, markbooks, activities and pictures, which may optionally be included in a dossier.

ClassRoom Manager is able to store scanned documents, video clips and other records of student endeavour. It includes some complex result recording processes specific to the New Zealand educational scene and some analysis processes relating to these.

6.2 Components of ClassRoom Manager

6.2.1 ClassRoom Manager Administrator

This provides the administrative tools to manage various aspects of the package.

6.2.2 ClassRoom Manager Teacher

This is designed for use by the teacher. It allows the design of documents, tables and graphs and the addition of new columns and comments. CM Teacher may also be used for the entry of student information and for printing reports based on this information.

6.2.3 ClassRoom Manager Planner

This program includes resource allocation and time-line management to help with all aspects of curriculum delivery.

6.3 Basic Tasks for Administrator

The ClassRoom Manager administrator's task is to manage the use of ClassRoom Manager within and beyond the school and will involve:

Consultation with school planning groups to decide on the appearance of documents

The creation (or import) of columns which will hold the student data which the school wishes to record

The design of the documents which link to these columns

The addition of staff members to the staff database

The creation and management of dossiers for teachers

A wide variety of other functions, for example:

- export and import of e-asTTle data
- creation of popup files
- management of group rights for teachers
- maintenance of comment banks for reports
- creation of markbooks
- management of student photos
- setup for National Standards reporting (see National Standards for details as well as the latest on our website www.musac.co.nz. Documents can be added to dossiers if you wish)

6.4 Basic Tasks for ClassRoom Manager Teacher

ClassRoom Manager enables your school to:

record student results, write report comments and document National Standards

print documents, print graphs

keep track of progress, keep track of activities

work at home

The basic processes have been designed to be simple to aid teachers to:

log in to CMTeacher

select the dossier with which to work

select the document or markbook with which to work

move to the required student

enter results or comments including National Standards requirements (see our website www.musac.co.nz for latest developments, and section below for more details

7   CMAdmin Menus

CMAdmin (ClassRoom Manager Administrator) consists of two (or three – secondaries have a page for NZQA) screens of buttons, each of which provides access to a specific management task.

The opening screen is the main menu screen.
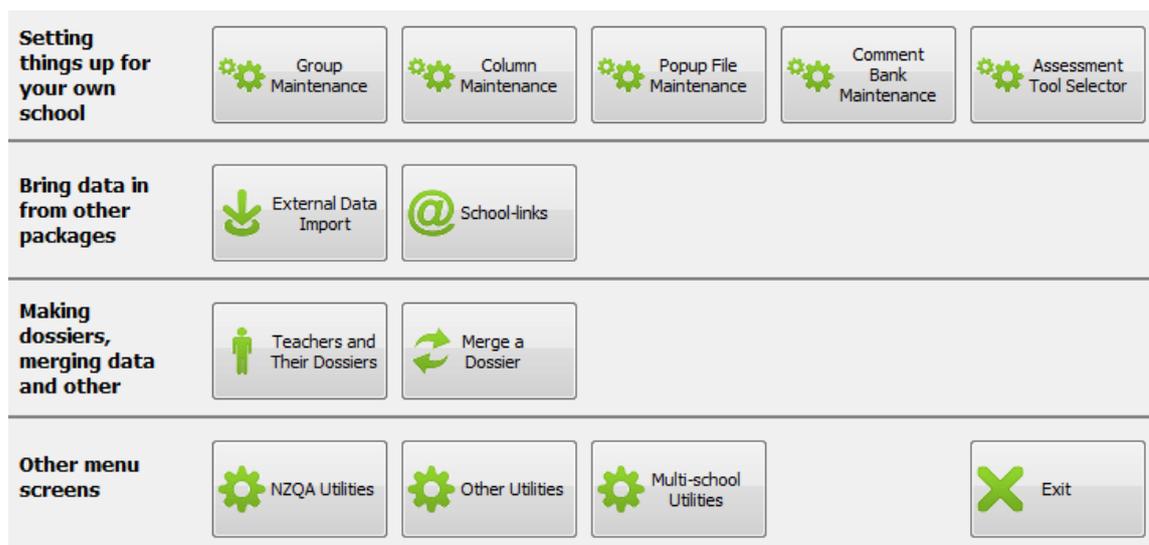
Figure 8: The main menu screen – secondary school version

The primary/intermediate school and secondary school versions are similar, and vary with the inclusion of the bottom row button which provides access to the NZQA menu screen.

It has also sensed that the program is being operated in 'multi-school' mode. In this mode two or more schools share the same databases and access is provided to utilities peculiar to that situation via the 'Multi-school' button in the bottom row.

Click the 'Other utilities' button for a portion of the relevant menu shown below.
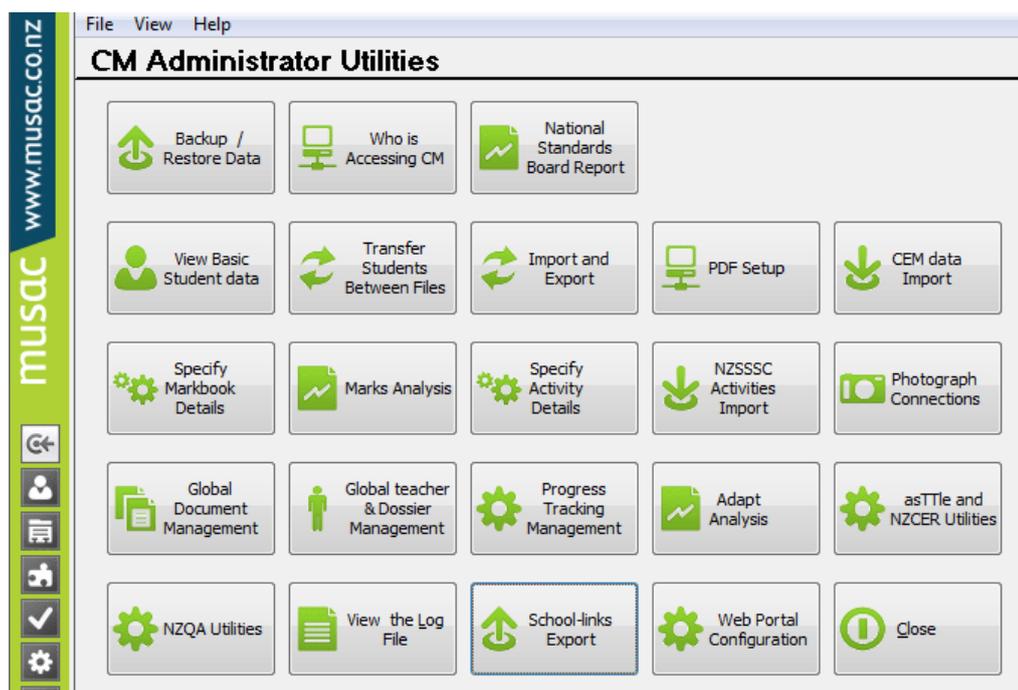
Figure 9: The 'Other utilities' menu screen – secondary school version

7.1 Printing the NZSSSC Report from CMAdmin

All school sports information can be maintained completely within the CMAdmin Activities area and the NZSSSC Report can be printed directly from there. For current details on the Census, see the NZSSSC website.

The following is specific to NZSSSC information - see Help file, Activities area of CMAdmin.

1   Click 'Other Utilities' from the main CMAdmin menu.

2   Click 'Specify Activity Details'.

3   Click 'Create NZSSSC Report'. This will be used when the report is required for the New Zealand Secondary School Sports Council.

Setting up Sports activities and entering data:

Click 'Create and adjust activities'.
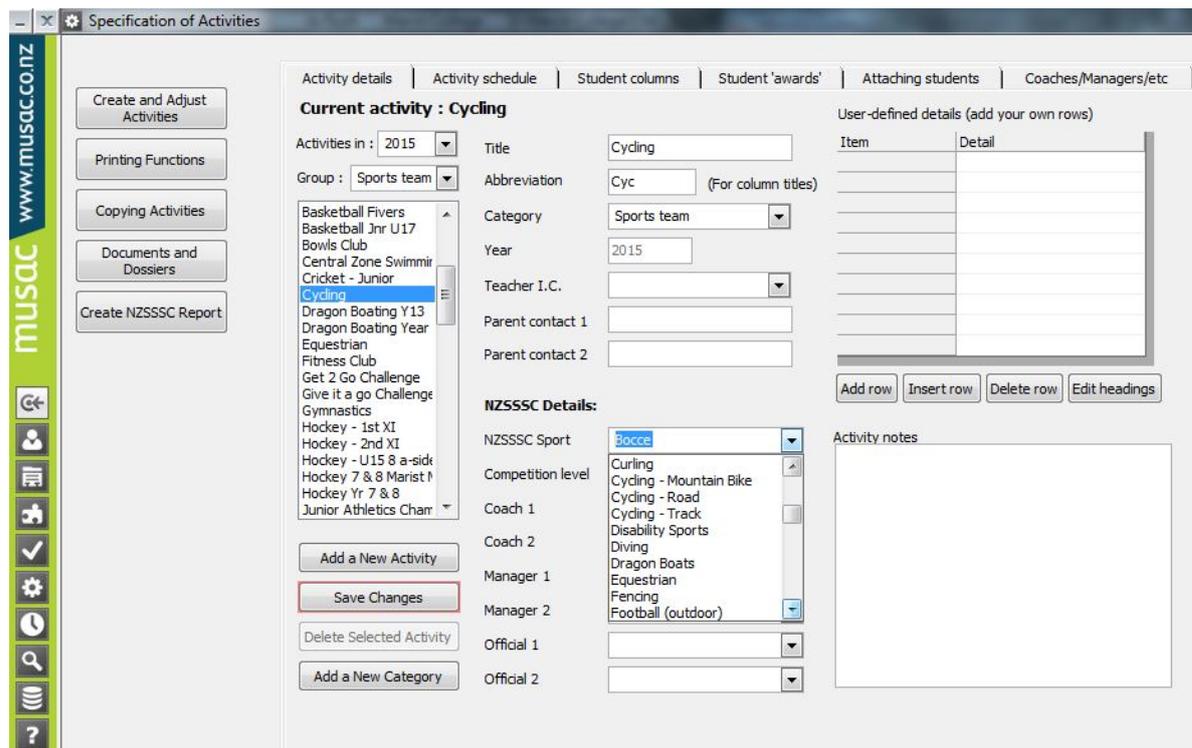
Figure 10: Activity Details tab

At the top of this screen includes the tab, 'Coaches/Managers/etc':

Clicking on this tab brings up the screen for entering relevant data for all the Coaches, Managers and Officials involved in sports at your school:
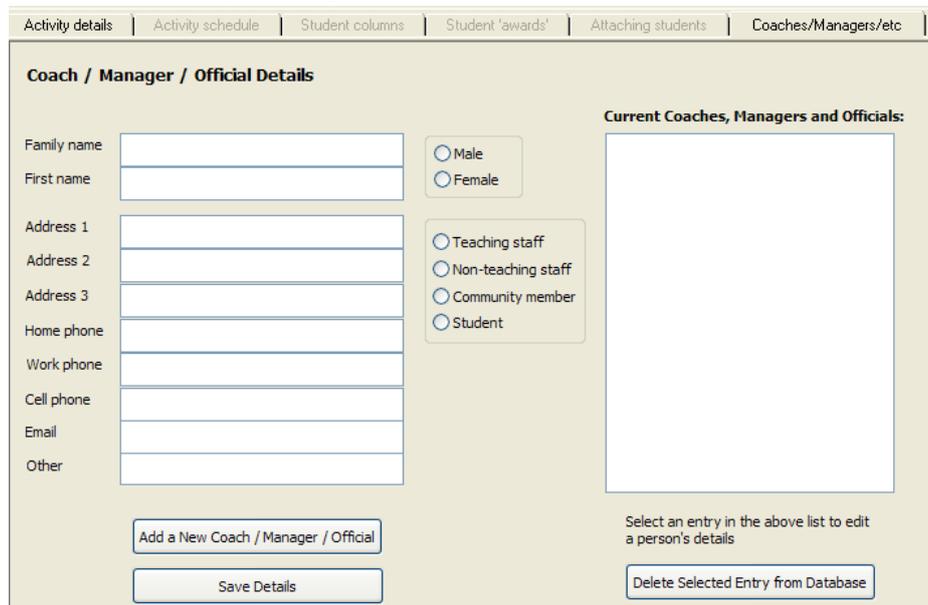
Sports Data Entry Screen

Back on the Activity details tab, if you click 'Sports team' from the Group drop-down or you click on any particular sports team the input fields are displayed:
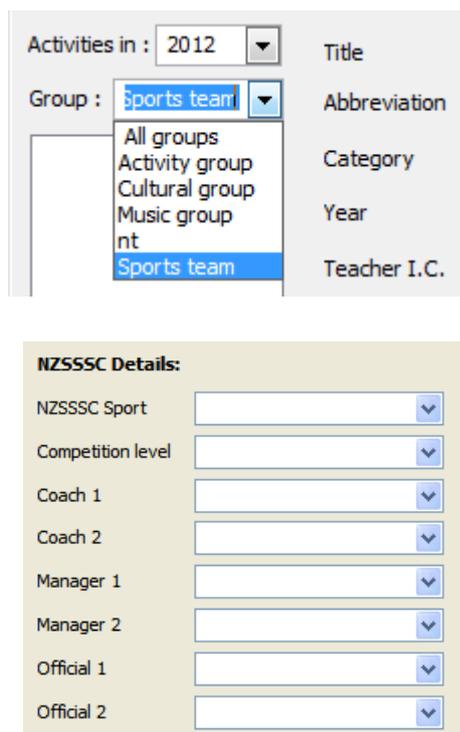
Figure 11: Sports Team input Fields

The NZSSSC Sport box contains a list of all sports (which is periodically updated) in the NZSSSC Report. Select the correct sport for the team you are setting up.
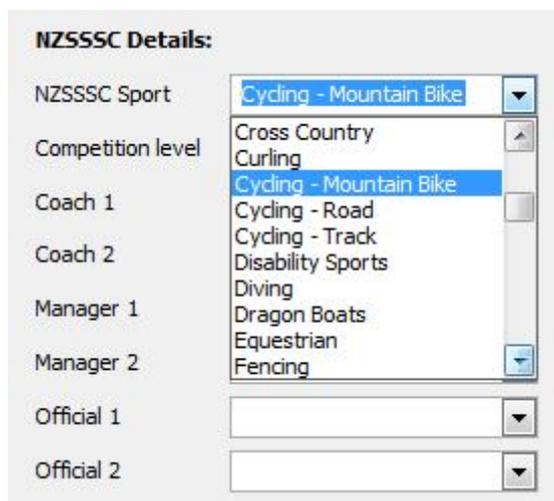
Competition Level contains the three levels which are required for the NZSSSC Report:

Coaches, managers and officials contain the names you have entered in the database.

7.1.1 Creation of NZSSSC Report

Click 'Create NZSSSC Report' for the following screen:

Creation of Report for New Zealand Secondary School Sports Council

███████ School

Please DO NOT run this utility if Microsoft Excel is not installed on your computer.
Instead use the NZSSSC SportSCID program to generate the report.

Please make sure the following fields are filled in before you create the report. Where possible fields have been pre-populated - please check they are correct. Student numbers are as at 1 March.

☐ Leavers have been moved to a leavers' database

Number of Year 9-15 females	133	Number of teaching staff	17
Number of Year 9-15 males	305	Number of non-teaching Staff	0

Total Number of Year 9-15 Students = 438   Total Number of Staff = 17

Your name	
Position	
Type of school	
School decile rating	2
RSD / SSC aligned with	

Generate NZSSSC Report

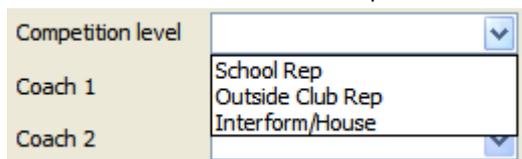**Sports Council Creation of Report screen**

Our software assumes Microsoft Excel is installed on your computer (required for the SportSCID program); if not you may need to use SportSCID to generate the report.

The data required is similar to 'School Information' within the SportSCID program. The numbers of Year 9-15 females and males and Total Number of Students have been pre-populated from the SM database. All other fields must be filled in before generating the report. The number of teachers cannot be 0.

The drop-down lists have been populated with the same entries as those in the SportSCID program, ie:

Position:

Sports Director/HOD
Sports Co-ordinator
Sports Assistant

Type of School:
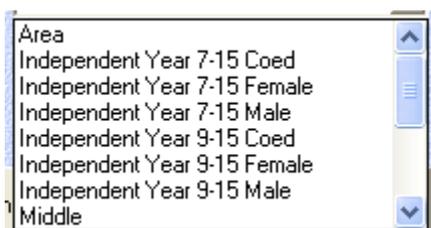
RSC/SSD aligned with:
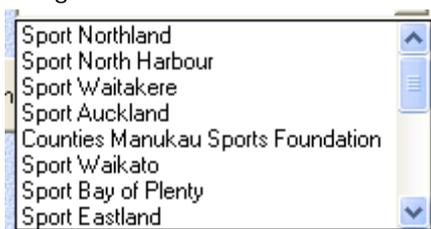
Click 'Generate NZSSSC Report' to produce the same spreadsheet as that produced by the NZSSSC SportSCID program. However, instead of it being named *yourschoolname.*xls it will be named *nnnn*NZSSSC*yyyy-mm-dd.*xls, where *nnnn* is your school Ministry of Education number and *yyyy-mm-dd* is the current date.
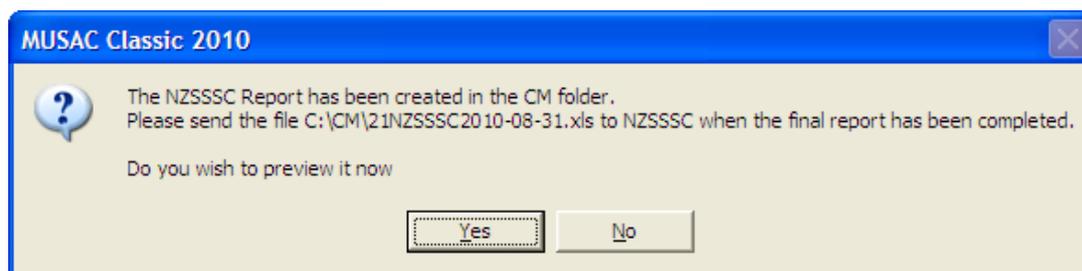
Figure 12: NZSSSC Report Confirmation

This spreadsheet will identify a single 'School Sport Participant' category differentiated by gender. School Sport Participants are students who had MEANINGFUL ENGAGEMENT in each sport in your school; who
- represented the school in that sport, OR
- took part in a sport provided in-school over a period of six weeks or more, OR
- played for a club arranged by the school as the school had no teams in that sport, OR
- took part in sport provided through the KIWISPORT initiative.

Therefore students who took part in "one off" in-school events such as school athletics, swimming sports, or short term inter-form/house events are NOT included.

The primary school version of the 'Other Utilities' menu screen, is very similar to the secondary school version except that it has fewer buttons, as follows.
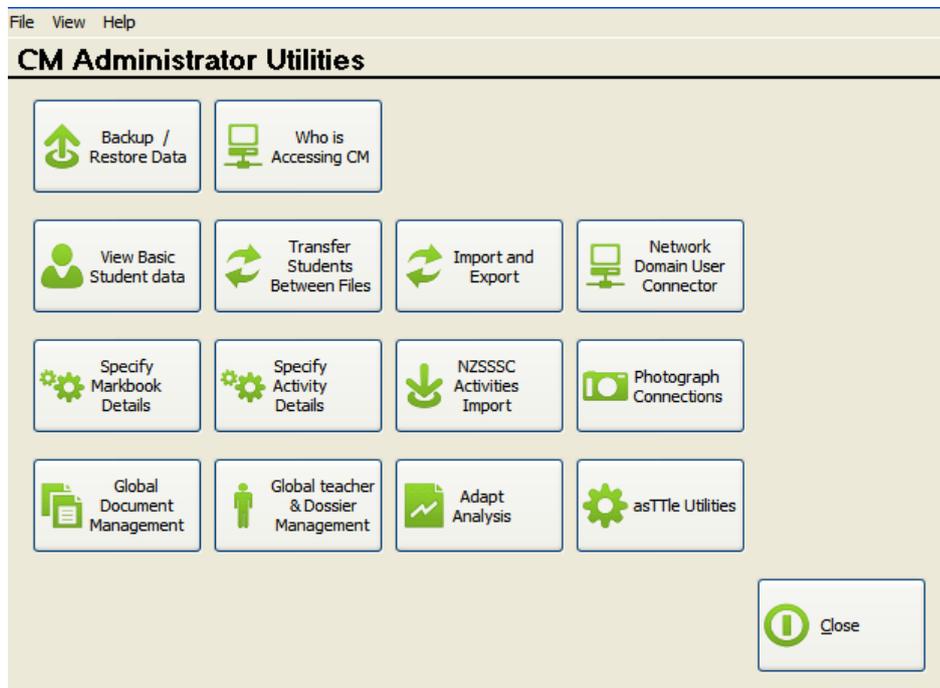
Figure 13: The 'Other utilities' menu screen – primary school version

For secondary schools click 'NZQA utilities' from the main screen 'Other utilities' screen, and the following menu screen is displayed.
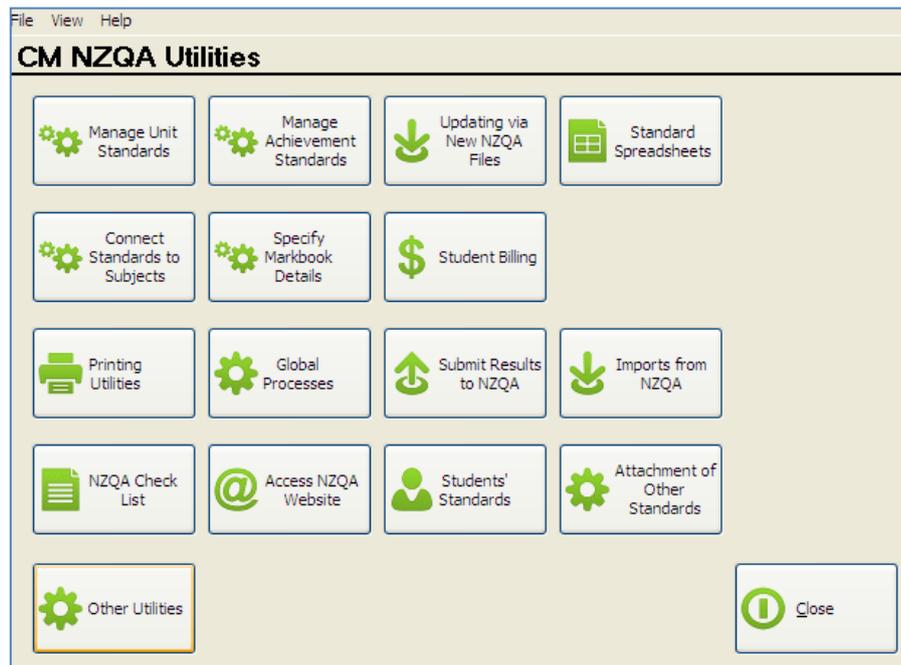
Figure 14: The 'NZQA utilities' menu screen

The 'Multi-school utilities' menu, accessed from the main menu screen in the secondary school version has one button other than the 'return to main menu', as shown.

Figure 15: The 'Multi-school utilities' menu screen

The pull-down menu items are not used much as it is easier to click directly on the required utilities rather than hunt through a pull-down menu. Consequently, the 'File' menu has one item:


Figure 16: The 'File' menu

The software prefers that you use the large exit button at the bottom right of each menu screen.

The 'View' menu below, allows you to choose from four basic colour schemes. These are:
> Basic grey, as shown in the illustrations
> A rather pleasant whitish background
> A pale blue background
> A sort of brown coloured background
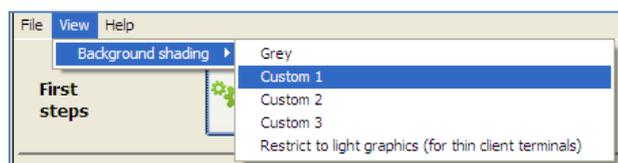
Figure 17: The 'View' menu

In addition to these is the possibility to restrict the program to 'light (or lite) graphics'. This setting is designed to cause the screen to be drawn somewhat faster than the four 'colour' settings and this can be beneficial in terms of speed when operating the software via the thin client.

Figure 18: The 'Help' menu

Clicking on Help from the Help menu displays a message to choose ClassRoom Manager or the NZQA User Guide.

7.2 Where to from here?
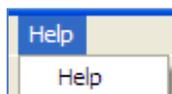
MUSAC agents can help you plan what you need. They have been through this process with hundreds of schools and can easily guide you along the most productive paths. Not only that, a large number of the documents you will need have already been designed for other schools. The 'MUSAC Assessments and Profiles' button in CMAdmin provides documents and graphs for analysis, bearing in mind that any documents modified MUST be carefully renamed to avoid being over-written with subsequent updates.

If you are a primary school then your main aim may be to monitor students' progress towards a number of the school's objectives using perhaps Curriculum Framework objectives, PAT tests, your own Specific Learning Outcomes and National Standards. You might also wish to design some sort of Cumulative Record document.

If you are a secondary school then you will probably want to design your term reports and subject analyses.

The tasks of the administrator determines the path through the buttons. Firstly, set up the columns to hold the data to record. When the module is first installed there are only ten student data columns:

1   Family name
2   First names
3   Preferred name
4   Year
5   Horizontal class group (Class, Year or form etc)
6   Vertical group (Whanau, House, room etc)
7   Gender
8   Date of Birth
9   Status (Full time, Part time, Pre-enrolment, Leaver or Delete)
10   Ethnicity

MUSAC has also designed several thousand other columns for you called the 'National' columns as they will be the same for every school and data held in these columns can be exchanged between schools. In addition to these you might want to design your own.

Once the columns are in place, add your students. In Student Manager they will already be there waiting for a document via which they can reveal themselves. If you don't have Student Manager then you'll have to either import students separately or add them to the database manually.

Documents are designed in CMTeacher, not in CMAdmin. So, for those who wish to take that step, see the CMTeacher latter part of this document.

Add your staff members to the staff database, and to give them suitable rights to access the various functions of CM, create dossiers for your teachers so that they see only their own students and only columns relating to those students.

Your teachers may want to take their dossiers home either on a pen drive (to use on their home machine) or on their laptops. Ensure that the background school details from Student Manager are correctly set up in CM. The teacher portal of Classic web portals is available, for more information contact MUSAC Support on 0800 600 159.

Having covered the main menu buttons, to the 'Other Utilities' menu. The main one, particularly for secondary schools, is the creation and management of markbooks. Some primary and intermediate schools now use markbooks too. (Markbooks are like the teacher workbook, where you have 100 columns to record your own details concerning your students, frequently based on subjects. We'll show you how to manage markbooks too.

Finally, all of the other functions and utilities you might need from time to time to ensure the smooth functioning of CM.

8   Columns

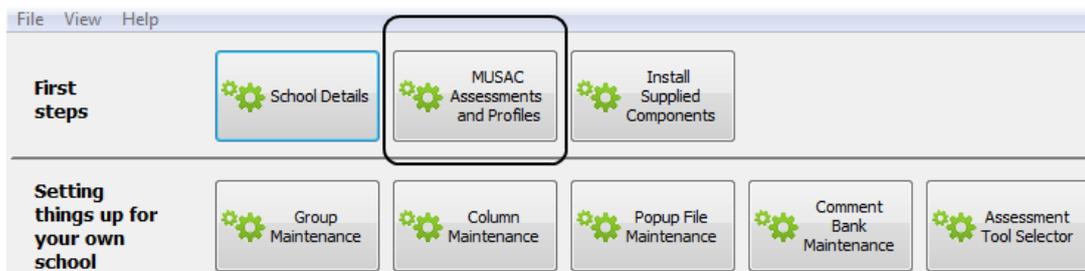Some of the following buttons are dealt with here.

Figure 19: The 'Column' buttons

Remember: Some sections and processes may be considered of greater importance in the scheme of CM than others. Those which you can afford to skip on a first reading will have a small icon to indicate that you can return to them for fuller detail if required.

8.1   MUSAC Assessments and Profiles

### 8.1.1   MUSAC Preconfigured Solution – Assessments and Profiles Overview

Many schools have custom solutions created especially for them by our Agents, some schools do not. To assist schools which do not have a selection of documents for entering and analysing assessment data, ClassRoom Manager comes with an "out-of-the-box" solution. The MUSAC Administrator ticks a box to have the first set of documents and menus available in ClassRoom Manager. Any existing documents are also available in the same way. The initial set contains PAT, e-asTTle, STAR and National Standards. For Secondary schools, Academic Mentoring, and NZQA/NCEA tracking is also available. Further editions to this easy solution may be added.

To make the out-of-the-box solution available to teachers, also see 21.3 Pre-Selection of dossiers, Documents and MUSAC Assessments and Profiles:

From the CMAdmin main menu click 'MUSAC Assessments and Profiles'
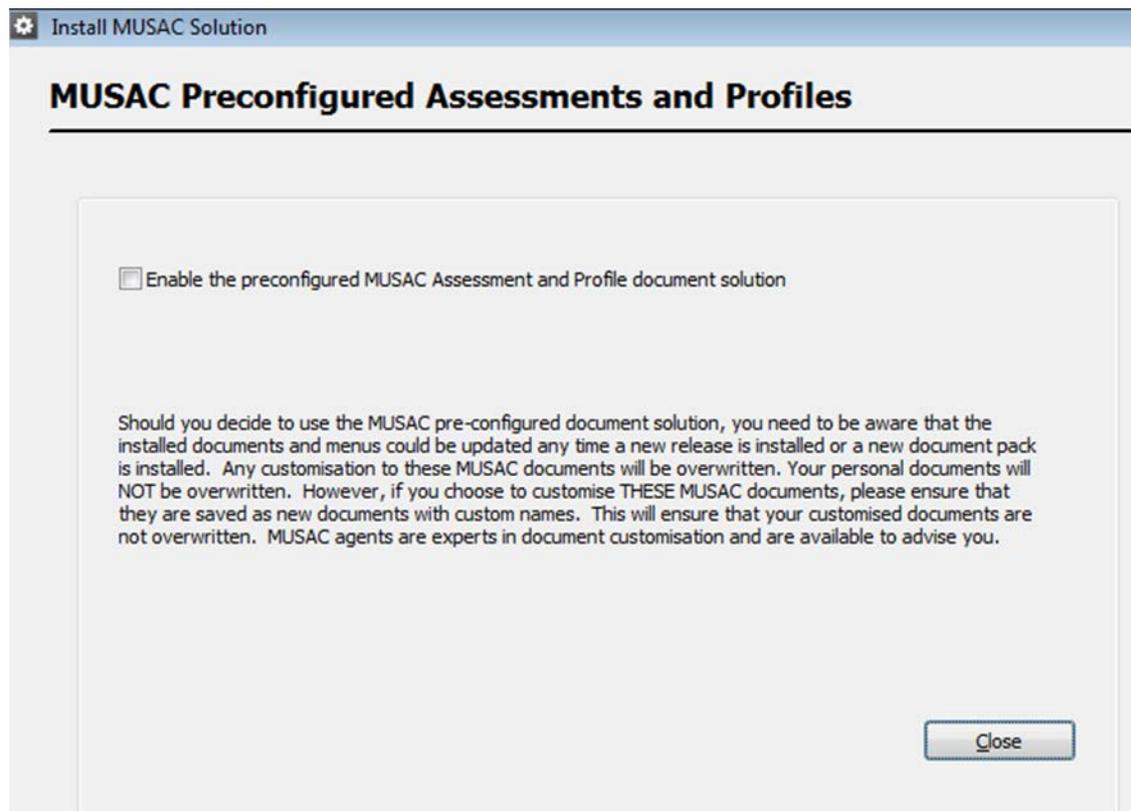
- By default, the box is not ticked, and the preconfigured solution is not available.
- Once the checkbox is ticked, click >Update for the change to be effected.
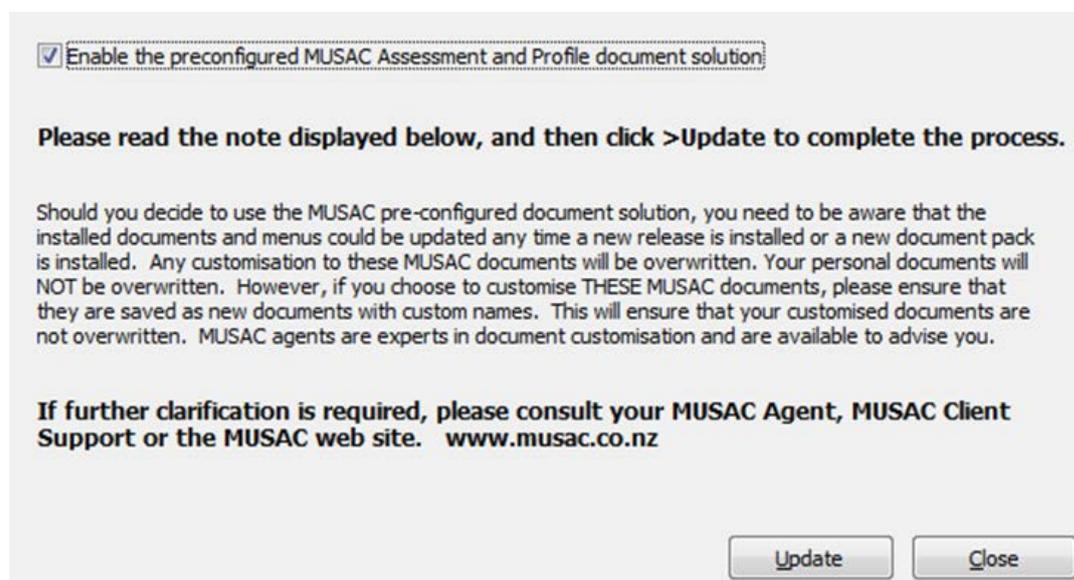
The documents and menus are delivered as packs when version 12.9 or later of MUSAC Classic is installed. Once the MUSAC Administrator has 'ticked the box', the next time ClassRoom Manager is opened, the packs are un-packed and become available. This process may take a few minutes, but it is a once only delay while the documents and menus are unpacked.
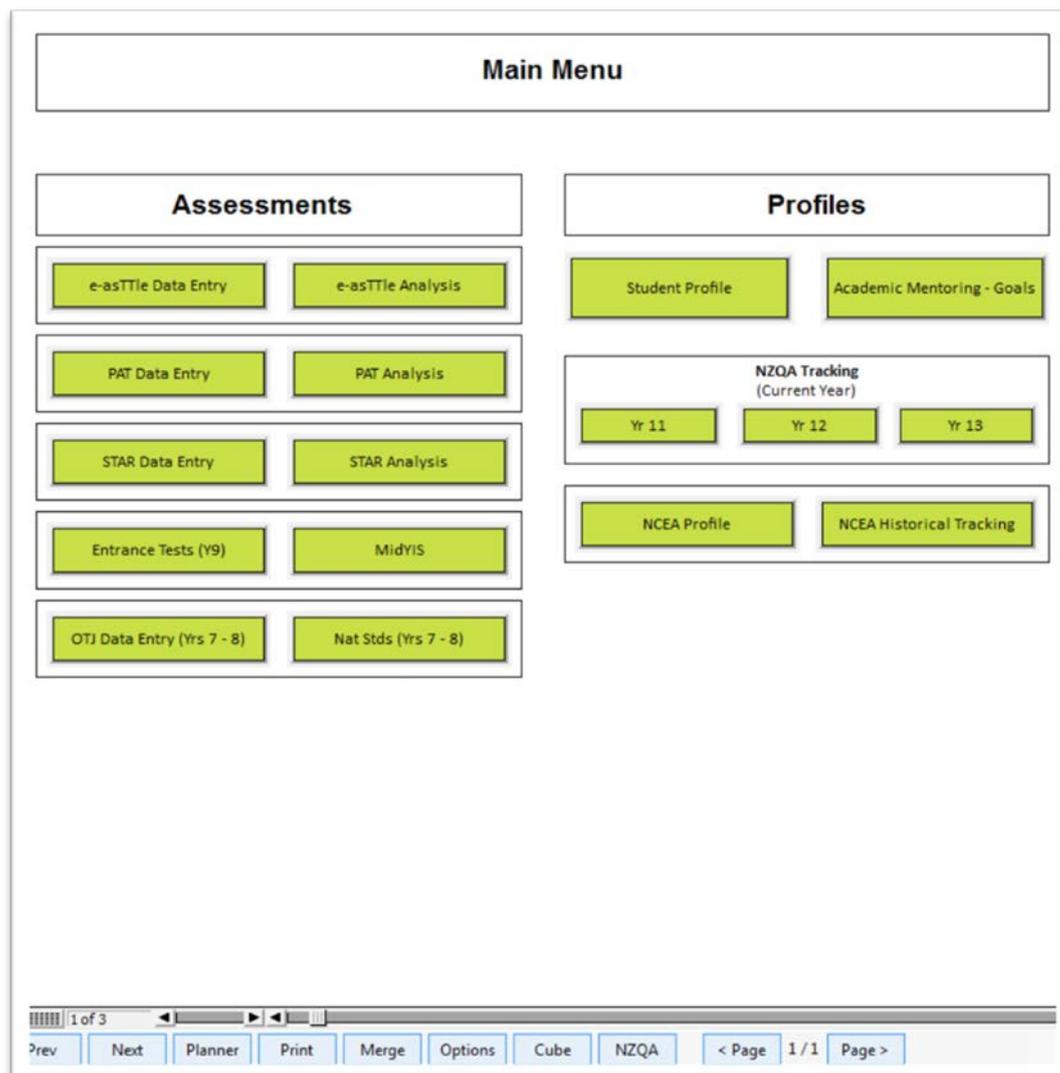
Primary Schools:
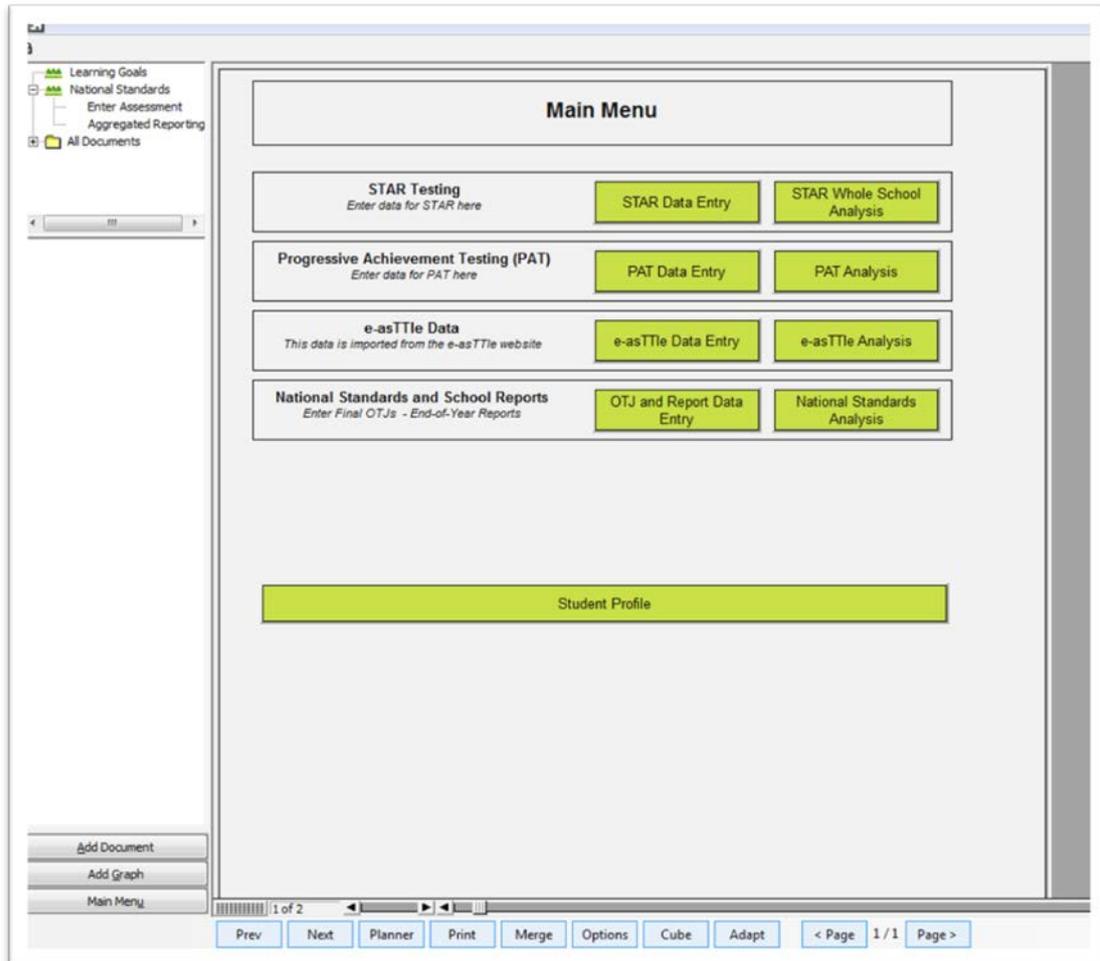
CM opens with this menu where all the additional documents are available.

To view any other documents that you may have, click on >All Documents on the left near the top, and the panel on the left will be filled. Click on a document to view it as normal. Clicking >Main Menu right at the bottom on the left displays the Main menu again.

Technical Detail:
•   Updating the MUSAC Main Menu.dmt occurs automatically if a new menu.dmt – labelled with the correct moe school type is unpacked from the component pack. (e.g. 0MUSAC Main Menu.dmt becomes MUSAC Main Menu.dmt)
•   The first time CM is opened after an installing the MUSAC Assessments and Profiles, the new menu for your school type becomes the new MUSAC Main Menu for all the users in the school.

For Secondary Schools:

CM opens with the menu above on screen. All the additional documents are available through this menu.

To view any other documents that you may have, click on >All Documents on the left near the top, and the panel on the left will be filled. Click on a document to view it as normal. Clicking >Main Menu right at the bottom on the left reveals the Main menu again.

Your MoE school type determines the pack (eg. years 0-8 or secondary solution covering years 7-13).

8.2 An Overview of Columns

Each column has a number of properties which include:
- name
- type
- short description

- long description
- up to five categories
- a connection to a popup
- a formula
- keywords

The column name is displayed at the top of the column (when viewed as a spreadsheet).

Columns come in several types determined by where its data is stored in the database. Column types include:

8.2.1   Number

A number column can hold very small to very large numbers (For the experts, it can hold a double-precision long)

Text
A text column can hold many thousands of characters

Rich text
For example a report comment where parts of the entry may be bold, italicised, or in a different font etc

Date
For example Date of birth, Date started school etc

Popup
Sometimes you select from a popup file (eg. Gender, Type). The column holds the pointer to the selected popup entry.

Short text
Up to ten characters

CurrFmwk
A curriculum framework column holds up to six dates. The date 'Begun', the date 'Achieved', the Date 'Mastered' – or whatever you have decided are your (up to) six degrees of achievement towards Curriculum Framework objectives.

Currency
For example NZQA fees

8.2.2   Other Column Types

These are the basic column types from which you must select when designing a column. There are, in fact, several other 'column types' used in the internal working of CM and SM (Student Manager). These include:
- Markbook - A markbook 'column' can hold 200 marksand eight report comments.
- NZQA standards
- Financial transactions

- Pastoral transactions
- Register entries

Now import some columns…..and maybe other things as well.

8.3 Install Supplied Components

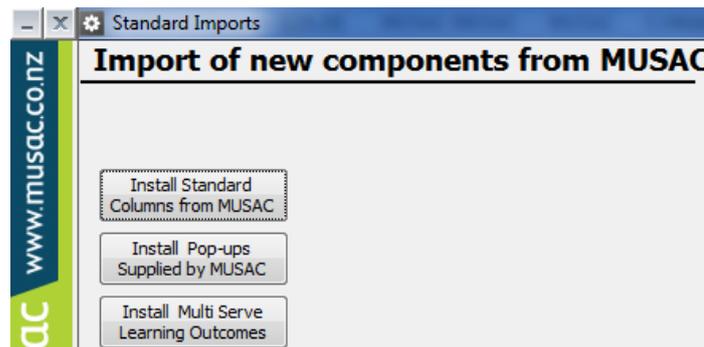Click 'Install Supplied Components' for the following screen.

Figure 20: Install Supplied Components

To import columns click 'Install Standard Columns from MUSAC'.
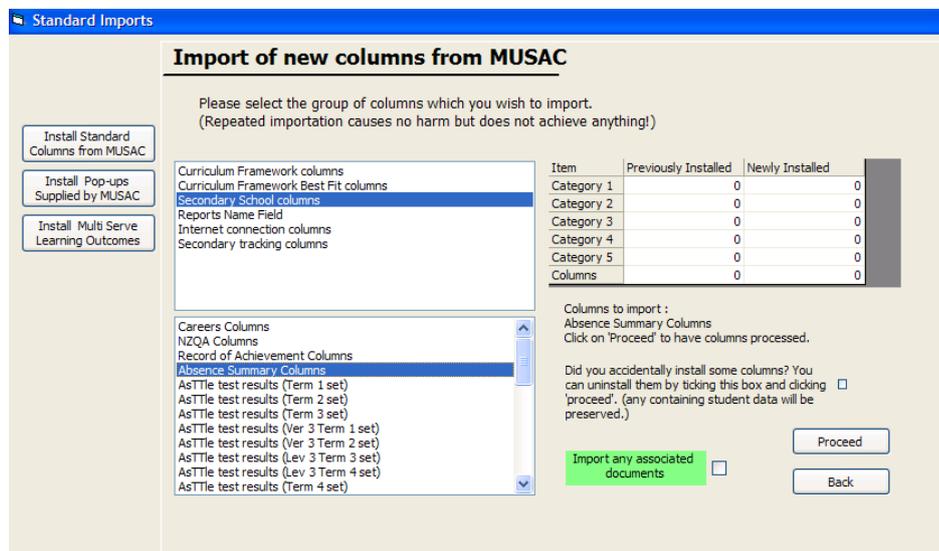
8.3.1 Import Standard Columns from MUSAC

Figure 21: Import of secondary school columns

The top left window displays several categories of available columns. Those shown above are for a secondary school. Select one of the categories and several subcategories of columns will be displayed in the window below. From this window select those sets of columns which you wish to import. You can select more than one subcategory at once. In the example select 'Secondary School columns' in the first window and both 'Absences Summary columns' and 'Secondary School ESA Information Skills' from the second window.

On the right is a progress window which lists the number of column categories, some information concerning your selection, the opportunity to remove accidentally installed columns and a couple of buttons. The ability to uninstall columns is *REALLY USEFUL* for those who accidentally install several thousand unrequired columns.

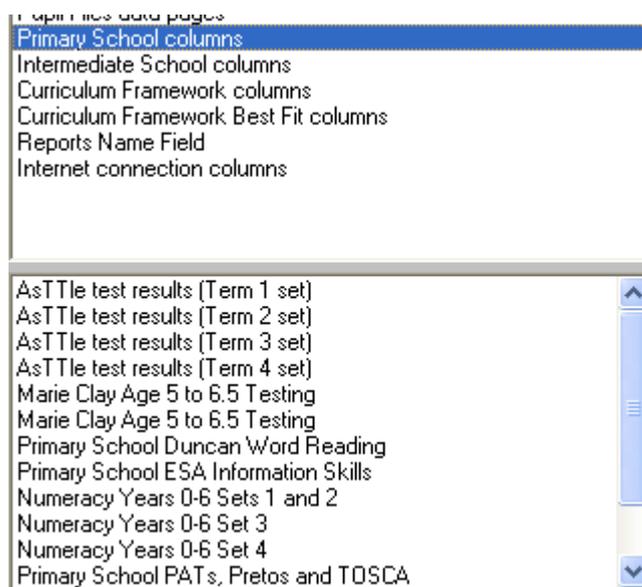The equivalent pair of windows for a primary school is shown below.

Figure 22: Importing primary school columns

A full list of all available columns is provided in an appendix - The National Columns.

MUSAC also provides standard data entry screens (documents) for various sets of columns, including each of the Curriculum Framework Learning Areas, level by level. If you wish to import these, check the small box which offers this facility. As the columns are imported you will be offered the chance to also import these standard documents. You may not wish to do so, either wishing to design your own or obtain different versions from elsewhere (eg. our agents Edtech have their own designs).

Once you have made your selection click the 'Proceed' button and your chosen standard columns will be added to the database.

As mentioned already, full details of the National columns are provided in an appendix but they include, for example:

- New Zealand Progress Achievement Test columns (PAT tests)
- Primary School Standard Testing columns
- Primary School reporting columns
- Secondary School Subject columns
- Record of Achievement columns
- Careers Information columns
- Various sets of Curriculum Framework columns

At the end of the import process the result will be displayed. You may either exit at this point or select another set of columns for installation.

From time to time MUSAC will update the sets of standard columns. Any matching columns will be ignored and new columns will be added.

8.3.2 Install Popups supplied By MUSAC

One of the possible types of columns is the popup column. This is a column which is linked to a popup. An example of a pop-up is 'Ethnicity' where each student's entry in the column is selected from a popup of possibilities. In the case of 'Gender' there are two possibilities, in the case of 'Type' there are five (Full time, Part time, Leaver, Pre-enrolment, Delete)

A reasonable number of predefined popups are included, also see maintenance of popups. Some are optional, and you may import selected popups using this utility. Click
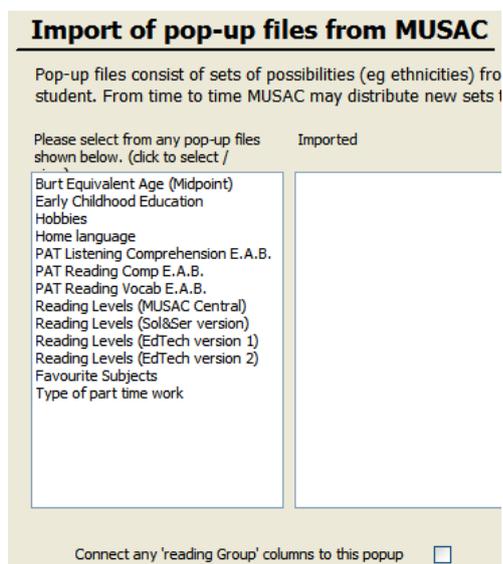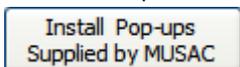
Figure 23: Import of popups

Select a popup which you are considering for import and its members will be displayed in the centre list, as shown below.

In the example shown, we have supplied four versions of the Reading Levels pop-up, another National Reading groups pop-up and a secondary school Sports pop-up.

If you've decided NOT to install the one you've clicked on, then click on it again to deselect it. Once you have selected the popups which you wish to import, click the 'Proceed' button and they will be added to the database.
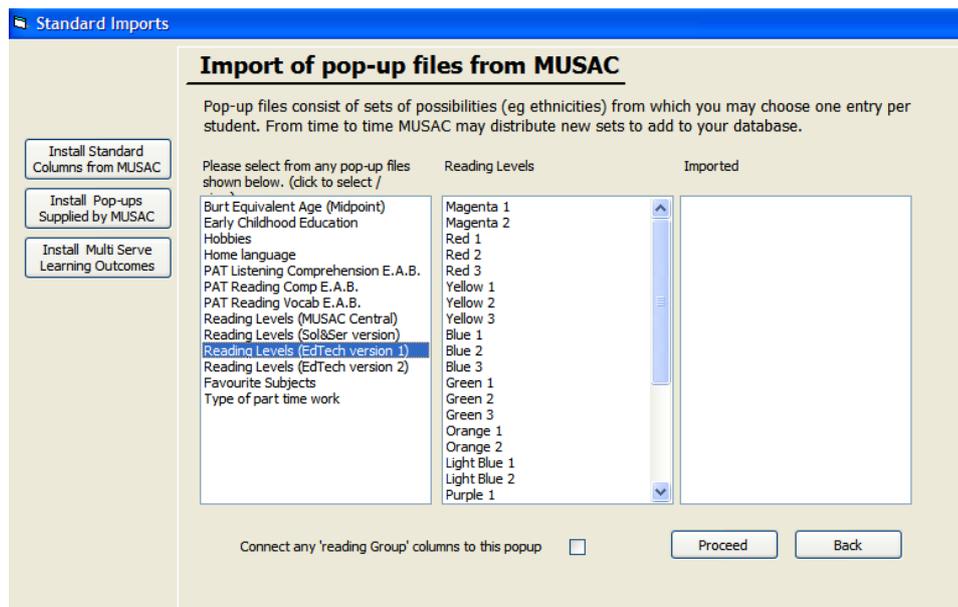
Figure 24: A selected popup and its members

8.3.3 Install Multi Serve Learning Outcomes

Multi Serve Education Trust developed Specific Learning Outcomes based on the Curriculum Framework. A few schools requested attaching these SLOs to CM columns.
If your school is NOT registered then you may only view the SLOs.

If your school HAS been registered to use this utility then you may select SLOs and have columns automatically created in the names of the selection.
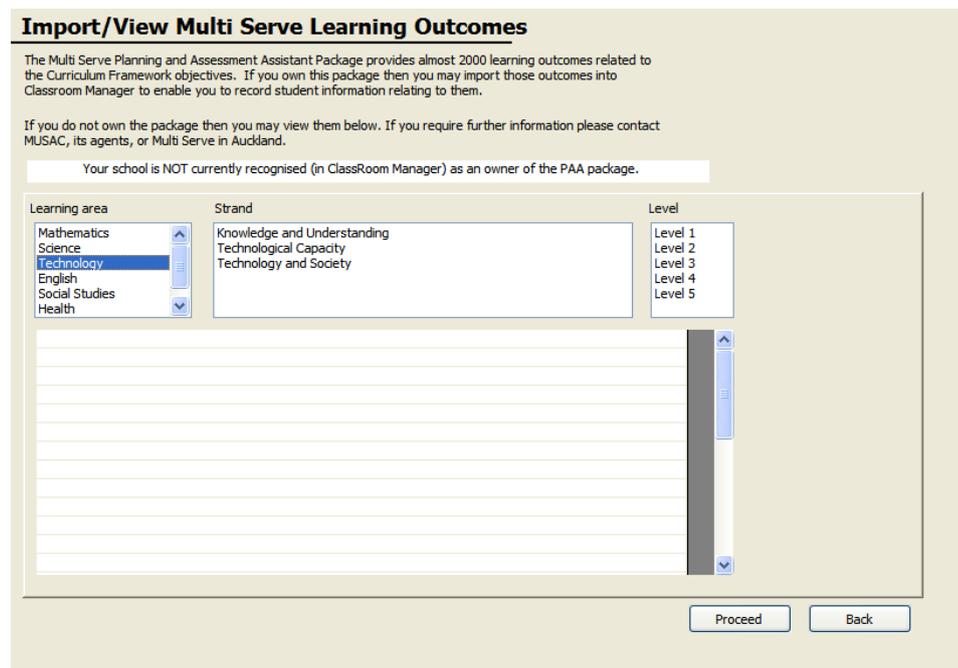

Figure 25: Importation of Multi Serve Specific Learning Outcomes

8.4 Popup Maintenance

We have already discussed pop-up files under the heading of columns, lets now see how these are maintained. These are much simpler than columns. The main popup maintenance screen is as shown below with the list of your existing popups down the left hand side.
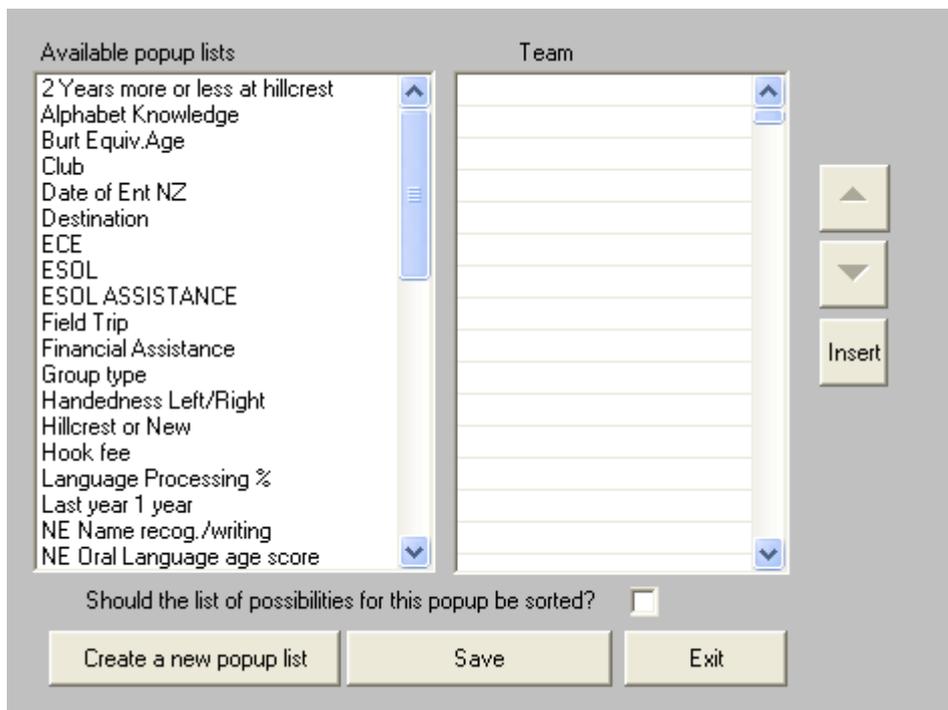
Figure 26: The popup maintenance screen

These begin with year, classroom, status, etc. As an example we are going to add the 'Team' popup which we connected to the 'Team' column created earlier in this chapter. Click on the button marked 'Create a new popup list' and a small input window will appear.
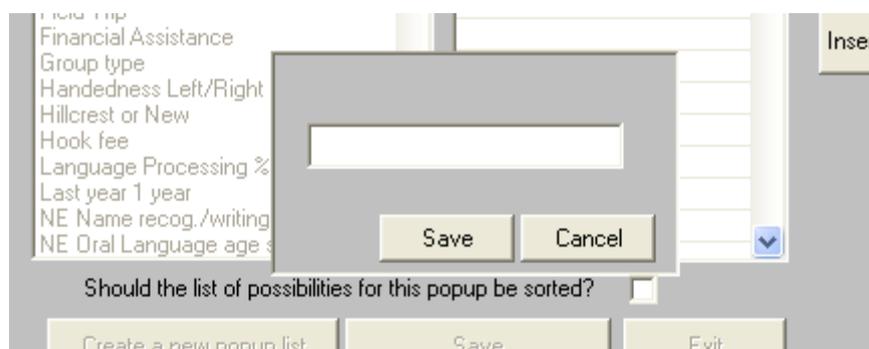
Figure 27: Entry of the popup name

 Enter the title, 'Team' and click to 'Save'.

Now, within your list, the title 'Team' appears, already selected. The right-hand list box will be blank, indicating that you have no possibilities yet defined. Enter the various team colours as shown below.
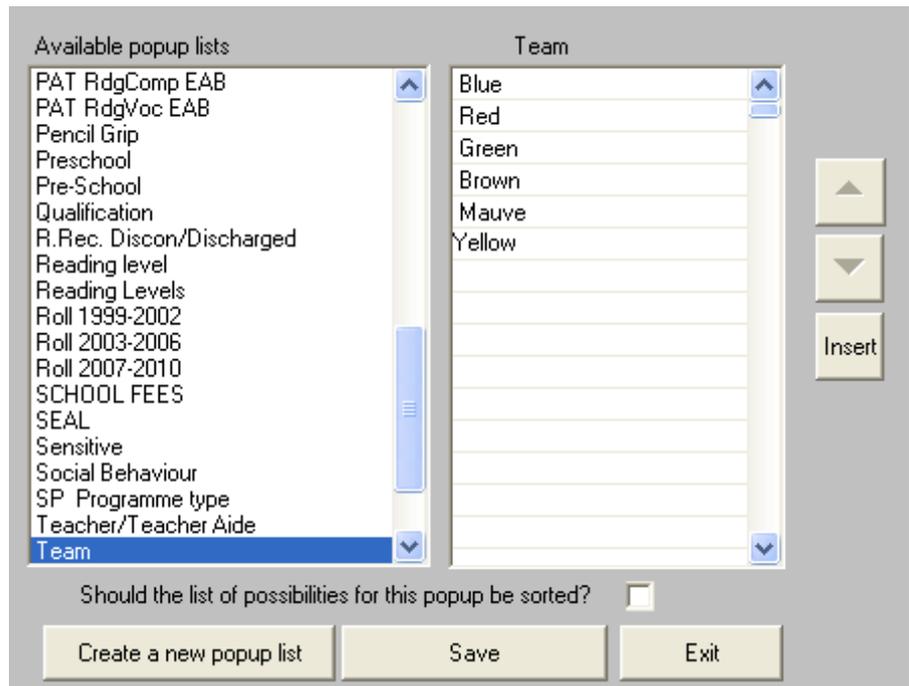
Figure 28: Entry of popup possibilities

Now, before you click 'Save' to record these results, for alphabetical order, check the small box at the bottom of the screen before saving.

The final result will appear as shown below.
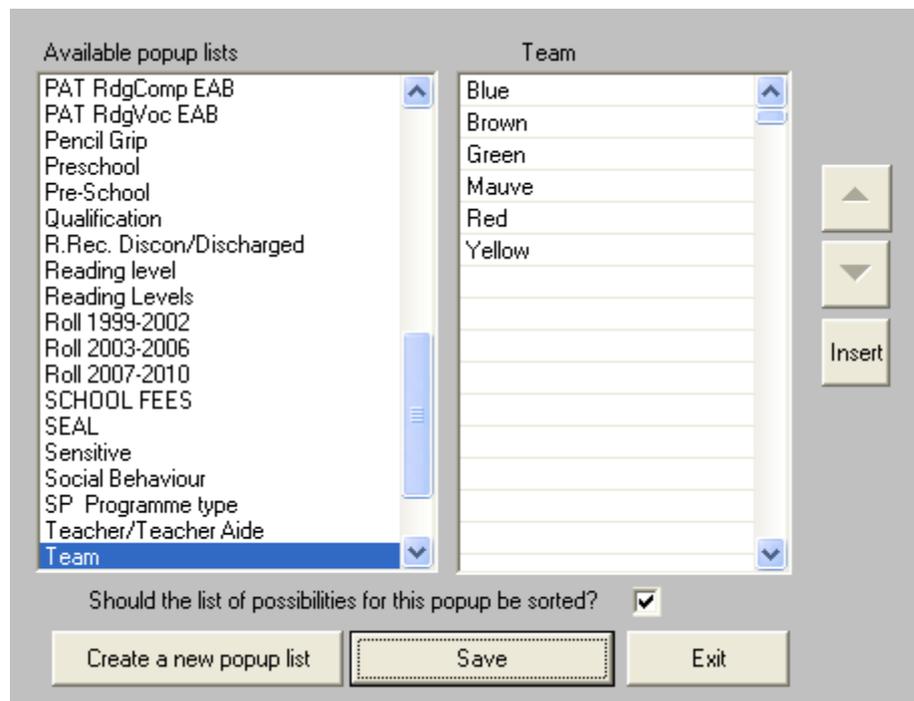
Figure 29: Saved and sorted

At the top of the popup screen is a message (in purple) pointing out that there are many popup lists the contents of which are specified by the Ministry of Education – e.g. Type, School of Origin, NZQA Financial Assistance types…. These are not offered here for modification.

There are two further possibilities concerning popup lists which you will by now have noticed.

1. Near the bottom of the screen above is the check-box where you may indicate that a particular popup list should always be sorted into alphabetical order. This is GOOD for things like ethnicities, school names etc, but it is bad, bad, BAD for things like numbers (where 1, 11, 2 is correct order alphabetically). If you do NOT wish to have a popup list sorted alphabetically then do NOT check the check box in question and they will be presented in the order which you have them displayed.

2. You may move a particular entry in a popup list up or down the list by highlighting it, and then using the buttons on the right hand side of the screen to move the highlighted entry up or down. (Remember to turn alphabetical sorting off again first, or your list will be resorted on exit!)

You can also highlight an entry, then click on the 'Insert' button and a gap will appear, allowing you to insert a new entry at that point.

The final section in this chapter deals with comment banks.

8.5 Comment Bank Maintenance – re Columns

1   Comments entered onto reports (documents) are stored in columns as type 'Rich Text' or RTF. They may only be used in columns of type 'Rich Text'

2   The definition of comments is virtually identical to the entry of columns. They can be categorized under up to five levels

The comment maintenance screen which appears when you click 'Comment Maintenance' has the categories area on the left side and the comments area on the right side.

For this example add three comments to a Junior Mathematics bank. Create the Category 1 – Mathematics under which I'll create two Category 2 headings 'Junior' and 'Senior' and the created categories'.
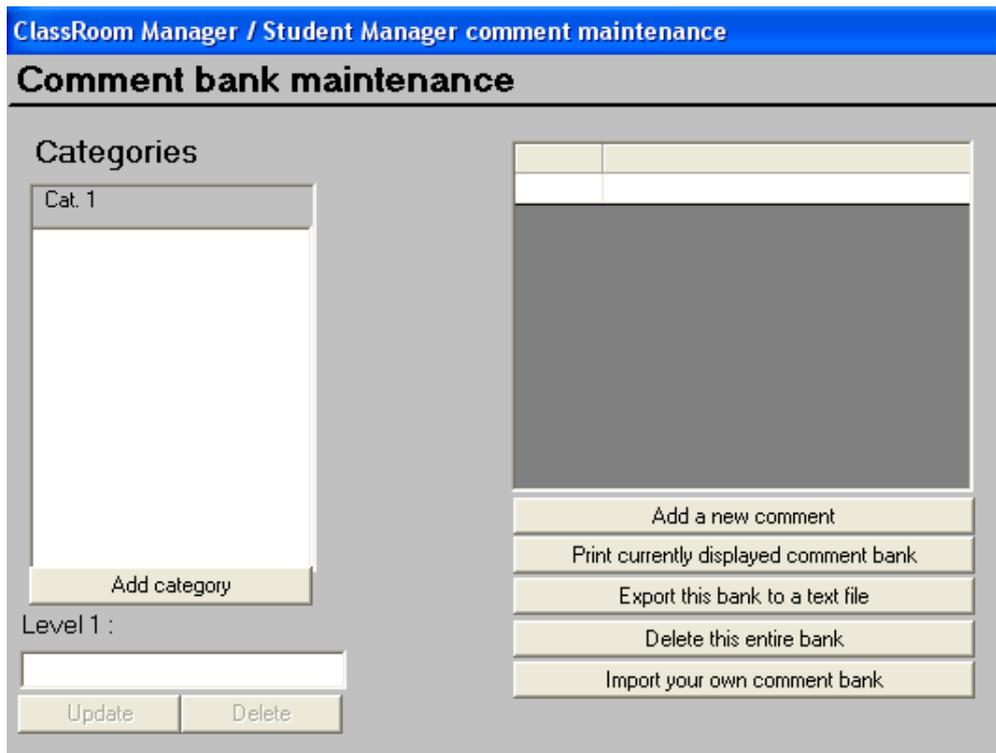
Figure 30: The comment maintenance screen
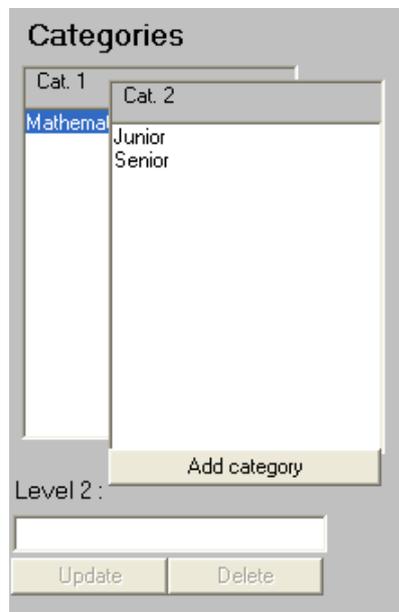
Figure 31: Two comment categories

Now select the 'Junior' category then click ''Add a new comment'. The following word processor window will appear into which type the comment.
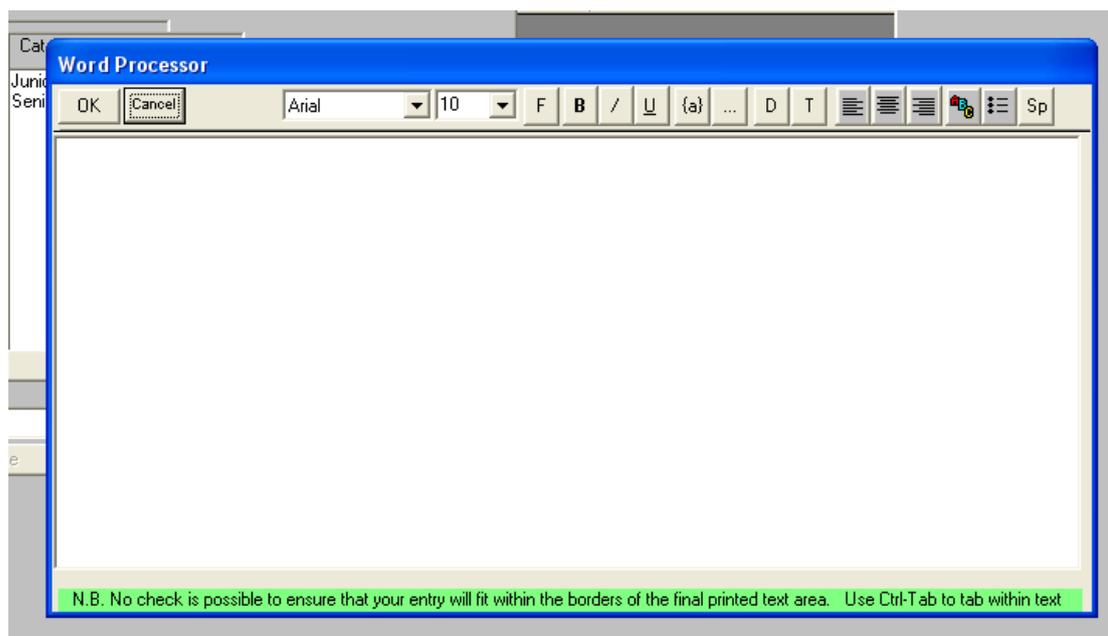
Figure 32: The comment entry word processor

Comments are stored in rich text format known as 'RTF'. This means that comments are in effect compatible with Microsoft word documents.

They may contain a variety of fonts and font sizes, along with bold, italic, underline and other possibilities.

When the word processor screen appears you may type in your comment. Firstly the top of the word processor screen.

Most of the buttons and other pieces of information at the top will be familiar. The OK button is the way out and is clicked after you have finished specifying your comment. The number count entry to the right of the Cancel button lets you know how many characters you have entered as well as the maximum you have set for comment fields.

The next pull down combo allows you to choose the font for your highlighted text. This is followed by a combo that allows you to choose font size. The 'F' button that follows these combos sets the default font and font size according to what text you have currently selected. This is followed by a series of buttons, the first being '**Bold**' followed by '*Italic*' and, finally <u>Underline</u>'.

Next we come to the '{a}' button and we shall use this in the first comment.

I wish the comment to be directed to the student's preferred name so I must insert the code which, when printed for a particular student, will be replaced by his or her preferred name. This can be done most simply by pressing Cntl-N. The code {cm.col(3)} is inserted into the comment. This will be replaced on printing by the contents of CM column number 3 – the student's preferred name.
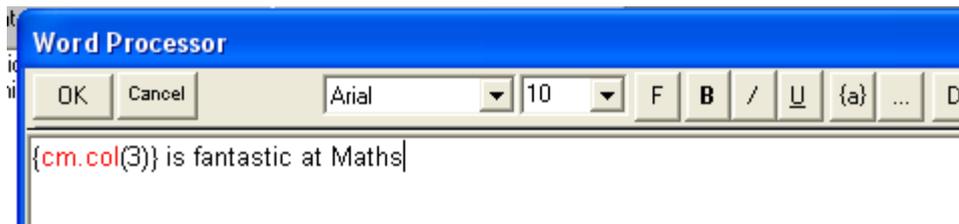
Figure 33: The code for 'Preferred name'

After the code I continue the comment, until I come to the point where I wish to insert a gender-sensitive word – either 'he' or 'she'. At this point I click the {a} button to select a code insertion. This button allows you to insert data from a column of the spreadsheet and to have that data appear in the middle of your comment. The code insertion shown below window will appear.
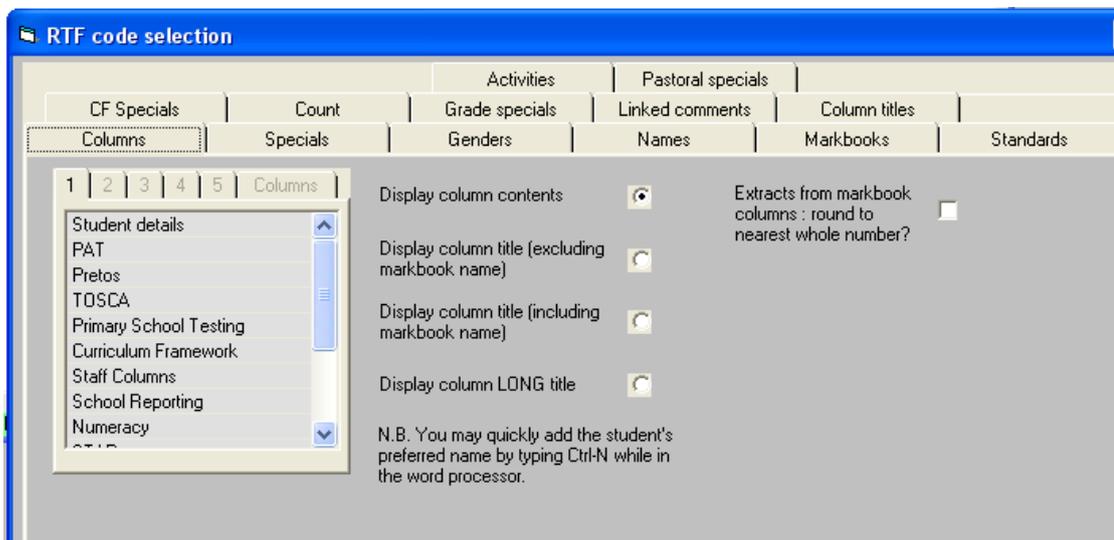
Figure 34: The CM/SM insertion screen

This screen is dealt with in full detail in the CMTeacher section of the user guide so, without further explanation here, I'll click on the tab "Genders". The following window is displayed:
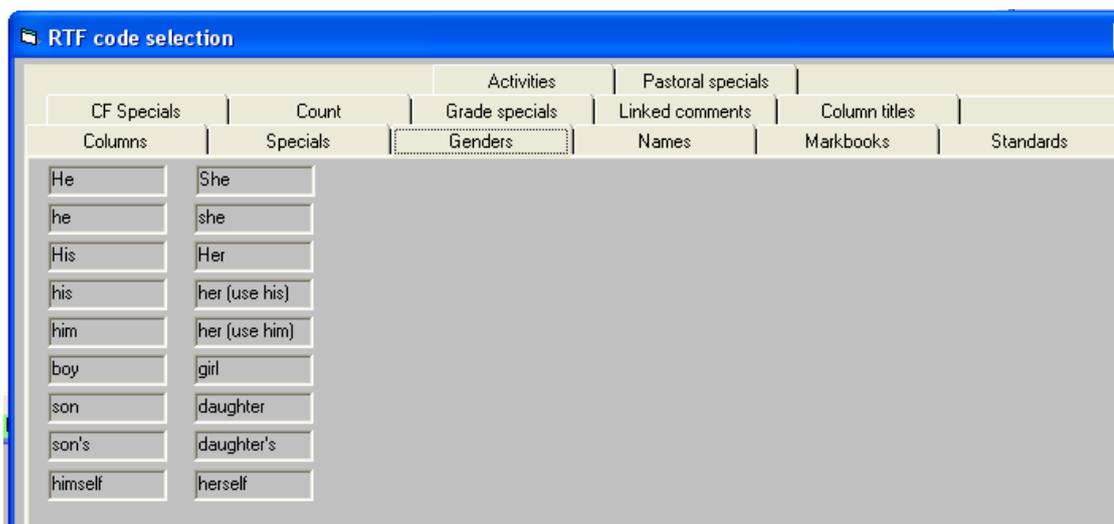
Figure 35: Selection of gender-sensitive codes

The code I require can be inserted by clicking on the 'he' button.
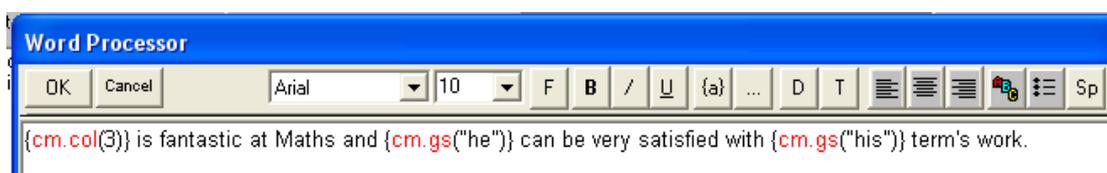
Figure 36: Gender codes inserted in comment

A brief digression on the use of the gender insertion codes. If you are a single sex school then, of course, you will not have to use these codes. If you wish to insert the code for 'her' then use the code for the male equivalent. 'her' is strange as it has two male equivalents. Consider 'It is his ball so I gave it to him' and 'It is her ball so I gave it to her'.

The next button (which has three dots) allows you to select previously defined comments for inclusion in your comments. While it may appear that this could become rather circular, this is how you will later select multiple comments for students' reports.

The next two buttons allow you to embed the current date and the current time in your comments. The next three buttons determine the placing of the line of text on the page - left aligned, right aligned or centre aligned. The final two buttons allow you to change the font colour of any text you have selected and add bullet points to the line your text cursor is currently in.

Once you have completed entering your comment and this may involve highlighted text and changing font and changing font sizes etc, click on the 'OK' button and the comment will appear back on your comments screen in ordinary text mode i.e.: without variety of fonts in the comment box.
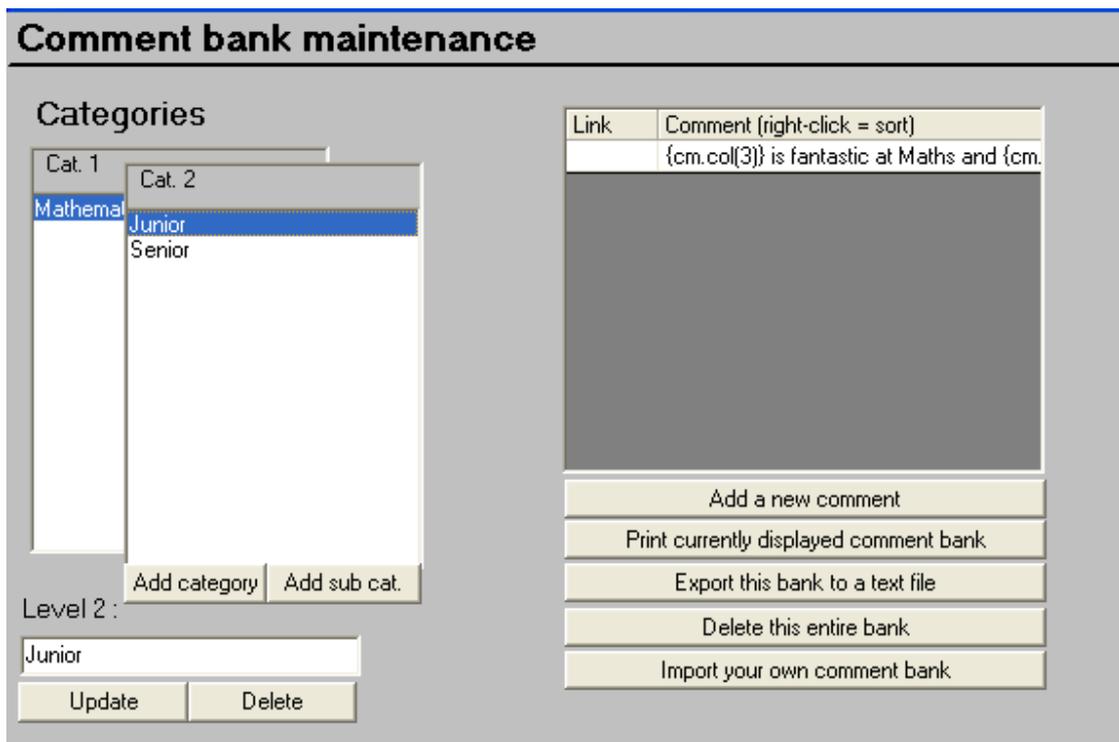
Figure 37: The completed comment

This is your first comment. You may add as many as you require. In the illustration below I have added two more, together with links.
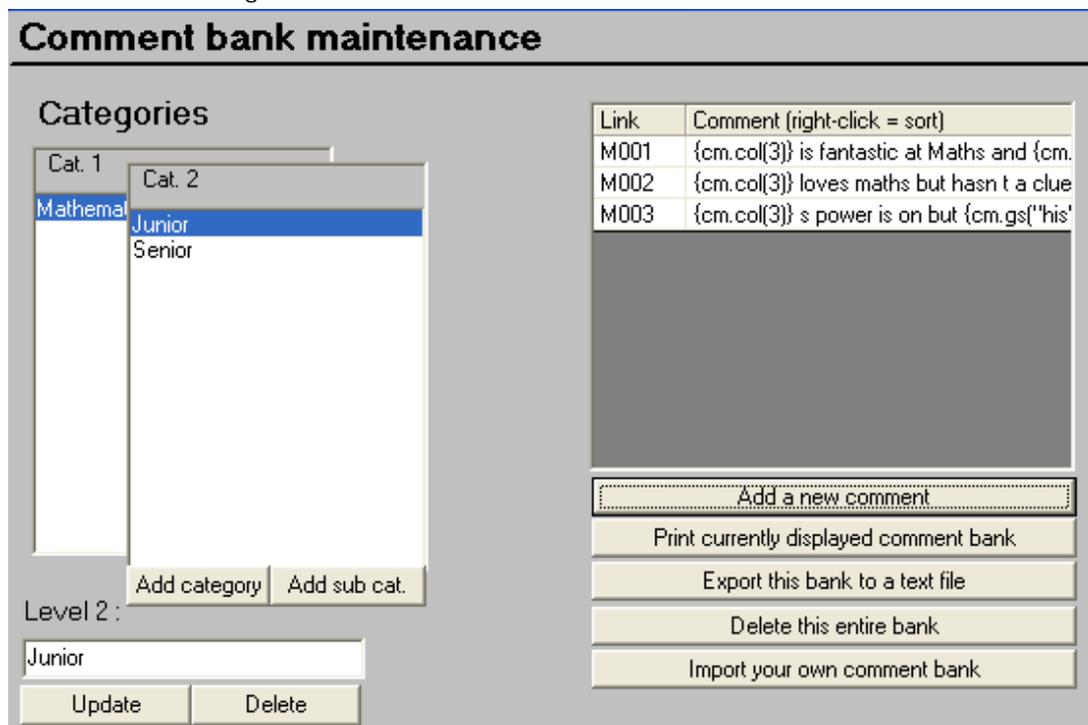
Figure 38: A small comment bank with links

The links are short keyboard shortcuts by which you may retrieve a comment into a report without having to go through a slightly more involved comment selection procedure. This can

most effectively be used if you have printed out the full comment bank in order for teachers to see the full comment and link in one list.

The comment itself is safely stored with its variety of different fonts but this will not be shown in either the list box (above) or in the comment selection box later on.

Once you have added a category you will have noticed a number of choices appear under the comment list area apart from the one you used to add your comment. The Print option is there for your convenience so completed comment banks may be printed out for checking as well as reference during report writing time. The export and import routines are also a convenience routine allowing you and other users to use your favourite text editor or word processor to put together the comments then bring them in and out of the comment bank area. For ease of import you need to put a carriage return (Enter key) after each comment then save the file as plain text.

Over time you may find that some of your comment banks become redundant so using the Delete button you can remove them entirely.

9   Your School and Your Students
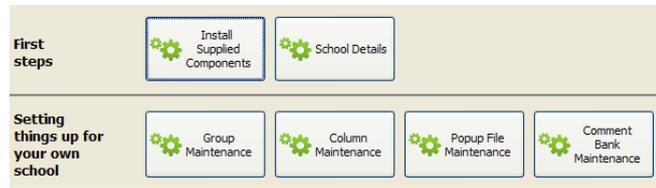
Figure 39: School and student details

9.1 School Address

Figure 40: School address details

Opening at the School Address tab (shown above) are setting details for your school's address, postal, phone, etc. They include your school's web address and a 'Configure Email Settings' button which takes you to the 'Email Setup' tab for configuring your school's internet service provider details. These settings are used throughout MUSAC software.

On the right are important pieces of information; your school's Ministry of Education number (which does not require leading zeros), and the type of school. This determines which menu items are available in various parts of the modules.

9.2   Email Setup and configuring Gmail, Yahoo! etc

To configure your outgoing email setting, the Email Setup tab is where you specify SMTP credentials, enabling SMTP authentication when setting up new emails (and using Gmail, Yahoo!

addresses). The setup below includes using emails for ELMU interoperability for Gmail/Yahoo email settings; and from Student Manager.
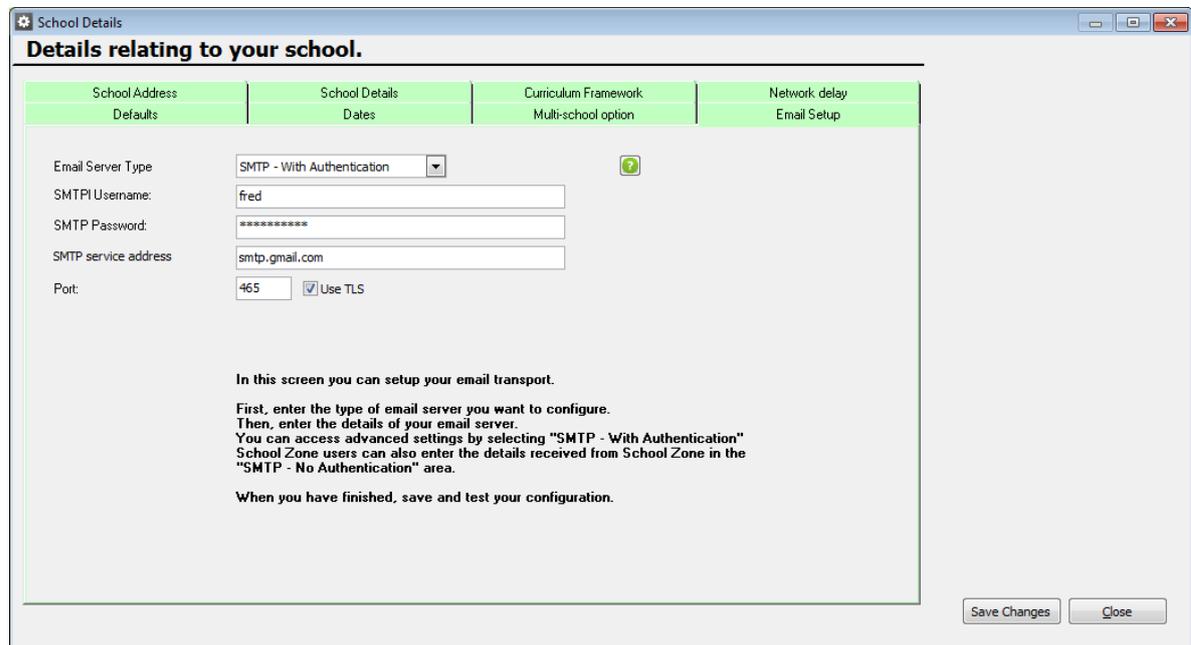
To select your desired email server type from the drop-down, some technical details are required here for your school. Note that in Student Manager > Configure Settings > School Details > School Address Details, a message directs you to configure email in CMAdmin > School Details. This email feature currently supports SMTP, either with or with no authentication.

Gmail or Yahoo! Accounts:
> CM Administrator adds the server settings for you and you only need to supply your email address and account password.

Using your own SMTP server – select from:

- **SMTP - NO Authentication** if your server does not need a password; or
- **SMTP – With Authentication**, if your server needs a password - gives you access to all available settings for email setup, allowing you to create custom configurations

> SMTP – With Authentication email type, you will need:
>
> SMTP server: Address
>   Login details   (user name and password)
>
> Port: Port 465 is used where your school has a gmail address, however the email type chosen determines the fields displayed for completion.
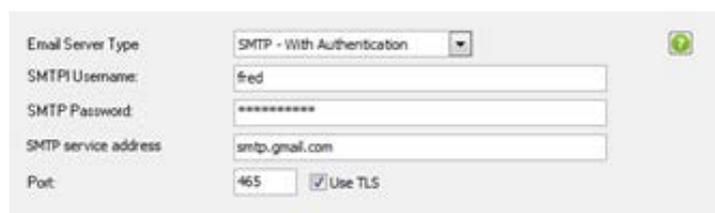
Once you have entered the server details, click **Save Changes** and the configuration test panel will become visible.

To test your configuration, enter your email address in the box shown, and click **Test Configuration**. This will send an email to the address you entered using your saved settings. Once you have performed a successful test, this configuration is complete.

Adding a different return address in Modules

Emails can be sent from **other** modules in MUSAC Classic, for example 'print' in Student Manager > Student Finances > Print a student's statement (see following screen); Student Manager > Pastoral transaction and Staff Manager > Print Lists.
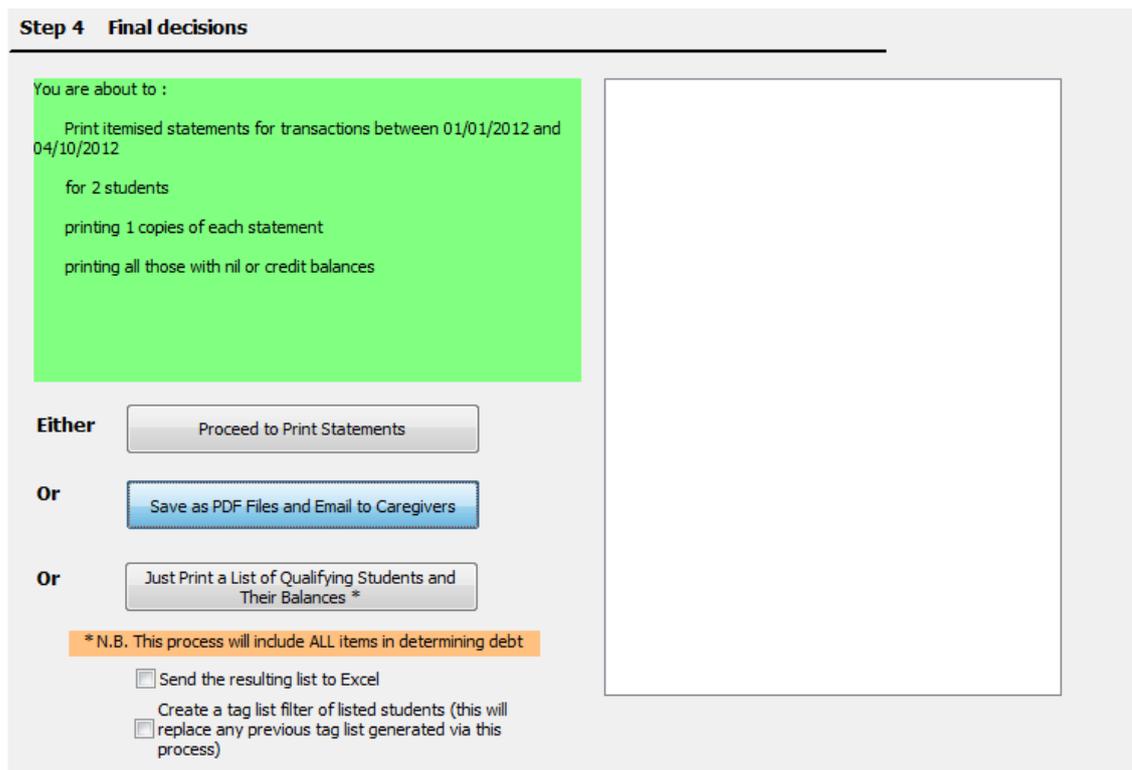
Changing the return email address

After selecting the recipients of your email, you can nominate the return address. The process in each module area (eg. Student Manager > Student Finances, or > Pastoral printing; Staff Manager), allows you to alter the default email configured above for your return address.

The drop-down list (eg. in Student Manager > financial or pastoral printing) presents a choice of return addresses.

1   The global school email address which is setup in **CM Administrator** (see below) will automatically be your local return address, which you can edit if required. If you have a personal email address entered in **Student Manager**, you can select it from the list if desired.

If you want to change the local return address, click on the 'Change the default …' link shown below the field.

The editor allows you to edit the address. If you are using GMail, the return address of your email is the same as your GMail account email address. If it is not, Gmail will change it automatically for you. If using other providers such as Yahoo, you may be prompted to change your return address to match your account email address. These are requirements of using those services, not a limitation of MUSAC Classic.

If you need to change the address, the **Save** button will automatically show, prompting you to save. The address will then be automatically changed into the drop-down and selected for you. Please note that the local default address in the drop-down list is changed to the new address; it is not added to the list as a new entry.

Next, click the **Send Email** or **Proceed** button, depending on which area you are in, to complete the task.   To configure outgoing emails, see School Details from the CM Administrator main menu > School Details or Email Setup.

9.3   School Details

This is where you set up your year level titles, class (or form) names and room (or group) names.
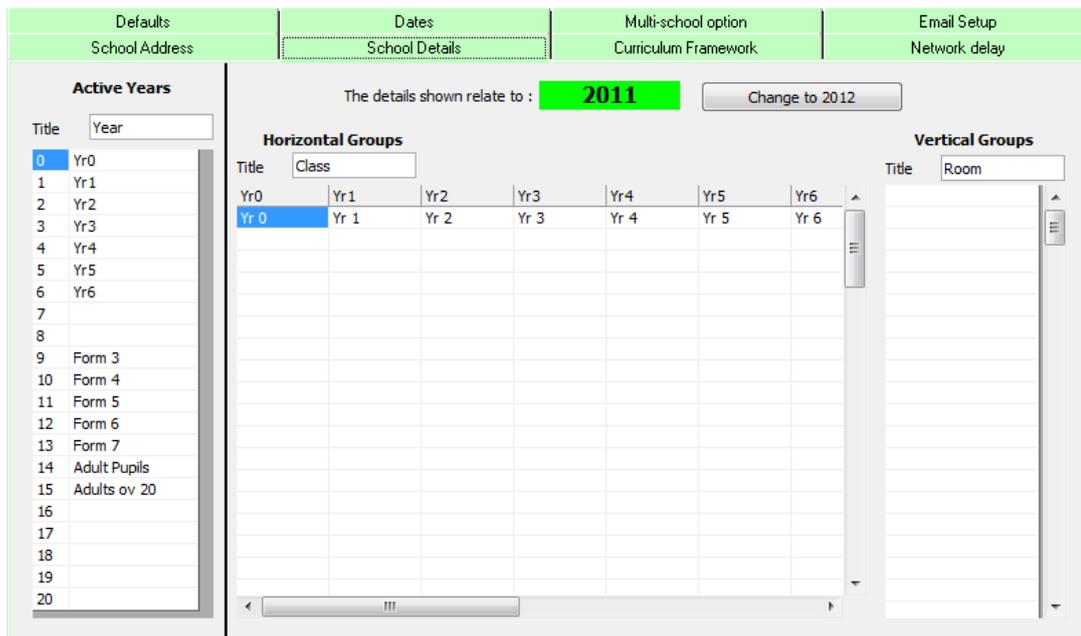
Figure 41: School year and class details (or form and group names)

The School Details tab allows you to specify the names of the various groupings in your school and the functions for each of these. The results of your entries will be stored in the database under pop-up files.

Active Years and their titles
Most schools use Years (Year 1, Year 2 etc)

Horizontal group names
Remember, 'Horizontal' means that all students in a particular group (e.g. Class, Grade, Form) are studying at the same academic level.

Vertical Group names
'Vertical' means that students in a particular group MAY (but not necessarily) be from more than one academic level. (e.g. Room, House, Whanau)

9.4   Curriculum Framework Settings

Figure 42: Curriculum Framework settings

The third set of details enables you to specify your Curriculum Framework defaults. Simply read through the onscreen descriptions and fill in the fields as you require. You may specify from one to six levels, giving each a name and an identifying letter. There is much more information on this topic in the Teacher section.

The most common usage seems to be three levels and the three above are provided as defaults with the package.

9.5   Option Details

This is a whole topic dealt with in the next section.

9.6   Network Delay

Figure 43: The network delay

Most schools will not require this setting. A few years ago we found that on some larger/slower networks adding a value in here, usually from 10 to 20, alleviates problems with record locking. This value usually only needs to be entered when there are a large number of users on the system, ie. during report writing time, so it will default back to zero after logging out from a

session of work. Should your network suffer from excessive slowness then a window will appear during large data transfers, reporting that the problem has been identified and requesting an entry for the network delay. Once specified then, any time the problem does occur the specified delay will be automatically invoked to overcome the problem. Most networks should not experience this problem.

9.7   Default Settings

Figure 44: Some default settings

The **Defaults** tab allows you to enter global settings relating to word processor font type and size as well as the maximum number of characters allowed in those boxes. These can however be over ridden by individual user settings.

The final setting on this page relates to the fact that, every time you enter either CMAdmin or CMTeacher the package checks to see that the latest versions of new system files have been installed. If not then they are automatically installed. This process has been found to cause a 'rights' problem on some networks and it is possible to deactivate the process here.

9.8   User-Set Dates

Figure 45: User-set dates

This tab allows the entry of **Dates** relating to reports, parent interviews, etc. These can then be globally referenced within ClassRoom Manager reports rather than having to manually add or change them each year as these dates change. Most schools seem to prefer to adjust the 'hard-wired' dates embedded in reports, rather than use this excellent facility.

10   Core and Optional Subjects and their Markbooks

10.1   Beginning Year Setup : Core and Option Subjects and Markbooks

Electronic markbooks are also useful for primary and intermediate schools.

In a secondary school students take some subjects where they may remain in their form class groups. These are normally the 'compulsory' subjects, such as 'English, Mathematics, Science, Social Studies, Art, Music, Physical Education and others at year 9 and year 10. These are known as '**Core**' subjects. These can vary from school to school.

Students also take subjects which they choose from a list of available possibilities, such as History, Information Technology, Home Economics, and Biology. These are known as '**Option**' subjects.

In some schools the boundaries are blurred. Some ensure that ALL junior students take a wide range of 'compulsory' subjects in their form class groups while others split into different groupings (via streaming) for subjects such as English and Mathematics.

There are some 'golden rules' for the successful management of students' subjects in ClassRoom Manager and Student Manager.

If ALL students remain in their form class for a particular subject and remain in that group throughout the school year then it is safe to treat this subject as a 'Core' subject.

If, however, even one student is separated off into other than their form class for a particular subject then it is safest to consider this as an 'Option' for ALL students at that level.

Many schools have their students in one selection of subjects for part of the year and allow students to change to a different selection at another time. Some schools allow for this sort of change several times each year.

When students select their subjects from lists of possibilities, on subject from each list, these lists are known as 'option lines' and a particular set of lists which operates at a particular time is known as a **'set of option lines**' or a **'set of options'**.

Some schools operate more than one set of options in a year, sometimes changing at mid-year and sometimes changing each term. Generally, the 'Core' subjects remain fixed throughout these option changes.

The creation of suitable set(s) of columns to hold students' follows. In ClassRoom Manager the core classes taken at each level are treated as an extra set of options, in that a set of columns must be created for them and the students' core subjects imported into these columns.

The plural 'sets' has been used frequently above. It is, however, the norm for a secondary school to have ONE set of options which lasts all year. Students' choices in this option set are imported in to a single set of option columns.

Option columns are a little different to ordinary columns in the amount of information which can be stored in them. Teachers record marks and other measurements of progress made by students in both their core and their option subjects,in electronic markbooks. Around two hundred results and eight report comments can be stored against each subject taken by each student. These are entered (in CMTeacher) via a markbook.

Once option lines have been finalised, electronic markbooks can be created for teachers to use. See Create Electronic Markbooks. For Course endorsement requirements for NZQA also need to be entered, see NZQA Utilities guide.

The final topic covered is the process of importing students' choices themselves into those set of columns.

Only one set of options can, at any one time, be the **CURRENT** set. More than one set, however, can be currently **active**. Half way through a year in which you plan to use four sets of options you may have two sets which have been activated and, probably, the second set will also be the current set.

10.2 Maintaining option structures

This process is managed within Student Manager.

10.3 Management of Subjects, Standards and Course Endorsements

NZQA Utilities > Connect Standards to Subjects. See the NZQA Utilities user guide for detailed information (available from the question mark icon on the MUSAC side bar) or from our website MUSAC). 'Excellence' results can be entered where the school is accredited, for certain NZQA Unit Standards – added to the course endorsement page via 'Connect standards to subjects'.

10.4 Create Electronic Markbooks

To create your electronic markbooks for a year, click on either 'Other Utilities' or 'NZQA Utilities' from the main CMAdmin menu. Click 'Specify Markbook Details' for a number of global markbook functions and to set up common column headings and other functions. The main screen follows.

We have but one task to perform here and that is managed by clicking the first button. This leads to the 'Markbook creation' screen, shown below.
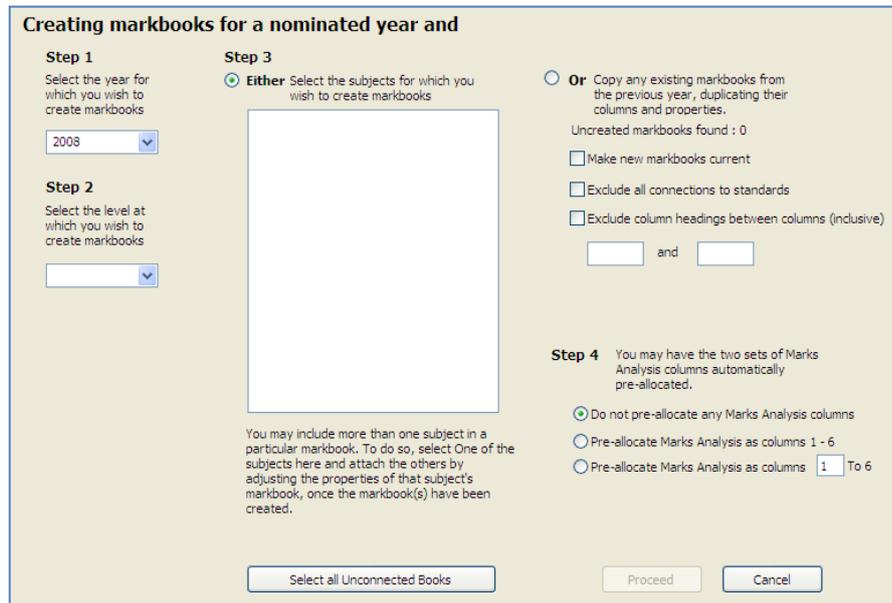
Figure 46: The Electronic Markbooks screen

Step 1 – is to select the year with which we are concerned. This defaults to the current year and is therefore almost certainly correct.

Step 2 –select the level for which to create markbooks. Work through every level, so begin with the first – in our case Year 9.
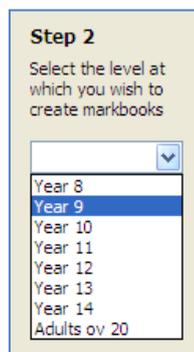
Figure 47: Selecting a year level

This causes all of the subjects (extracted from the core and option lines for year 9 to be displayed. Click the button below the list to select them all.
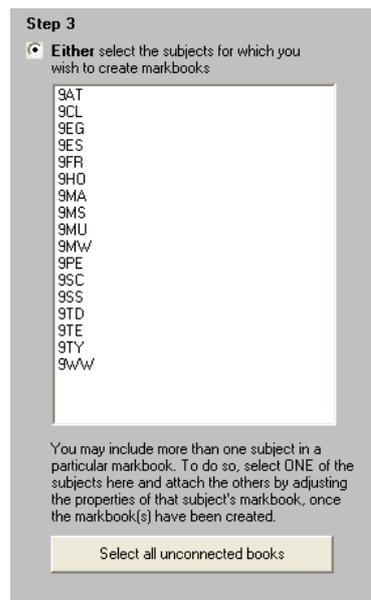
Figure 48: Selecting subjects

Click the 'Proceed' button at the lower right hand corner of the screen.
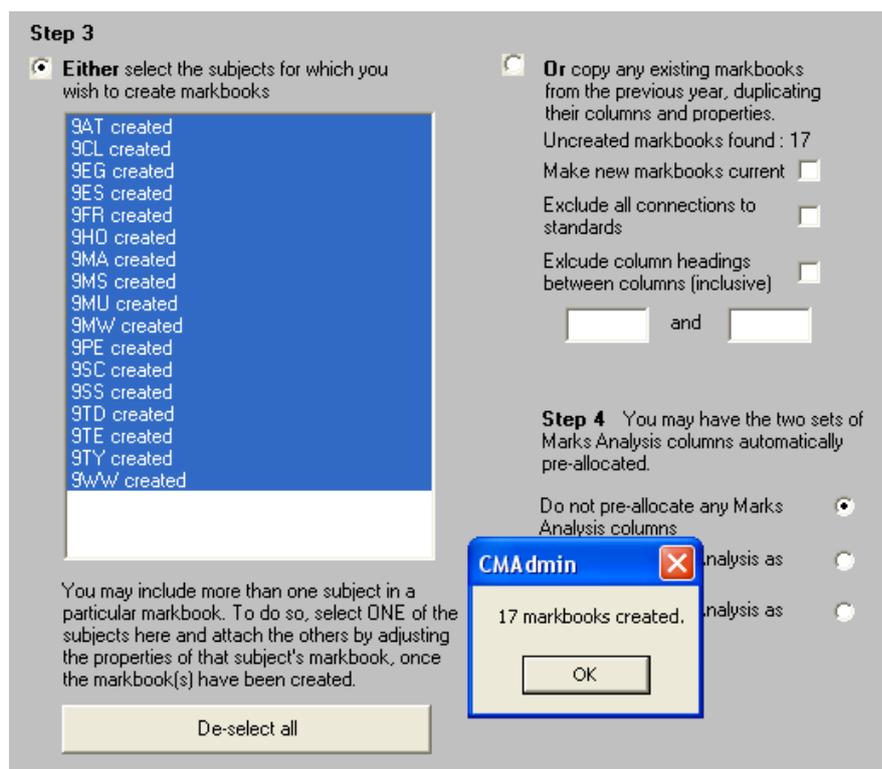
Figure 49: Creation complete

Markbooks will be created for all of the selected subjects. Should you be returning to this screen for a subsequent year then you might well elect to use the alternative displayed on the right hand side of the screen. This allows you to duplicate the markbooks which you used in the previous year. You may then retain all your markbook column headings (see Design of markbooks).

You can include or exclude columns devoted to NZQA standards (See NZQA section of this user guide). You can exclude a particular range of column headings.

Make choices relating to columns devoted to the purposes of Marks Analysis. This process is now obsolete – apart from a few schools who use it to determine their most successful students. (See Marks Analysis).
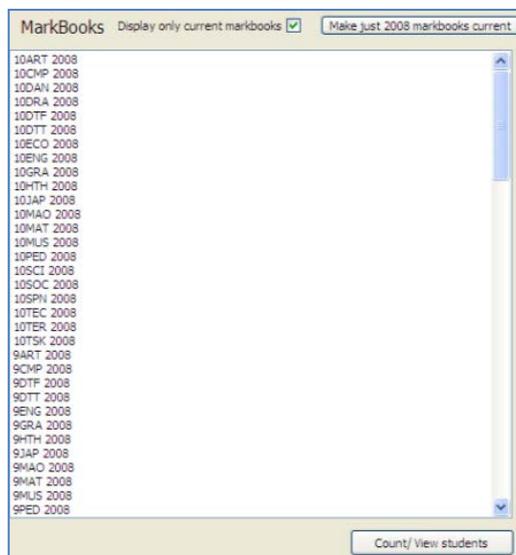
Figure 50: All have been created

Once we have completed the creation of markbooks for all year levels, return to the main markbook screen and our markbooks will be displayed, as shown above.

Please note: Due to the inability of an alphabetic sort to know that 9 comes before 10, all of the year 9 markbooks are listed at the bottom, after year 13.

10.5 Student Manager – attaching students to markbooks

To register students as members of markbooks click 'Update Markbook Details'. Earlier in this chapter we visited that area to create markbooks for the current year. Now we return to use another button. The button we require only appears if you do have Student Manager installed and it is the fourth button in the centre group, shown below.
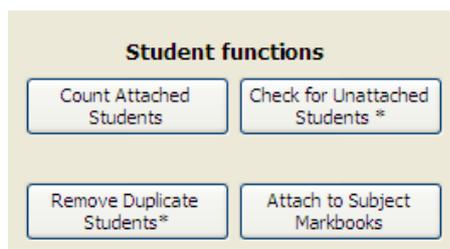
Figure 51: Attach subjects to markbooks

On clicking the button 'Attach subjects to markbooks' a new screen appears.
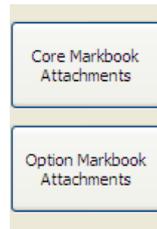
Figure 52: Attaching both core and options

Click 'Core markbook attachments' and the attachment screen will appear.

Figure 53: Attaching core subjects to markbooks

As can be seen in the illustration above there are a large number of core subjects waiting to be attached to markbooks.

You must establish a link, click 'Alter timetable link'. A dialogue will appear - click in the area where the timetable path is displayed and a further dialogue will ask for the path to where your Timetable software is; \ttsm.

Figure 54: The timetable link dialogue
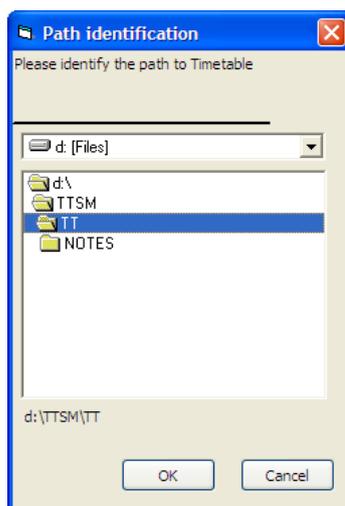
Figure 55: Identifying the timetable path

Once you have identified the path you will return to the first dialogue via which you can select the timetable itself as shown below.
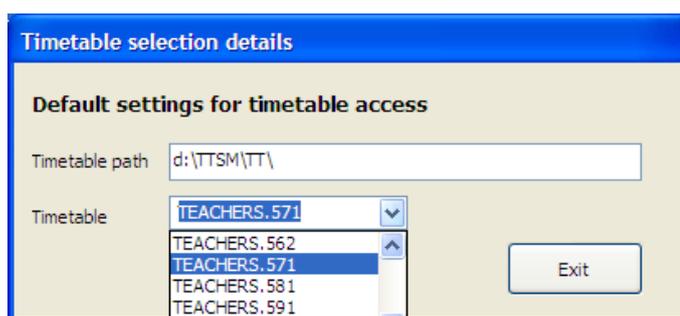
Figure 56: Selecting the timetable

Now that the timetable link has been established, click on the 'Proceed' button and all students taking the core subjects will be attached to the core markbooks.

Note: This process will reattach students already attached, including their teacher's names. This is useful if you had previously attached student without having specified the necessary timetable connection.

To connect the option subjects select the year level which you wish to process and 'Search for connections'. The screen will display the numbers of students both connected and unconnected.

Figure 57: Attaching option subjects to markbooks

Click on the "proceed" button and those unattached will be attached.

10.6 Primaries and Intermediates and Markbooks

Some primary schools also use markbooks. Follow the steps below and markbooks will be available:

1   They are achieved by using core subjects. Under option configuration create a set of options, giving it a suitable name, and add one or more core subjects such as 3RDG, 4SPL for year 3 Reading and year 4 Spelling etc.

2   Once you have some subjects you can create the markbooks using the steps outlined.

11   Teachers and their Dossiers
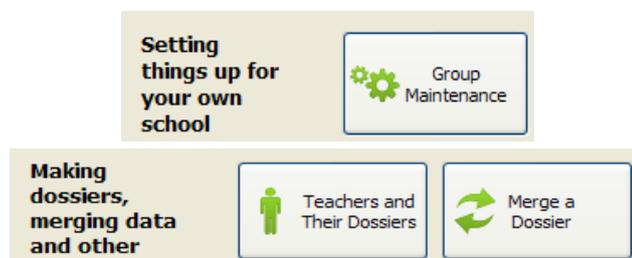
Figure 58: The three buttons

11.1 An Overview of Teachers and their Dossiers

Teachers and Administrators use ClassRoom Manager, having registered with rights to access at least some of the functions and processes which the module offers.

Teachers are allocated rights by virtue of being members of one or more 'groups' and a group is an entity which has certain selected rights. Firstly the creation of groups and the allocation of rights to each group; then to the staff members themselves who use the module. Each staff member must have certain personal details recorded in the staff database associated with ClassRoom Manager. Their rights within the package are allocated by making them members of one or more groups.

Most teachers will use ClassRoom Manager via one or more personal dossiers (collections of selected students, columns and documents).

Finally, teachers can enter CMTeacher and select one of their dossiers.

11.2 Group Maintenance

Groups are used to determine which rights individual teachers have within the module. Each group has its own rights and a teacher belonging to one or more groups is granted the rights of those groups to which they belong.

Click on the 'Group Maintenance' button for the following group maintenance screen.
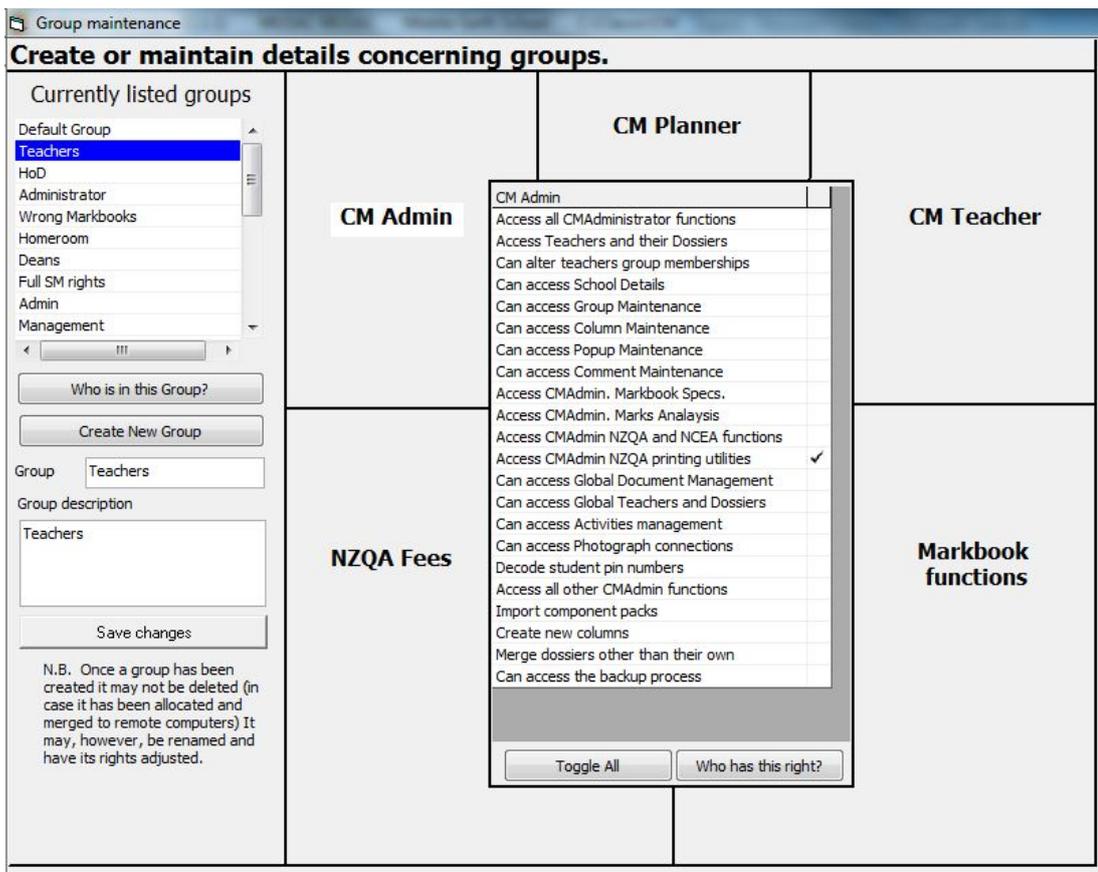
Figure 59: The group maintenance screen

Initially only one group will be listed. They will be entitled 'The Default group'. If you click on this on the left-hand display screen, then its details will be available for display on the right hand side of the screen, where they may be adjusted.

You should not attempt to remove the details concerning the default group.

To add a new group - click 'Create New Group' at the bottom of the left side of the screen. Enter the name of the group (as an example I've created a 'junior staff' group) and an optional group description telling a little bit more about the membership of that group. Then click 'Save changes' and the new group will be added to the list of groups, as shown below.

Figure 60: Adding a new group

Once you have entered these details then you should configure the rights which members of this group will have. This is done by clicking on each of the area titles on the right hand side of the screen. The rights associated with each area will be displayed and can be toggled on or off by clicking in the right hand column. Two of the areas, CMAdmin and CMTeacher, are shown below.

Figure 61: Rights within CM Admin
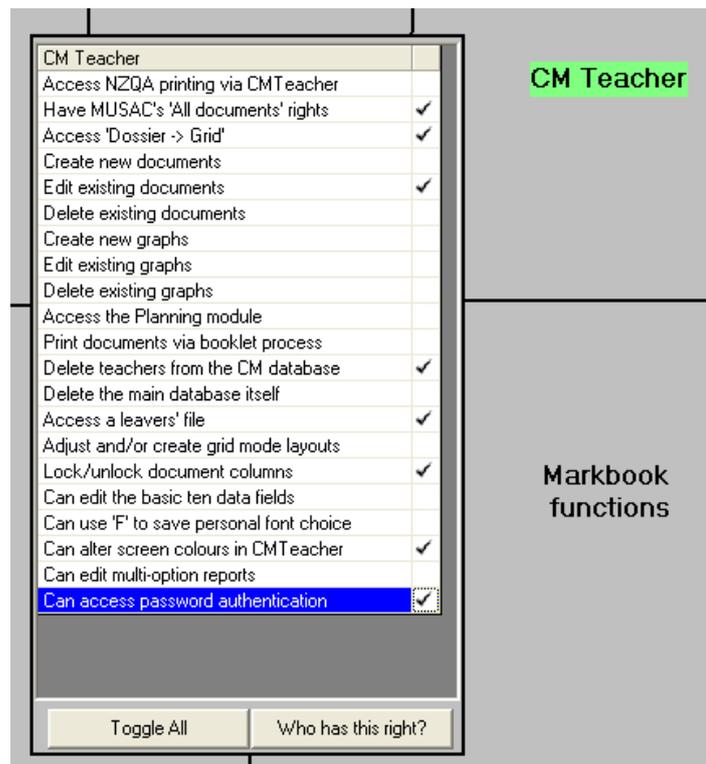
Figure 62: Rights within CM Teacher

If you select an individual right from within a group then you can see who amongst your staff has this right by clicking on the relevant button at the bottom of the rights display area. And example of such a display is shown below.

Figure 63: Who can access password authentication?

This example is somewhat spurious as the right to access password authentication is one which would be allocated to very few people indeed.

Click 'Save changes' when you have assigned all the rights you wish to assign.

The deletion of a group is not to be performed without consideration. Before deleting a group, the teachers belonging to it should be moved to another group or, if they have left, removed completely from the database. The group can then be selected and the delete button clicked. The first click will pop up a suitable warning; a further click will remove the group and its associated columns.

11.3 Teachers' personal details

To access this area click on the main menu button 'Teachers and their dossiers'. The main staff details screen will appear as shown below.
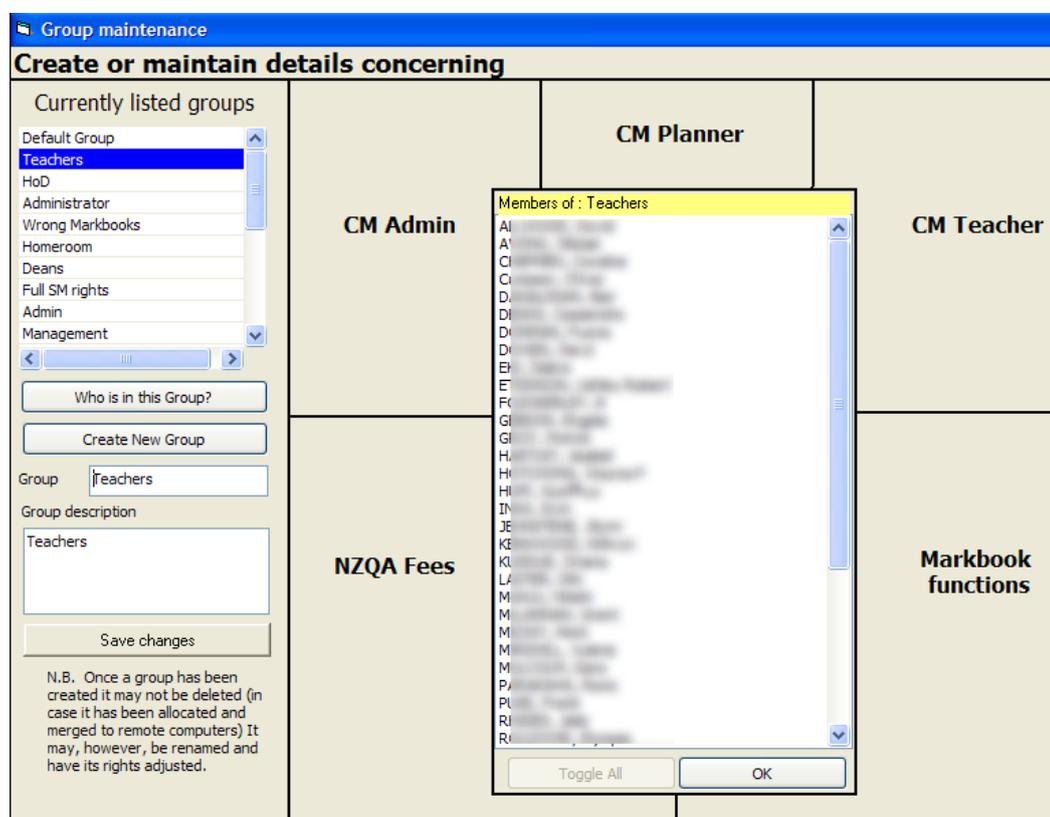
Figure 64: The staff details screen

On first entry the only teacher known will be a certain teacher known as MUSAC. Once you have added a staff member with comprehensive rights you should change the password of 'MUSAC' to prevent others from gaining unauthorised access.

To add a new staff member, click on the 'Add new' button and enter their details on the right side of the screen.

Click on the surname field and enter the various pieces of information (surname, first name) a password which this teacher may use (passwords may be up to 6 characters in length, passwords will be encoded and stored encoded in their onward files).

The title of the teacher should be selected in the next pull down combo from the list of possibilities available. If you have other possibilities then you do not at this stage have the option to add those to the pull down. We would have to add those for you.

The teacher's code is the most important part of the teacher - more important even than their surname or first name! Their code is used to identify the dossiers belonging to a particular teacher. Codes may be either two or three alphabetic characters, may not be duplicated, and may not contain digits! Please enter a suitable code that is unique to the teacher. (Not UUU - we have used this one!)
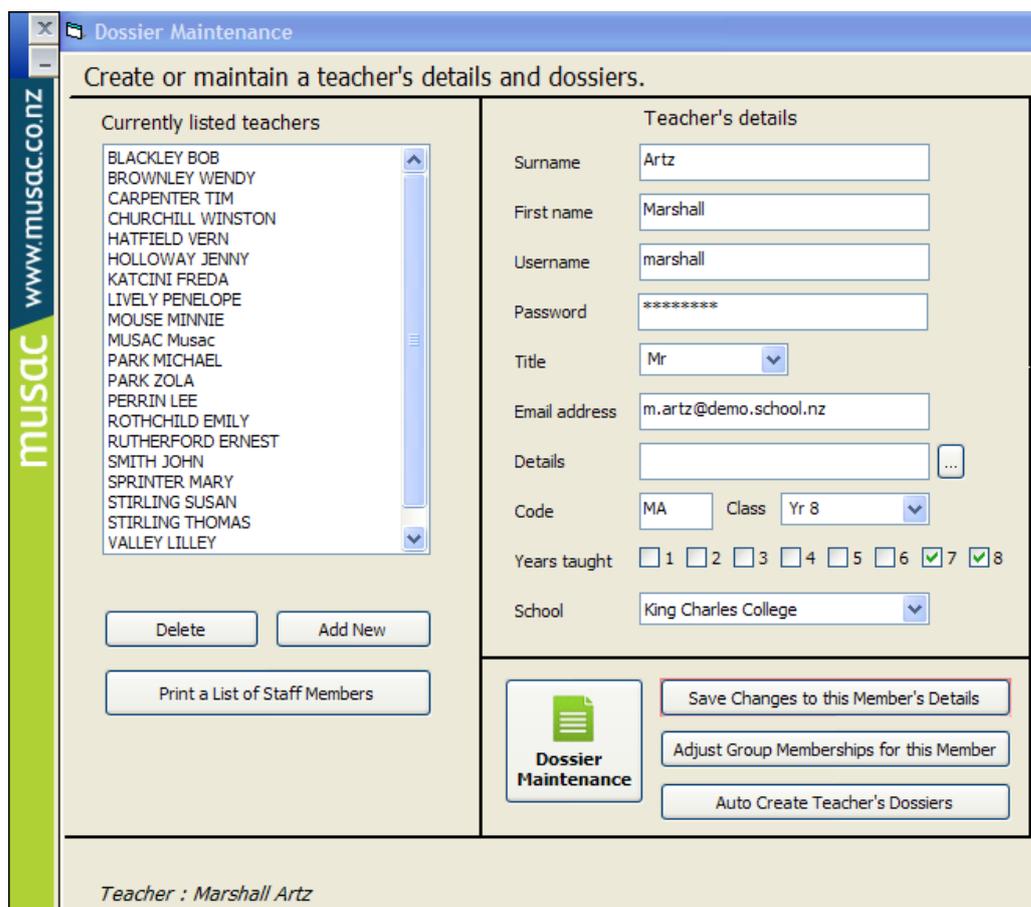
Figure 65: Entry of a teacher's details

'Class', 'Details' and 'Email address' are optional but each of the others, including the school of which he or she is a staff member are required.

The 'details' section is rather large and may be accessed in full by pressing the small button with the three dots at the right-hand side of the screen. You can add a considerable amount of detail for each teacher.

At this point, before doing anything else, you should click on the 'Save Changes to this Member's Details' button to record your new teacher's details. Now he or she will appear in the left hand list of teachers.

In CM Admin the school assessments have first been configured in the Assessment Tool Selector, thereby installing the required columns to ensure the relevant documents are available in Student Manager. Click 'Auto Create Teacher's Dossiers'. Only the documents with the correct year level in their name which match the teacher's year levels taught will be added to the auto created dossier, which can then be manually edited.

There are a couple of other buttons which require explanation. New columns can only be created using CMAdmin and CMAdmin itself should only be accessed via the school network. It must NOT be operated at home. This could lead to the creation of overlapping columns and that would not be a good thing.

Provided that you have created some spare columns (via the 'Column Maintenance' area) then some can be allocated to a staff member by clicking the button mentioned. The following screen will appear.
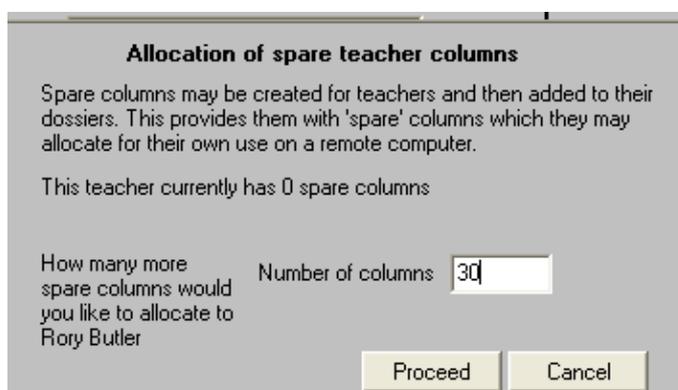
Figure 66: Allocating spare columns to a staff member

The other button, of course, is the allocation of group membership(s) for the staff member. Click on the final button and the allocation screen will appear.
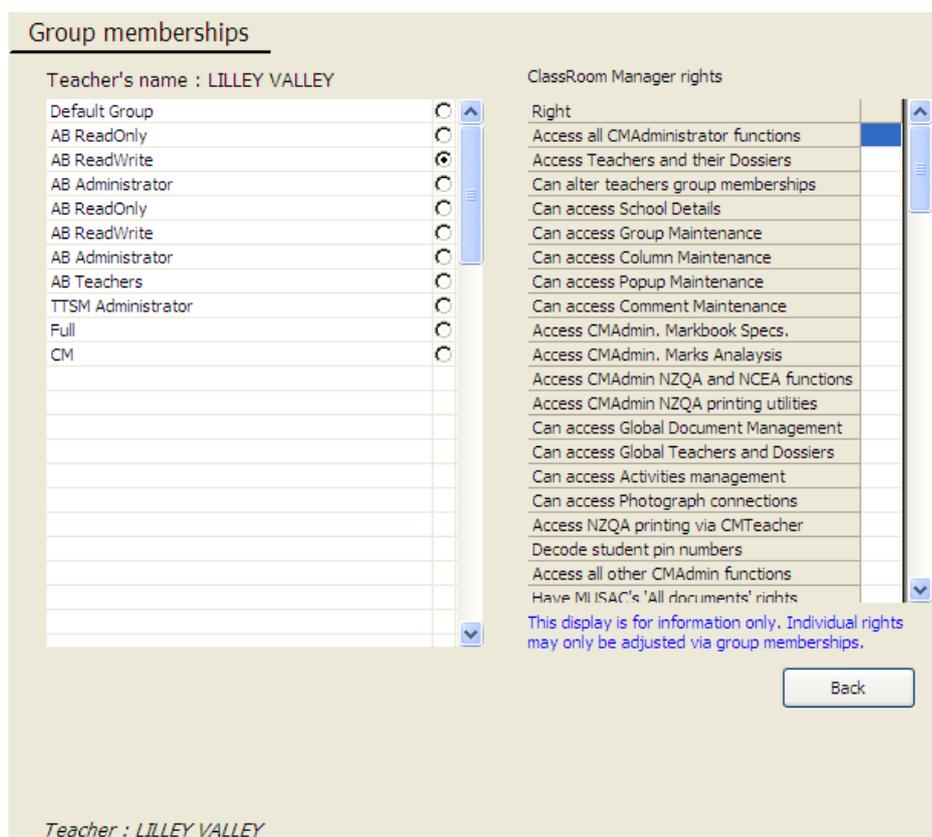
Figure 67: Allocation of group memberships to a staff member

A list of the available groups appears on the left-hand side of the screen and you should click on the option buttons nominating membership to particular groups. Remember that each group has certain rights within the package and by allocating a teacher to a particular group the teacher gains the rights of that group.

A teacher may of course belong to several groups and each teacher's rights will be the maximum access gained through membership of any group. In other words, if one group which a teacher belongs to is NOT allowed to perform a particular function and another group to which the teacher belongs IS allowed to perform a particular function then the teacher concerned WILL be able to perform that particular function. The rights which group memberships confer on the teacher concerned are displayed on the right hand side of the screen.

Once you have supplied the groups to your satisfaction click 'Back'.

You may return at any time and click on a teacher on the list and their details will appear on the right-side for editing.

Primary Schools:
From the main menu of CM Admin > Assessment Tool Selector.

1   The assessments need to first be selected from the available options by ticking the year levels taught by this teacher. Go to Teachers and Their Dossiers and select the teacher, and put ticks in the year levels that the teacher teaches. Then you can click the button to 'Auto Create Dossiers'. This process will provide the documents in Student Manager.
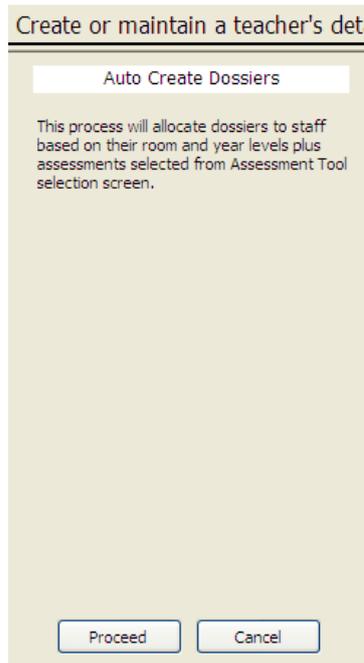
It is not desirable to change a teacher's code once they have dossiers allocated to them. Should you change the code on a teacher, then any dossiers using that teachers' code will be adjusted to reflect the new information but this cannot affect those dossiers already merged to other computers. Please avoid changing a teacher's code. We have tried to cover most bases automatically for you but cannot guarantee that all of the steps taken will be sufficient to completely effect a change.
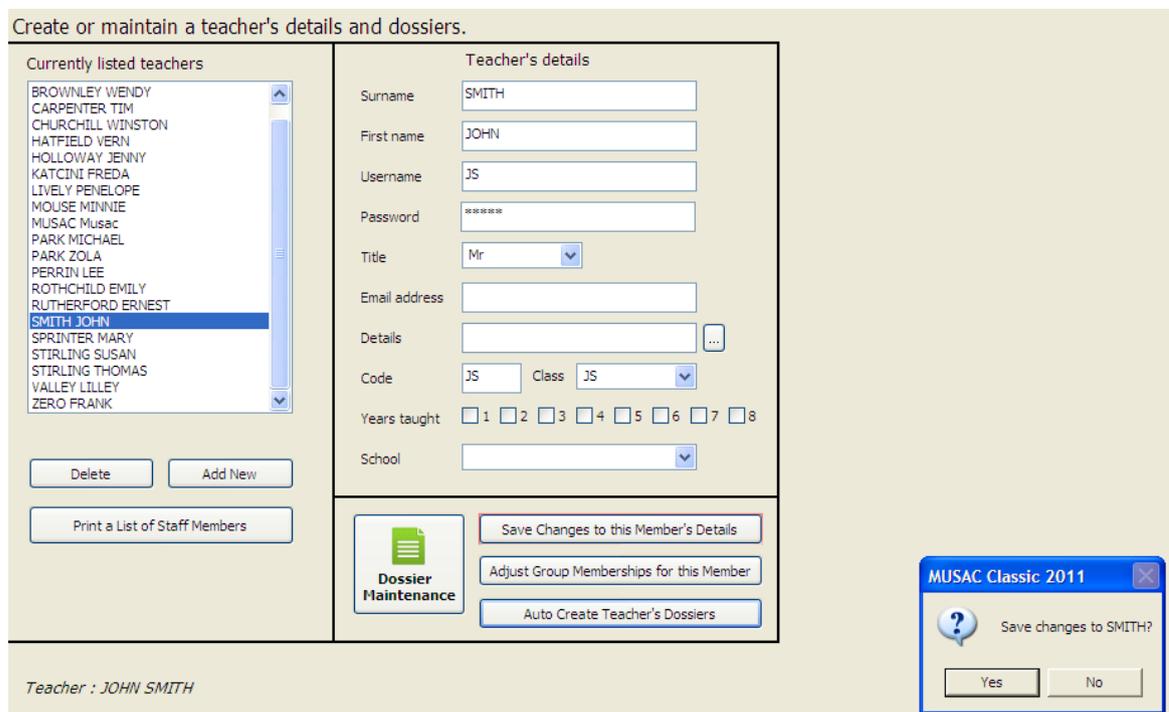
Figure 68: The screen which appears when you change a teacher's code

At the bottom of the left hand side of the main staff member data screen are buttons. The first allows you to print a list of staff members, via the dialogue shown below.
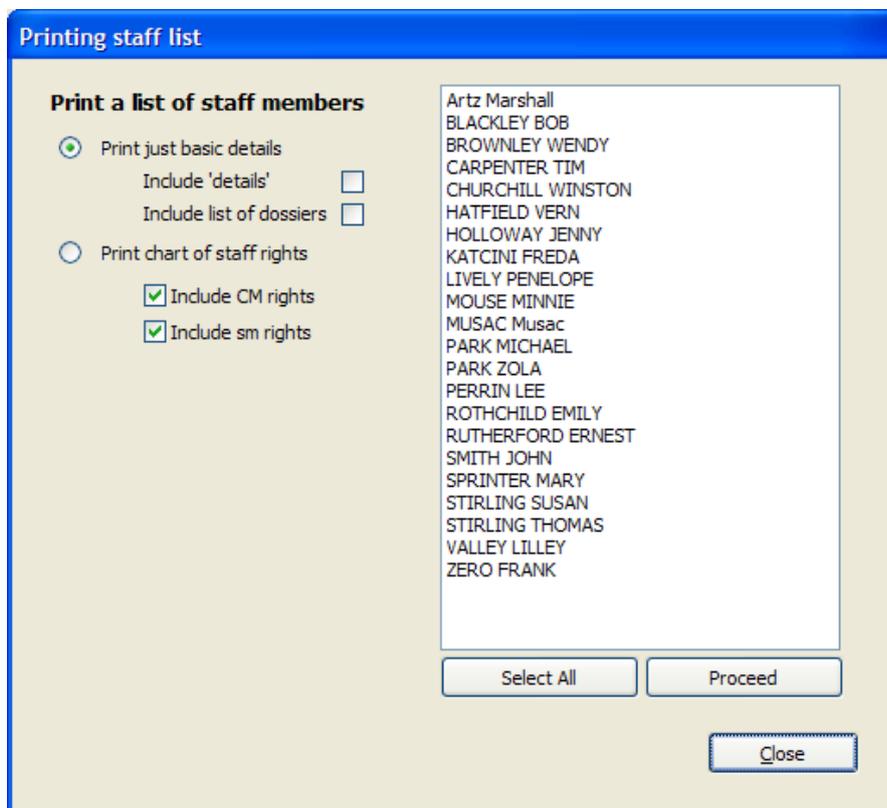
Figure 69: Allocation of group memberships to a staff member

Please do NOT import staff members who are already on file. This would only cause confusion!

Access Teachers' Dossiers via 'Dossier Maintenance' from the 'Teachers and Their Dossiers' screen. First select the staff member for whom you wish to manage dossiers then click on the large square 'Dossier Maintenance' button.

11.4 Teachers' Dossiers

Click Teachers and Their Dossiers.

Select a teacher(s) which leads to the first step. If you do not select a teacher you will be prompted to do so.

Dossier selection, the main screen of which is shown below.
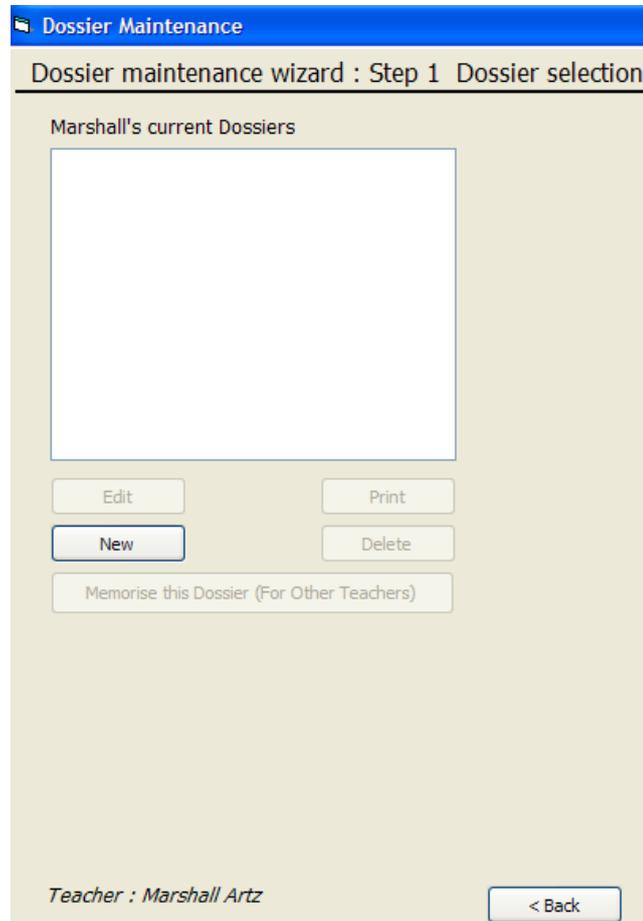
Figure 70: Dossier maintenance step 1

A window will appear listing any current dossiers designed for this teacher. As no dossiers have been created click 'New' to create a new dossier. If dossiers have already been created then selecting one will cause the other buttons at the bottom of the screen to become enabled, allowing you to edit, delete, memorise or print the selected dossier.
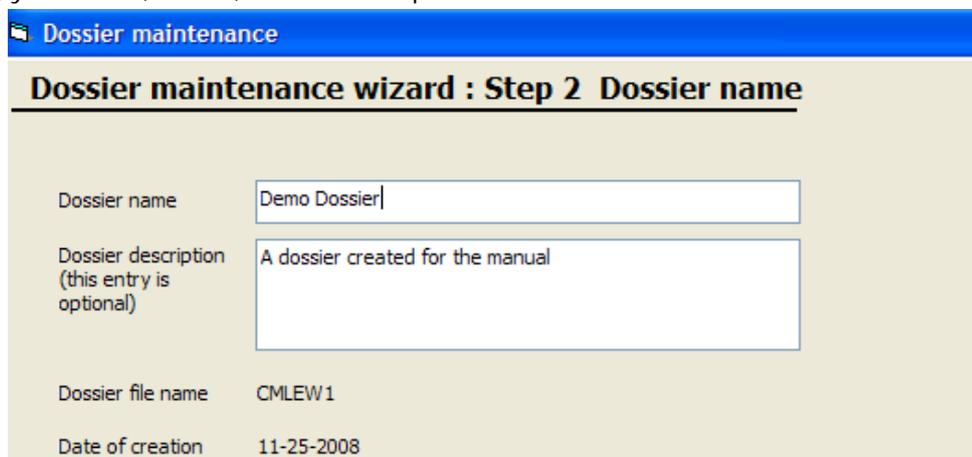
Figure 71: Giving your dossier a name

Name the dossier, select the students, select documents, columns and perhaps pictures, graphs, markbooks and comment banks.

In this step give the dossier a name by which you will later recognise it and a description (optional). The dossier has already been allocated a file name. This consists of 'CM' (for ClassRoom Manager) followed by the teacher's code, (we did say this was important), and the number of the next available slot for their new dossier, ending with the extension '.dos' eg. CMBT11.dos

The date of creation is also noted on the screen.

Click 'Next' when you are ready to proceed and you will move to Step 3 – the selection of students. This screen, shown below, has a number of tabs each of which provides one or more selection areas which can be used to identify the students whom you wish to include in the dossier. Since this selection process is used in a number of places throughout both ClassRoom Manager and Student Manager we'll leave a full discussion of it to an Appendix.
For the purpose of the demonstration we'll select Full time and Part time students who are in Year 9 and who are male and Maori.
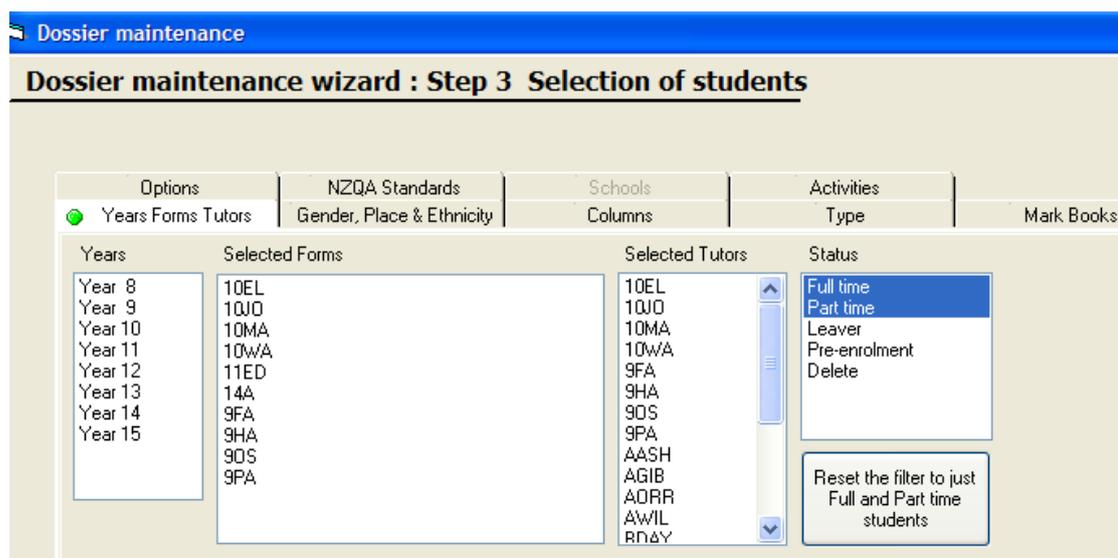
Figure 72: Selection of type, years and classes

On the first tab (Years, Forms and Groups) both Full time and Part time are selected by default. We add 'students in Year 9' by selecting that from the left hand 'Years' list.

Now click on the 'Gender, Place and Ethnicity' tab.
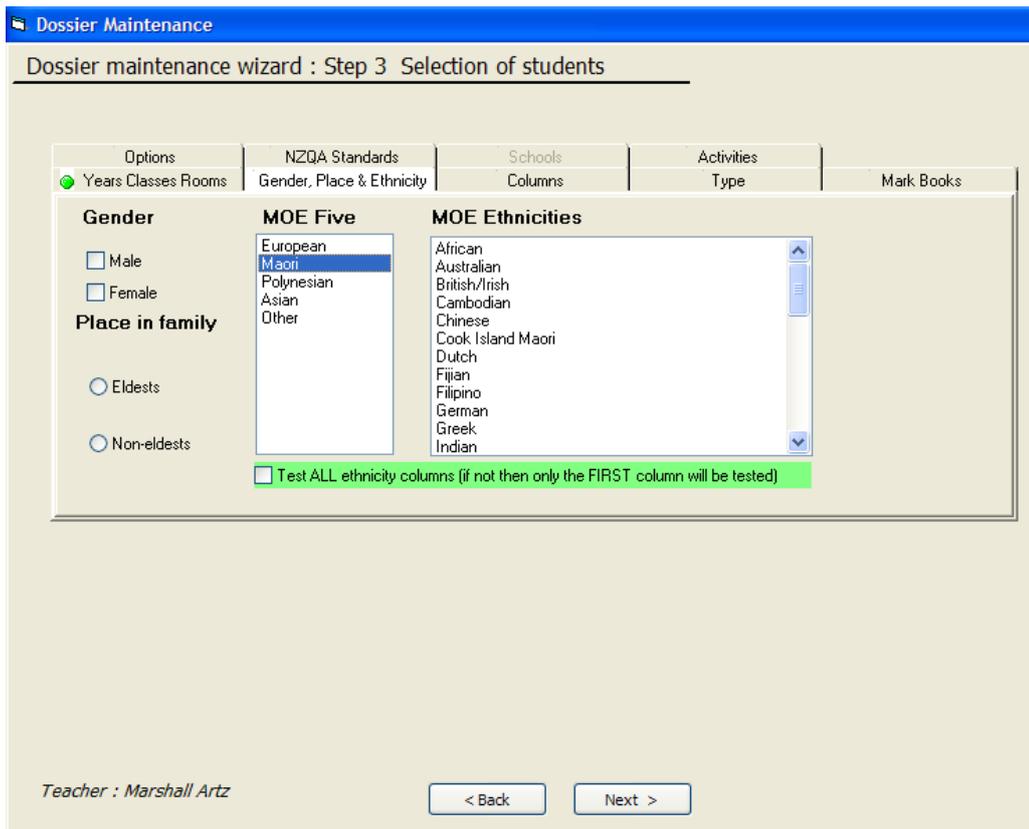
Figure 73: Selection of Gender and Ethnicity

Click both 'Male' and 'Maori'.

The logic of the student selection process is as follows. Choices are 'OR' within a list (eg. Full time OR Part time) and AND between lists – so that the selection we have made is effectively: (Full time OR Part time) AND year 9 AND Male AND Maori.

Click 'Next' to proceed to the next step, document and graph selection.
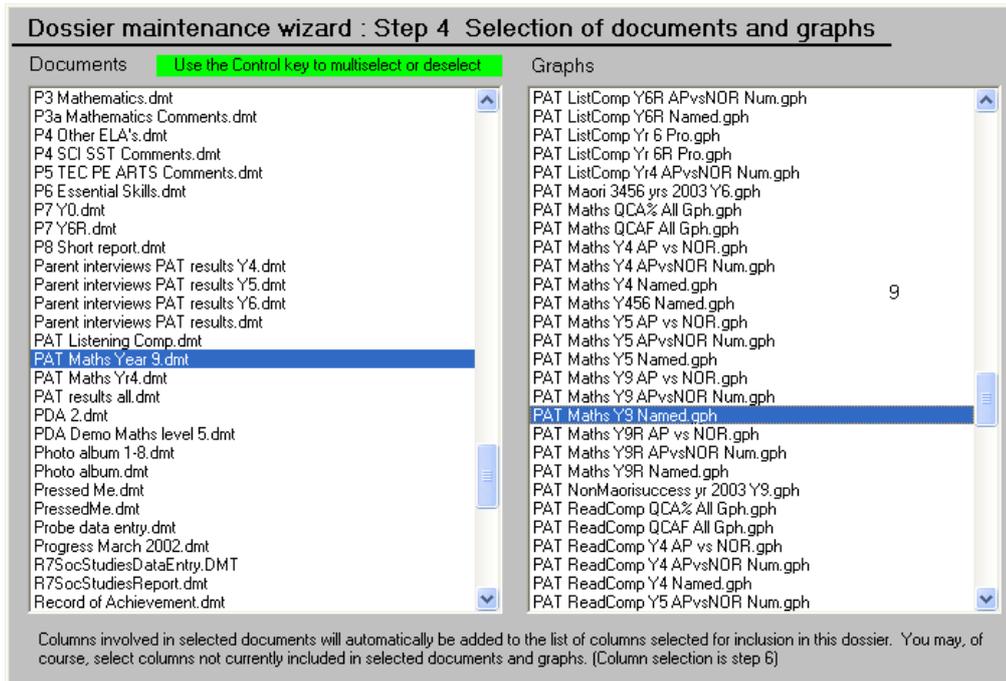
Figure 74: Selection of documents and graphs

Selected are one document and one graph. Hold down the Ctrl key if you wish to select multiple entries.

When you click 'Next' to proceed to the next step the following message will appear. This indicates that my document includes references to twelve columns from the database and that they've been added to the column list for me so that, in a couple of steps time, I will not have to go to the trouble of selecting them.
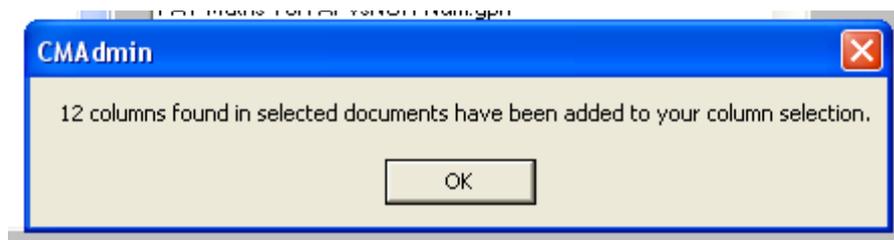
Figure 75: Automatic addition of columns
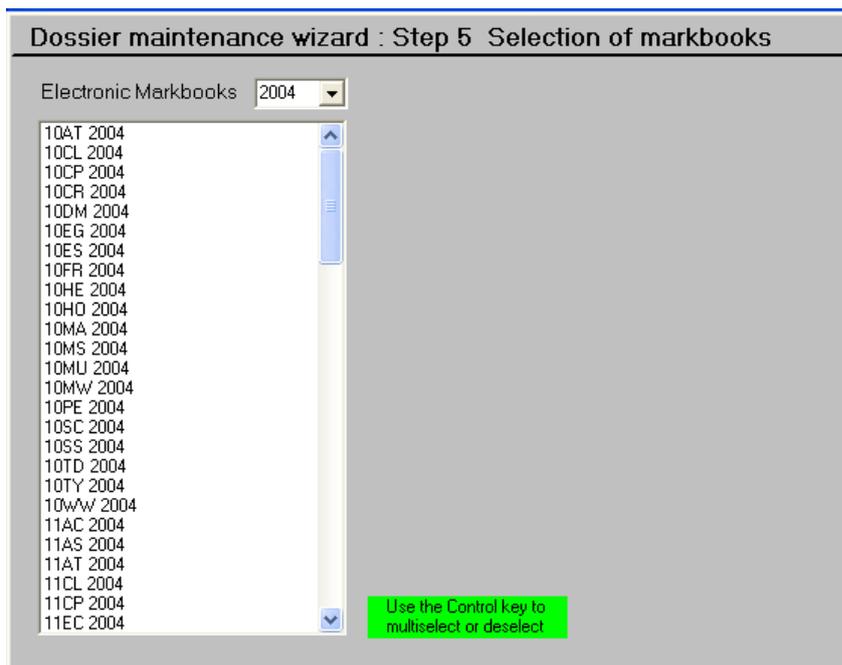
Figure 76: The selection of markbooks

Since we are not concerned with markbooks for this dossier proceed via the 'Next' button to the column selection step.
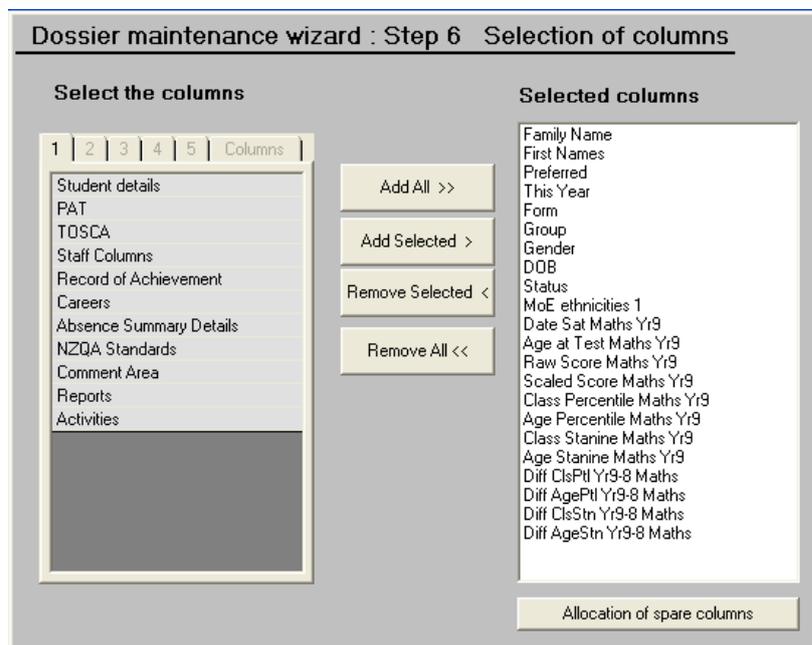
Figure 77: Selection of columns

There are already a number of columns selected for you. We recommend the first ten of these should be exported as part of EVERY dossier, later allowing you to analyse data thereon in a variety of ways. Also already selected are the columns from the Year 9 PAT document which we included. I'll add some more columns manually using the column selection process to identify various columns.

Now navigate to the required columns. To bring in the sports columns which were created earlier click on 'Sports' followed by 'Tennis' and select both columns.
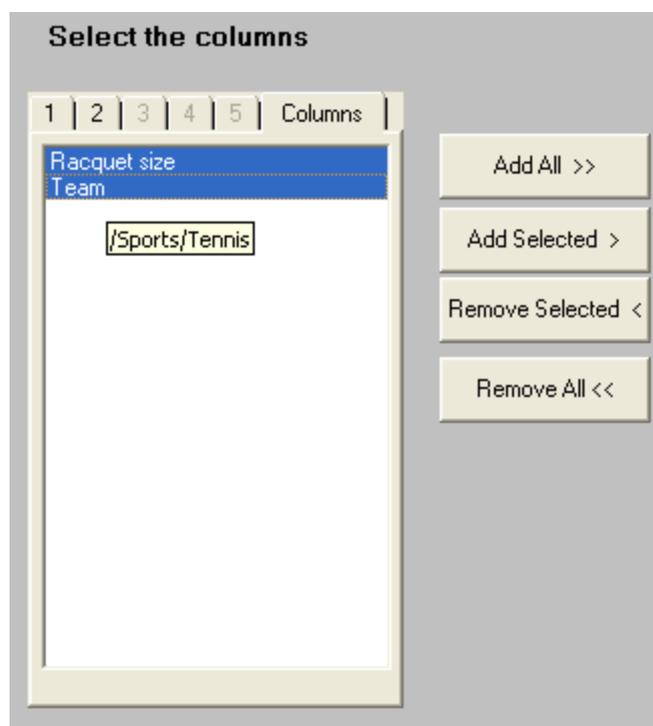
Figure 78: Selection of two further columns

Now click 'Add selected >' and my selections are added to the existing list on the right side.

Using the buttons displayed above allows you to add and remove columns until satisfied with the selection.

Please note: If preparing a dossier for a teacher who wished to access a particular markbook you MUST select the column or columns where the data holding the markbook data are stored. These columns are to be found under 'Record of achievement' / 'Subject History' / The year in question / the column(s) required. An example of option and core columns being displayed for selection is shown below.
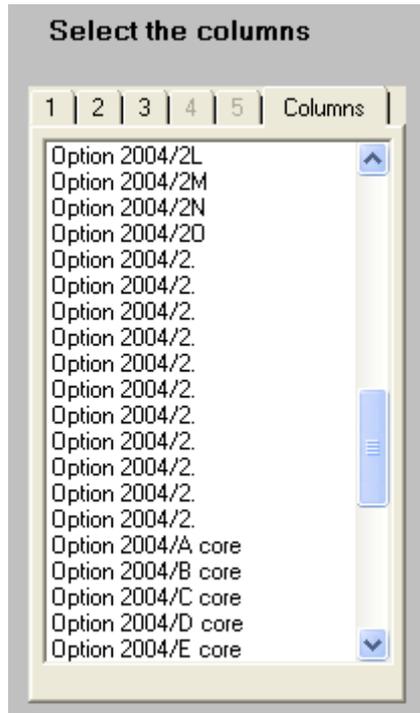
Figure 79: Selection of Option and core columns

The illustration shows the end of option set 2 for 2004 (where lines go as far as 'O') and the start of the core columns for 2004.
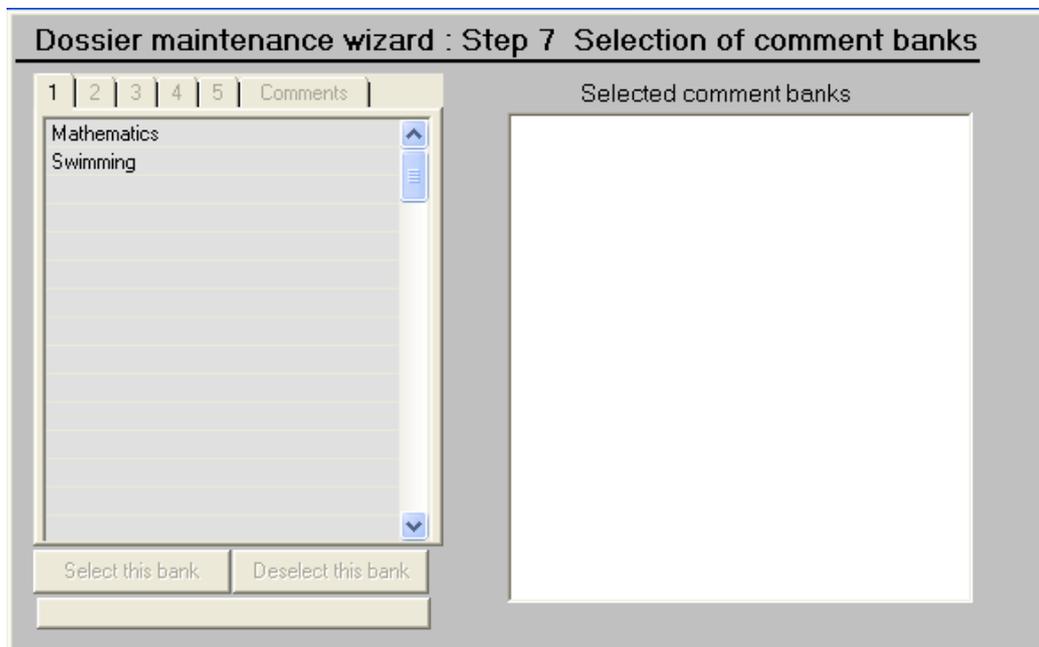
Figure 80: Selection of comment banks

Clicking 'Next' we come to the selection of comment banks and I have clicked on 'Mathematics' in the illustration above. Then, in the illustration below, I've selected the 'Mathematics' bank by clicking 'Select this bank' and the set of comments (known as a 'bank') is added to those selected, displayed on the right.
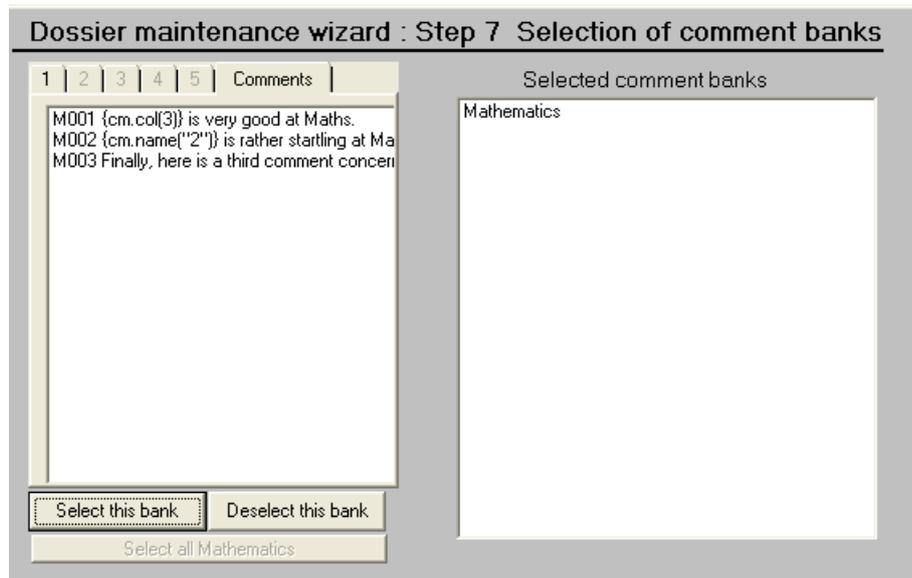
Figure 81: Selection of Comment banks (2)

Next we come to the selection of pictures.

If your documents selection includes a document with the school logo embedded then you will need to select it now, from the list of pictures.

There is another step yet to go – the selection of activities.
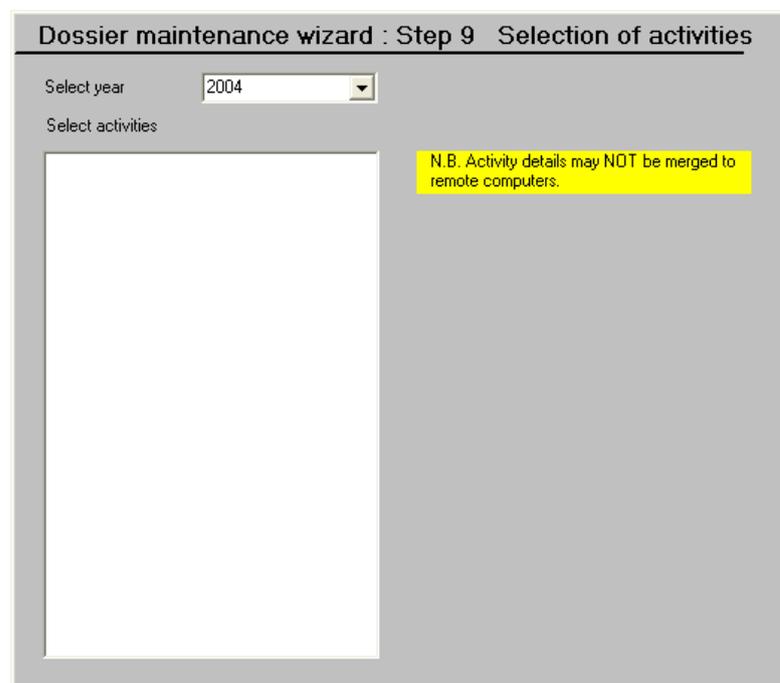
Figure 82: Selection of activities

We currently have no activities defined but, had we done so, we would select them here. There is an Activities section later in this user guide. (Briefly, activities allow you to create an entity

such as a sports team and attach a timetable grid, attach student columns, attach students to the activity etc and these processes can also be managed via dossiers.
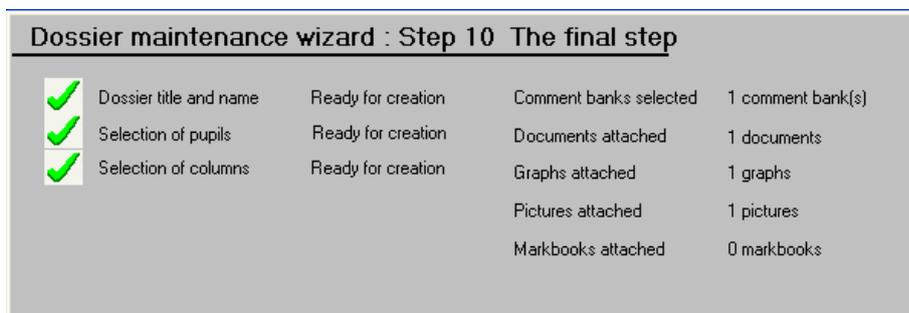
Figure 83: The final step

The dossier has now been defined.

Once you have three green ticks click 'Save' to record the design of your dossier. Please note that this saving process does not perform the extraction of data or the generation of the dossier itself. This process saves the design of the dossier created under the following step. Once you have created your particular dossier/s for your teacher/s, return to the main screen which now displays the dossier just created.
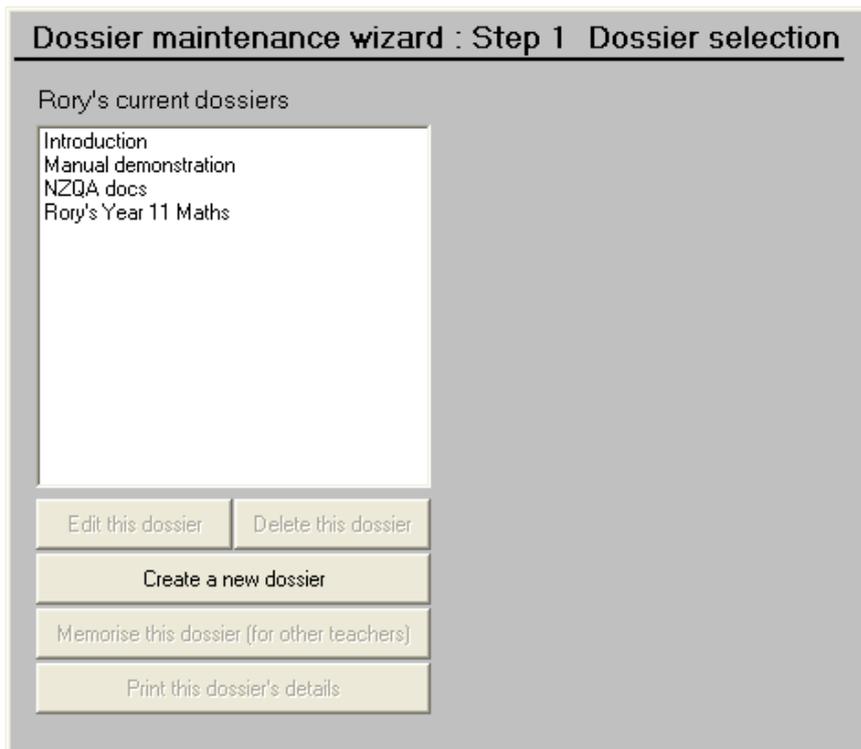
Figure 84: Our new dossier is listed

To edit this dossier select it from this list and click 'Edit this dossier', which will be enabled as soon as you select a dossier.

To duplicate an existing dossier for another teacher/s follow these steps:
>   Select the dossier
>   Click on the 'Memorise this dossier (for other teachers)' button
>   Return to the main teacher screen
>   Select another teacher
>   Click 'Maintain dossiers'
>   Click 'Create a new dossier'

The following message will be displayed.
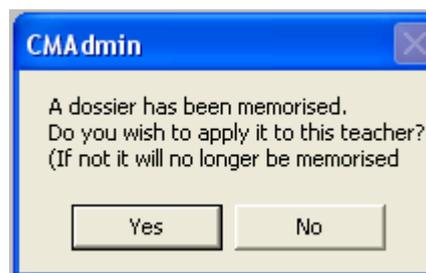
Figure 85: Copying a dossier for another teacher

There are global processes which apply to dossiers referred to separately.

If you are on a network, you can access dossiers directly using the Teacher module of ClassRoom Manager.

A final word about ClassRoom Manager and its presence on more than one computer. It is quite safe to install CMTeacher on as many computers as you like, but you must NOT have more than ONE copy of CMAdmin installed anywhere in your school's system. CMAdmin allows for the creation of new columns so this needs to occur in one place only.

Consequently, please ensure that you have only ONE installation of CMAdmin in your school's system.

12　Database Management Utilities

What's in this chapter?
1　An overview of database utilities
2　Accessing the backup utility
3　Recreating the database
4　Compressing the databases
5　Repairing the database
6　Who is accessing the databases

12.1 An Overview of Database Utilities

These processes are related to the management of the various databases which comprise the MUSAC Classic Suite.

The MUSAC packages access the following databases :

12.1.1 ClassRoom Manager

cm.mdb
Student specific data, columns, markbooks, options

staff.mdb
Staff member details

subjects.mdb
Subjects offered by the school

units.mdb
NZQA standards (unit and achievement)

12.1.2 Student Manager

All of the above plus:

sm.mdb
Student details, caregivers, financials, pastorals

calendar.mdb
Calendar details

absences20xx.mdb
Absence data

12.1.3 Staff Manager

staff.mdb
With extra tables

12.1.4 Absences

absences20xx.mdb

calendar.mdb

cm.mdb

12.2 Accessing the backup utility

THE most important management function you can perform is to make a backup of the databases on a very regular basis.

Everybody has, by now, suffered the indignity of lost data. Suffice to say 'Do it!' in no uncertain terms. At least twice a year we receive anguished calls from schools who suddenly decide that they need to restore a backup but that the last one was made several months ago and nobody is sure where it is.

The backup routine is a separate program and can be called via the backup screen, shown below.
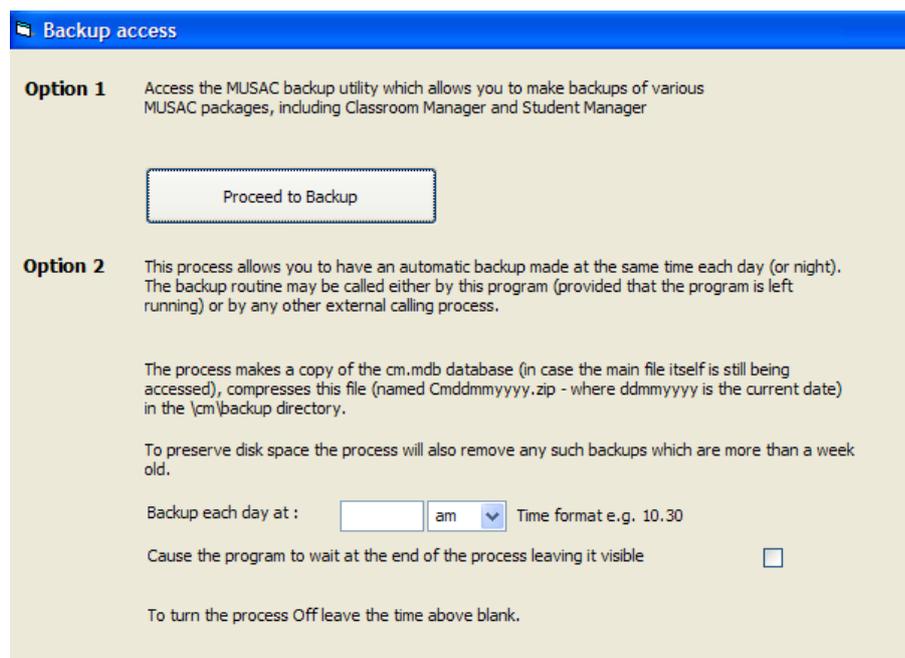
Figure 86: Accessing the backup utility

There are two options available to you via this screen. You can access the utility directly by clicking on the 'Proceed to backup' button.

You can instigate an automatic backup process which will cause a backup to be made automatically every day (or night) at the time which you specify.

Regardless of which process you use, make a backup and store it off-site. A backup is virtually useless if it is kept on the same machine as the databases themselves. Theft or fire would render the backup useless.

Early versions of the backup process required that nobody be using the software at the time of the backup. The current version gets around this problem by making a backup of a copy of the database, allowing users to continue their work during the process.

For full details on the use of the backup utility see the appendix devoted to this topic.

12.3 Repairing the databases

The golden rule :   **If in doubt please consult with MUSAC**

MUSAC Software Support or our agents can often effect a repair to a database. It is sometimes straightforward to open the database using Microsoft Access, which will sometimes recognise a fault and repair it. If a 'Compact and repair database' fails then, provided the database is not so badly corrupted that it cannot be opened, it may be possible to retrieve the vast majority of the data into a fresh copy of the database.

12.4 Who Is Accessing A Database?

From time to time it may be necessary to identify which staff members are currently accessing the databases. This utility allows you to do not only that, but to also send a message out and to even shut down their use of the software. The main screen is shown below.

Figure 87: Who is accessing?

The top half of the screen is devoted to a table listing those people currently accessing any of the databases. This screen is refreshed every five seconds so, if you are scrolling down viewing the list then, every five seconds it will be redisplayed from the top down. To have the constant refreshing paused while you are scrolling, click the first button below the screen titled 'Pause list generation'.

The list includes the following information:
- The computer name where the user is working
- Their login ID
- Their name
- The date
- The time

A database must be accessed to retrieve your password and entry code).

The bottom half of the screen allows you to send a message out to all current users. This part of the screen is illustrated below.
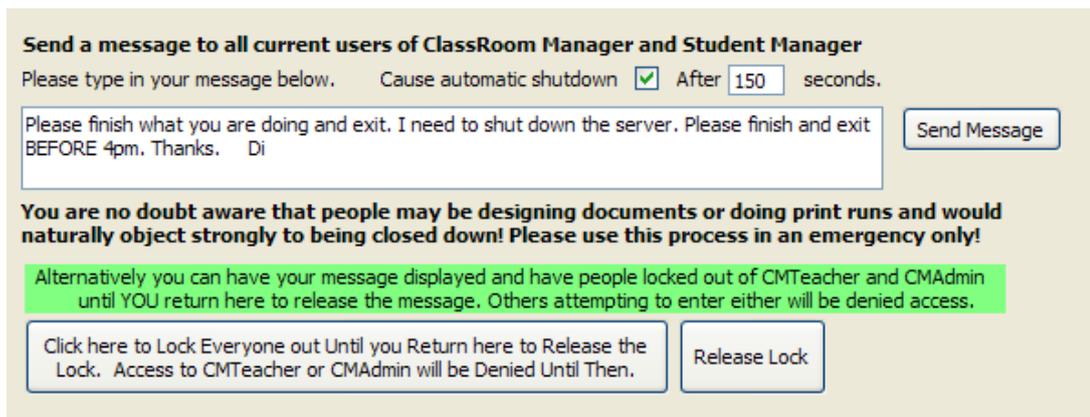
Figure 88: Sending a message

I typed in the message to send and have also decided to automatically sign users out of CM and, to cause this, ticked the small box to 'cause automatic shutdown'. This automatically fills in a time of 150 seconds – two and a half minutes. Once you click 'Send message' the clock starts counting.

Every instance of CM running on the network is checking for a message every twenty seconds. If a message is found it is displayed on the user's screen. With one minute to go a second message is displayed. When time is up, if they have not voluntarily exited from the package then any open databases are closed and the package is stopped.

If the work you wish to do requires that all users be locked out of the package while you carry it out, you can effect this by clicking on the large button at the bottom of the screen. Later, when you have finished, you (and only you) can return to click 'Release lock'.

Any user can send a message to anyone else using a general message utility. It is accessed by clicking Ctrl-M from anywhere in the main menu part of the package (or while viewing a document in CMTeacher). The following screen will appear.
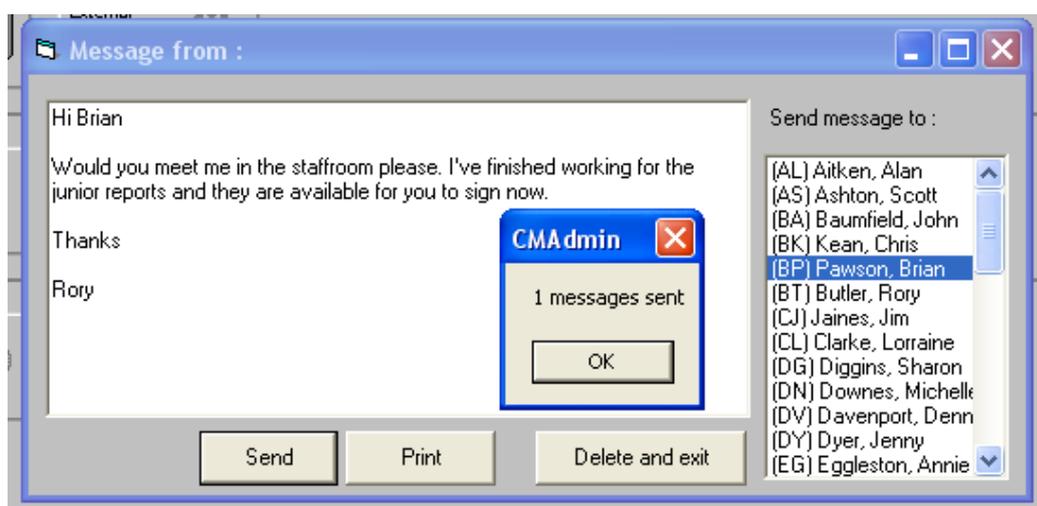
Figure 89: A message sent

In this dialogue a message for Brian has been prepared, and he has been selected from the list of staff members on the right side. More than one recipient can be selected by holding down Ctrl while you select. Click 'Send' and a confirmation message '1 messages sent' appears.

On Brian's screen he is interrupted with the following window.
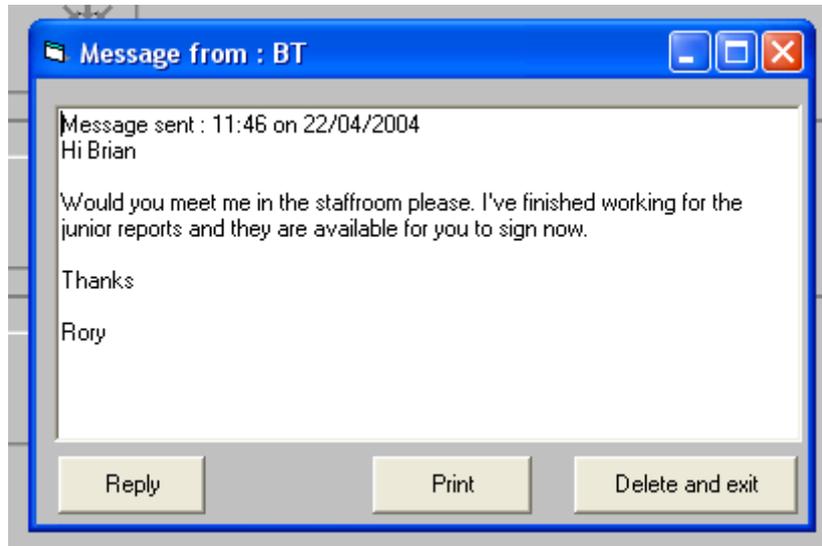
Figure 90: A message received

He can immediately reply, print the message, and he can delete it.

13 Utilities

13.1 View Basic Student Data

Sometimes you just want a quick look at the database to see which students are there and that they look alive and well. In addition to MUSAC's OneScreen viewing function for this purpose, (also providing an extended NCEA comprehensive student status summary) this button displays the ten basic columns for every student in the database.

Figure 91: Viewing basic student data

The note at the top of the screen tells you that you can sort any column ascending or descending by right-clicking in the column heading. When I do this to the 'Ethnicity' column I immediately see that several students are missing their ethnicity.

Figure 92: Missing ethnicities

While the program does not allow for displayed data to be edited it does let you know quickly that data is missing. Data can only be entered via CMTeacher (or Student Manager) and, as far as the basic ten columns are concerned, only if the user has been given specific rights to edit data in these columns.

13.2 Transferring students between databases

This process is used primarily to transfer leavers to a year-specific database of leavers, normally done each year AFTER the Ministry of Education March Returns have been completed.

It can also be used to retrieve leavers and return them to the main database should they reappear!

Figure 93: The student data transfer screen

To transfer students' data from one database to another, select the database FROM which you are transferring data. As you select the database the students contained therein will be listed in the third column on the screen. To do this select from the left hand list (in the first column). At the same time the number of full time, part time, leavers, pre-enrolments and delete students will be counted and the number of each also displayed to the left of the right hand column. To view just those students in a particular category click on the relevant 'View' button.

Select the database TO which you wish to transfer student data. To do this select from the second list of databases – in column 2.

In the illustration below to transfer data relating to four students from the main database CM (i.e. cm.mdb) to the leavers file for 2004 (cmlv2004.mdb) is selected with four students.

Figure 94: Four students ready for transfer

Select those students to transfer. Hold down Ctrl while you select to select more than one student. Alternatively, click on 'Select all' at the bottom of the screen to select all students displayed.

Click 'Proceed to transfer' to have the data moved from the first database to the second.

At this point the following confirmation message is displayed.

Figure 95: The confirmation request

Click 'Yes' and you will move to the data transfer screen via which you can monitor the progress of the process.
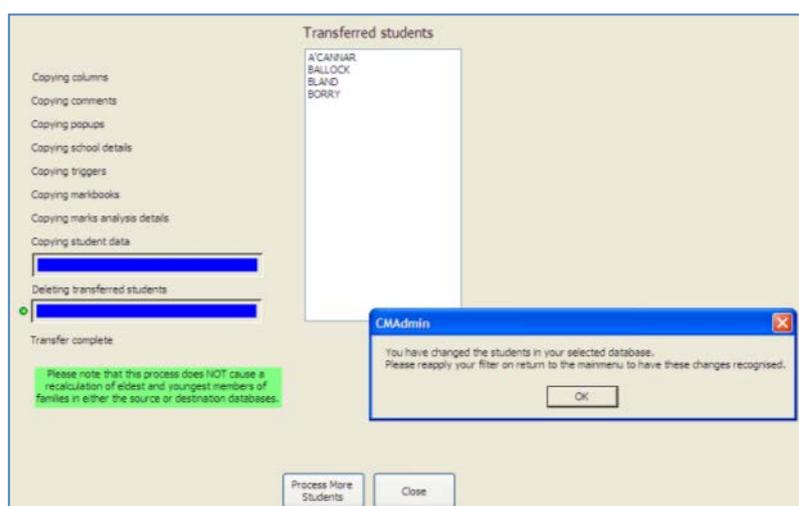
Figure 96: The transfer process

You can safely move students backwards and forwards between databases. Remember that, should a student who has left return, then you should ensure that their 'Date started at this school' is modified to the correct date. Their history of register entries can be viewed via Student Manager.

13.3 Introduction to Identity Data Export for PaCT or Active Directory

13.3.1 Background

Management of identity information within schools is becoming increasingly complex as the range of services provided by IT systems grows, and key applications move into hosted environments. Identifying a standard set of information to be sourced from Student Manager for the purpose of network directory provisioning, forms initial work programmed towards addressing the needs of the wider IAM (Identity and Access Management) environment, recognising the need for Interoperability with existing and future WAN based SAML 2 compliant Identity Providers (IdPs).

13.3.2 Implementation

MUSAC Ltd's Interoperability Control Centre incorporating Identity and Access Management functionality supports the electronic exchange of 'group' data between Student Manager and network directories in New Zealand schools.

The data transferred meets the data network directory requirements to set up and maintain user accounts; and additional user attribute data to be stored in the network directory for the use of Identity and Access Management (IAM) systems being developed.

The Utility:
- Allows the MUSAC Administrator to export directory identity data via a CSV file. Leavers can be excluded from this.
- Facilitates the identity data which require uploading to an SMS-IAM upload folder using the data already held in Student Manager and Staff Manager, for all users who use IT resources, including students, all staff, caregivers and senior management team.
- Allows the MUSAC Administrator to select which user group/s to include.
- Restricts access (password is required) to the SMS-IAM upload folder to the network IT Administrator (with those rights).

Note: The ID Export functionality is only available to those with IT Administrator access.

13.4 Working with ID Export functionality
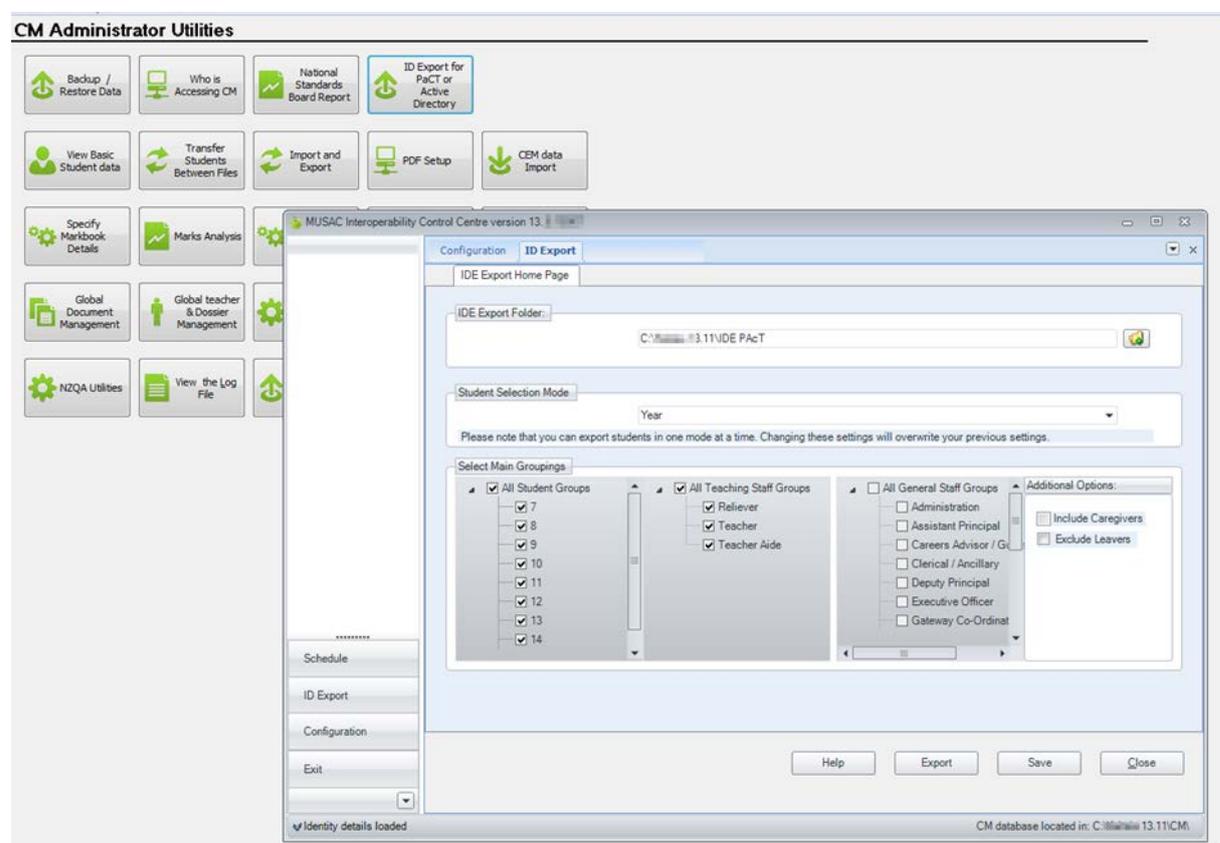
1   From CMAdmin > Other Utilities > 'ID Export for PaCT or Active Directory', the Utility navigates using the buttons on the side-bar on the left of the screen. The selected button will then open the relevant tab to the right.

2   Click 'IDE Export' in the navigation panel on the left to check the path of your SMS-IAM upload folder.

13.4.1 Selection of SMS-IAM Folder

Click 'IDE Export' and on the IDE Export Folder, select the SMS-IAM Upload folder location. It is important that the location of the folder is set to the correct path here.
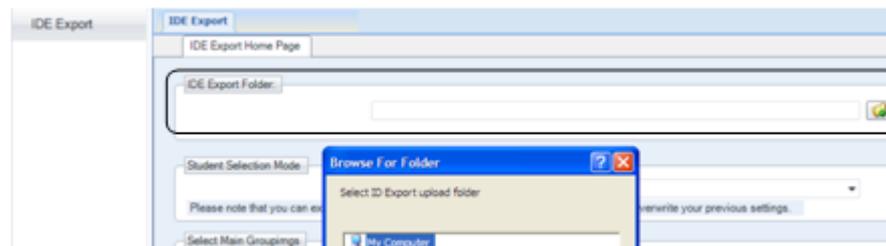
13.4.2 Student Selection Mode

To designate how your student groups are listed in the Select Main Groupings display, select from the drop-down. If 'Year' is nominated, 'All Student Groups' are listed by Year.
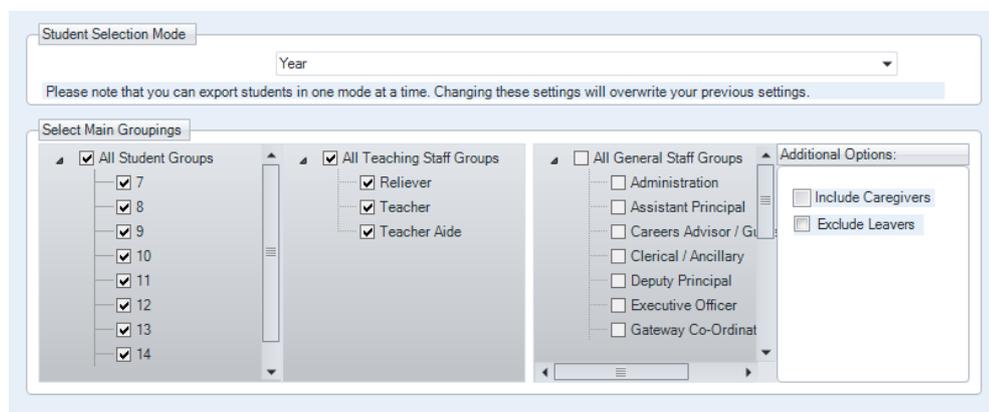
Only one selection in the 'Student Selection Mode' can be used at a time for each export. If a change of selection is made, this will overwrite the previous selection for the export. Alternative options for Student Groups are by Form, or by House.

13.4.3 Select Main Groupings

All Student Groups
Check the first box for multi-selecting all Student Groups, or check individual Student Groups for export.

All Teacher Groups

To filter teaching staff for export check required boxes.

All General Staff Groups

Check desired Staff Groups from all non-teaching staff for export.

Additional Groups

1   To export caregivers the Include Caregivers box needs to be checked.
2   Note when selecting caregivers, only those caregivers that are connected to the student with a valid NSN number will be exported.
3   If only caregivers are selected all the qualifying caregivers will be exported.
4   Where you want to exclude leavers, the Exclude Leavers box must be checked.

Once you have selected your groups click 'Export'.

13.4.4 Viewing the Results
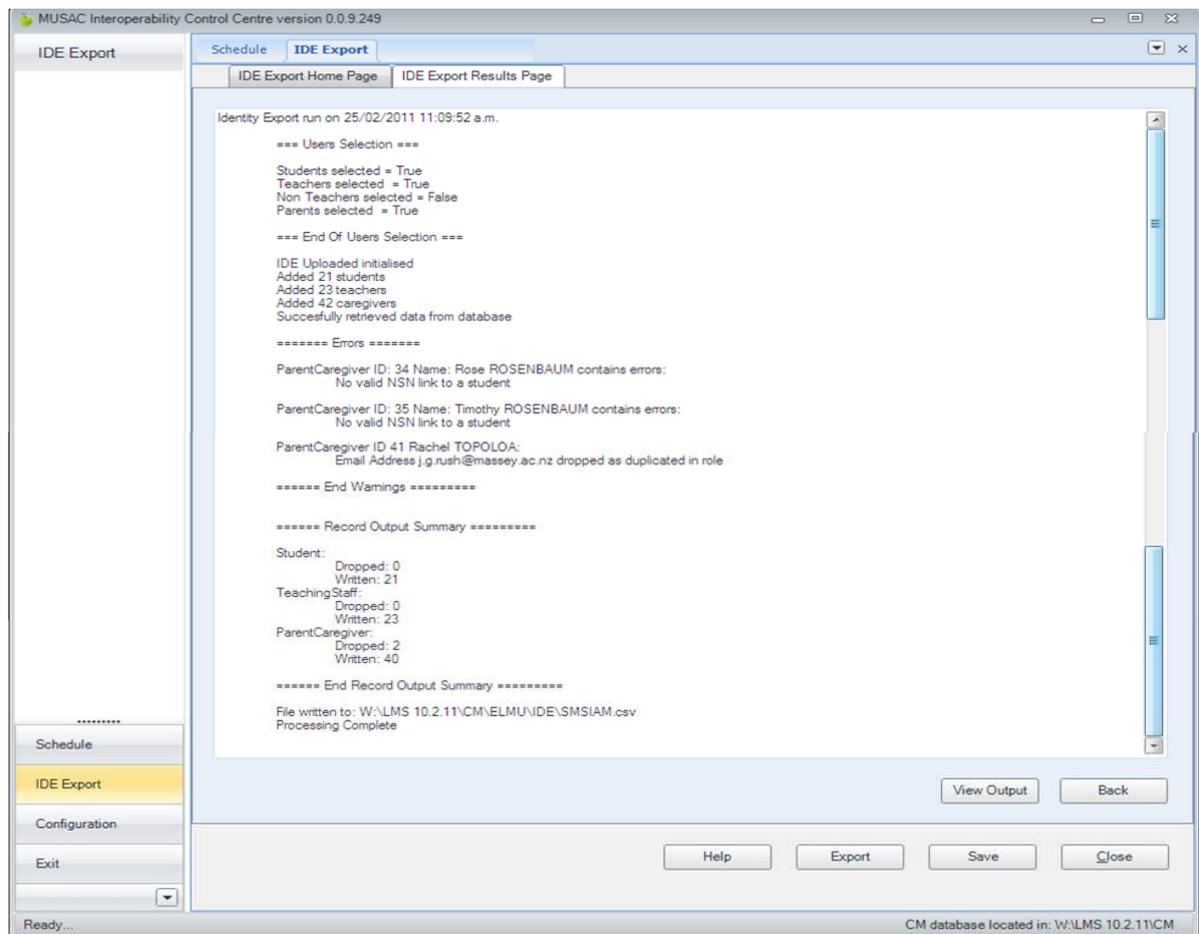
1   When the export is completed the log file will automatically display.
2   Click 'View Output' to see the content of the Output File which will open in Notepad (see below for further detail).

13.4.5 Required Core Identity Data

The complete identity data required to effect data export is:

Person ID
First Attendance date is mandatory for students
First Name
Last Name
Role
- o Student
- o Teaching Staff
- o Non-Teaching Staff
- o Caregiver/Parent (the associated Student's NSN must be included)

13.5 The IDE Log File

1 To access the log file browse to your ...\CM\ELMU\Logs folder.
2 The file displays the date, time, group selections (with the ID and name/s of identities with data validation issues) and a results summary of the export logged.

The log file is divided into six sections:
- User selection showing the selections used in this export.
- Diagnostic information showing the number of identities loaded, although some may not qualify for output.
- Identities with errors – these identities will not be written to the output file.
- Identities with incorrect information in one or more fields. These identities will be written to the output file, but the invalid fields will be omitted.
- A Summary which lists the number of records dropped (omitted) and the number written (output to the file) for the whole export.
- The path of the SMSIAM.csv output file.

13.6 Server settings: MUSAC Interoperability Control Centre Utility

13.6.1 Scheduling of Task

1. To set the exports to occur automatically click the 'Schedule' tab in the left pane.
2. Select either IDE or LMS export to change its schedule.
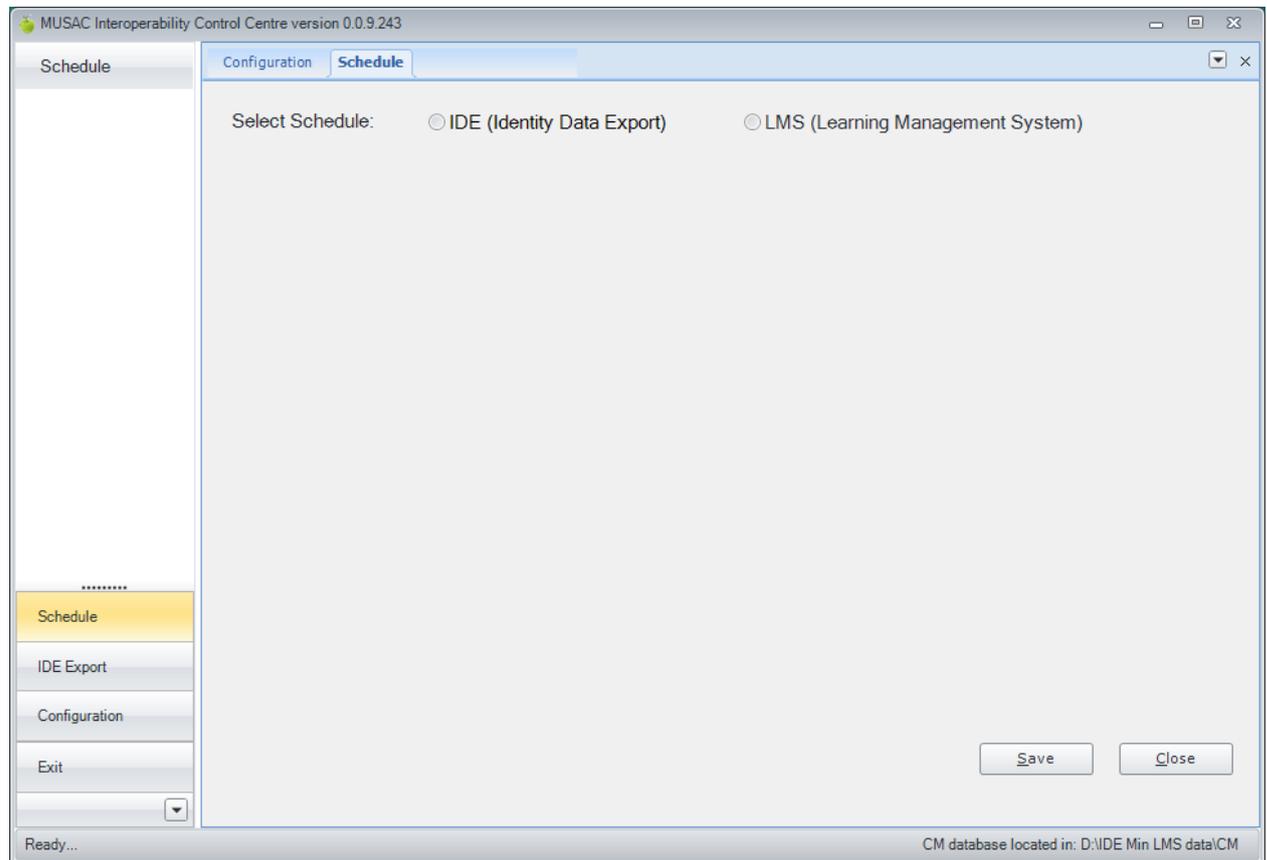
The following screen shows settings which have been changed.
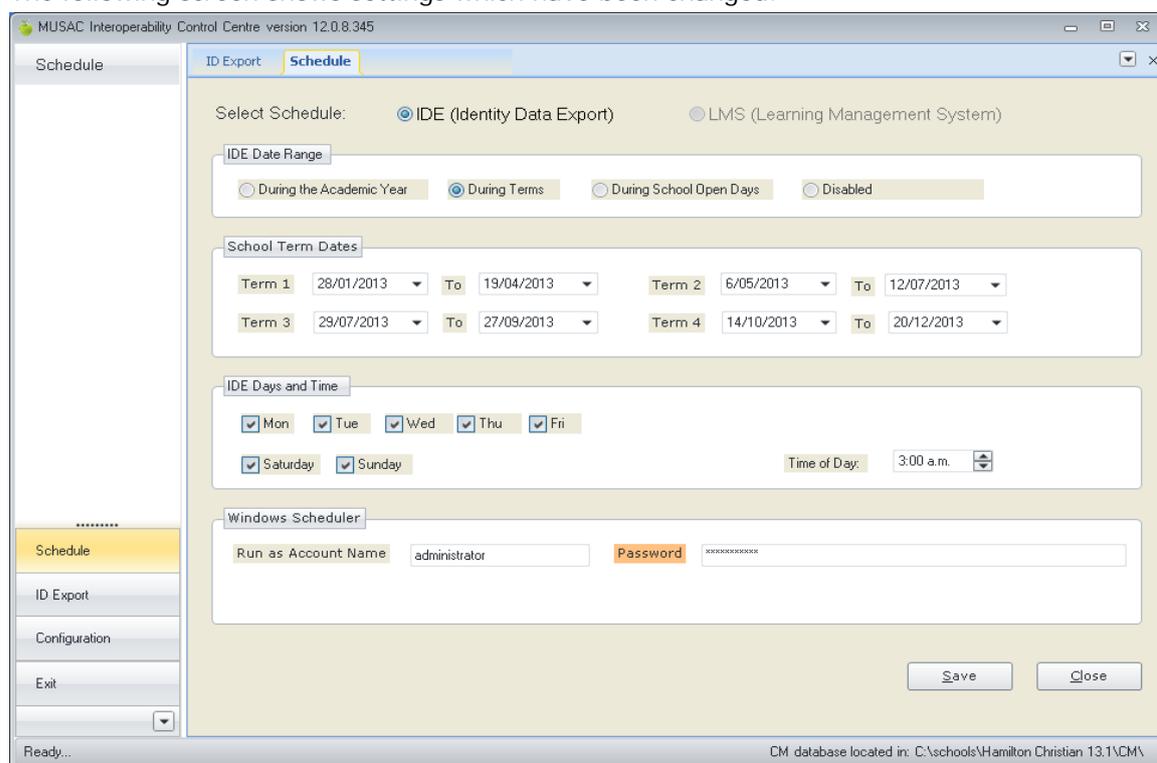
Installation folder path
To change the location of the MUSAC Interoperability Control Centre folder shown in the field, click the folder button.

Days of the year the upload will run
To alter term dates click the arrow and select from calendar. By default the exports are scheduled to run during term time.

Days of the week
To set a particular day if desired for export, or to exclude weekends and holidays, edit these settings.

Select the Time of Day
To alter the export Time of Day (defaults to 2.00 am) in considering other data-intensive settings, eg. creation of rolls in Attendance software.

User Name and Password
If you change any of the existing settings you will be prompted for the password. The user names and password relates to the Windows account user name and password.

Schedule preference tabs
If you plan to schedule **both** Identity Data Export (IDE) and Learning Management System (LMS):

1. MUSAC advises scheduling the 'Identity Data Export (IDE)' export first.
2. Please leave a five minute time slot for this to complete before running the 'Learning Management System (LMS)' upload as the 'Identity Data Export (IDE)' export completes much faster than the 'Learning Management System (LMS)'.

Click 'Save' and 'Close'.
Then 'Exit' the application.

13.7 Import and Export of Student Data

This process offers export and import functions accessed via the main screen shown below.
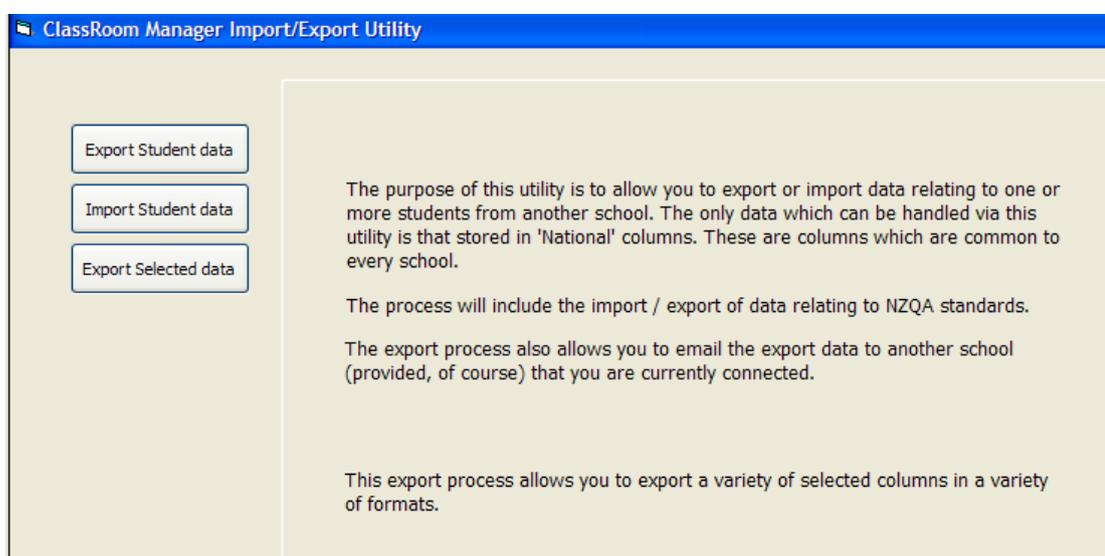
Figure 97: The import/export possibilities

As detailed on the screen the first export process is intended to export data held in 'National' columns – ie. those common to all schools – in order for one school to transfer data relating to selected students to another school.

There is an 'Export Student data' function which allows you to export all or selected data for selected students in a variety of formats.

'Import Student data' performs the matching import process allowing the destination school to receive the data for their new students.

13.7.1 Export Student Data to another School

This utility exports all 'national' columns for selected students, presumably those leaving to go to another school. The main export screen is shown below.
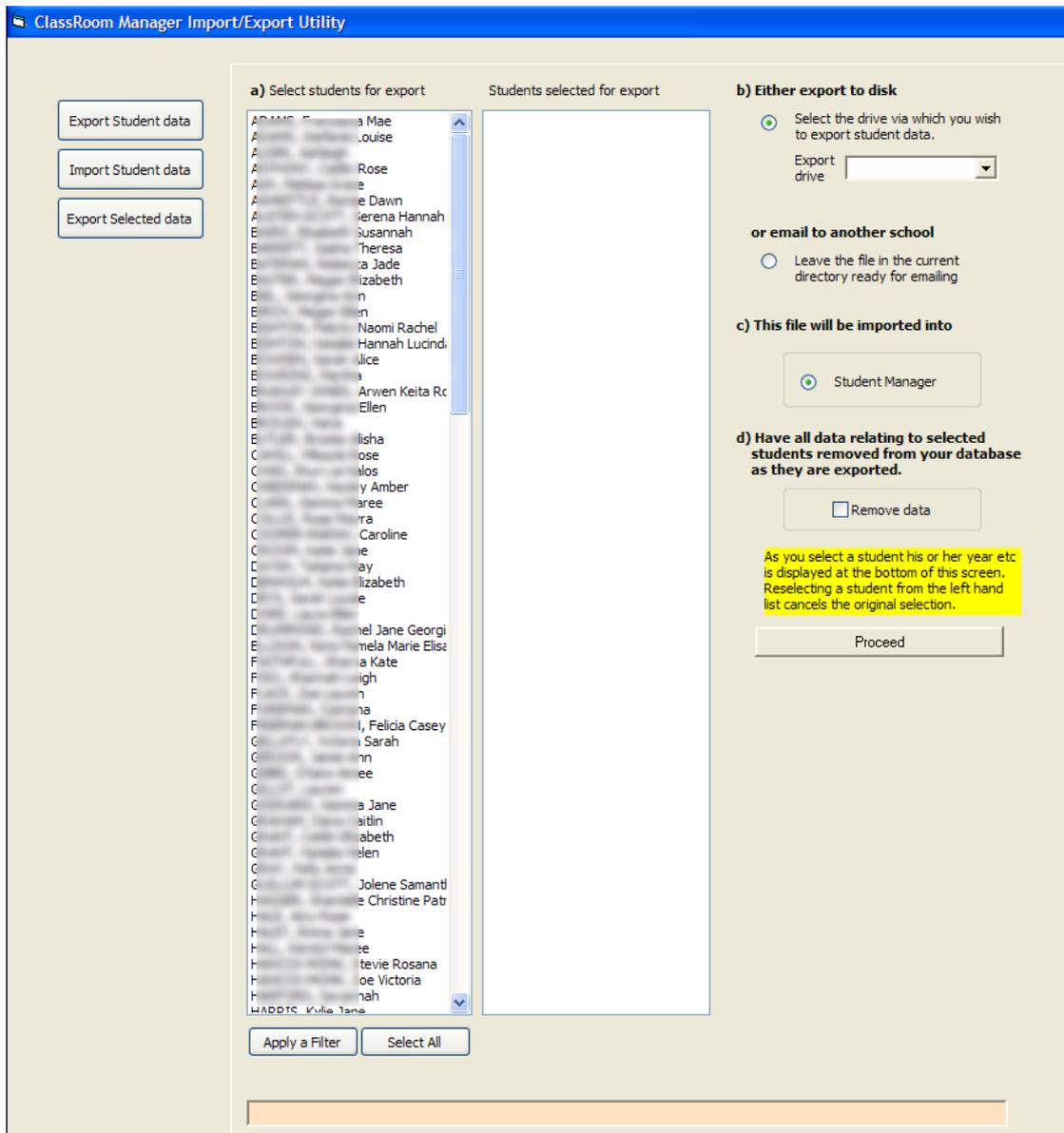
Figure 98: The export screen

Select those students you wish to export from the left column. As you click on a student their name is added to the centre column. To remove a selected student either re-select them, or click on their name in the centre column.
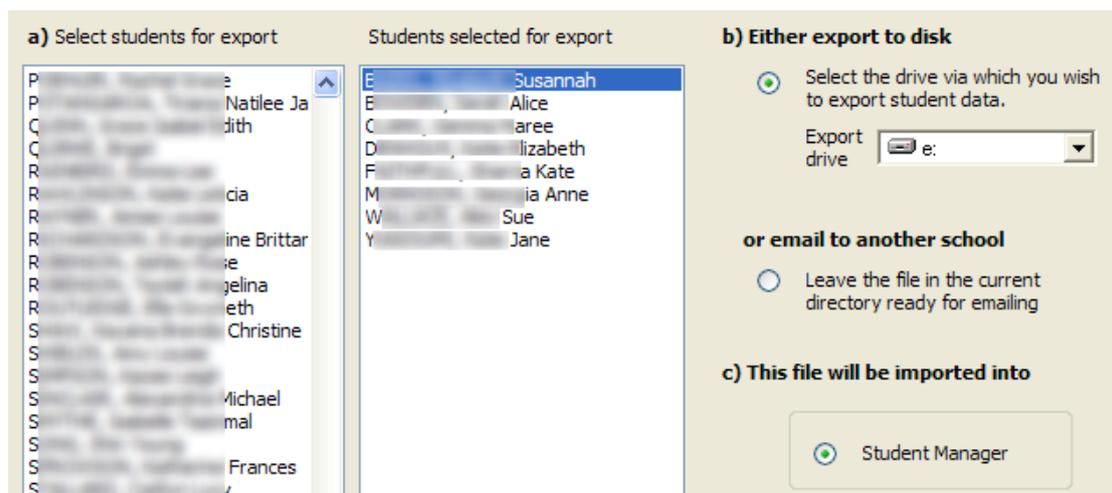
Figure 99: A selection of students for export

In the illustration above eight students are selected for export. On the right of the screen is elected to export them to a file on a pendrive. Alternatively I could have the file left in the \cm directory and emailed it to the destination school.

Once you have completed your choices click 'Proceed' and the export process will occur. Exported students' names are displayed on the 'Proceed' button as they are processed.

The name of the import/export file is CMImpExp.txt; an example of part of an exported file is shown below.

MUSAC Demonstration 16/04/2008
22/04/2004
1#BARRIE
2#NOEL LINDSAY
3#NOEL
4#MR & MRS R BARRIE
7#197 BATH STREET
8#WANGANUI
12#34~Nationality~New Zealand
13#35~Language~English
16#13
22#33~Gender~Male
23#19841115
25#19890101
26#19890101
27#5~Type~Regular student
29#4~Status~Full time
30#24
31#25
38#41~Relationship~Father
39#41~Relationship~Mother
46#NNYNYYYNNNNNNN
47#NNYNYYYNNNNNNN

244#7~MoE ethnicities~NZ European/Pakeha
451#XX XX XXXXX   XXXXX   X   0 X X   X XXXX   X X   0
NZQA*9721901E~~~2007~123
NZQA*9726201E~~~2007~123
NZQA*9720101E~~~2007~123

At the end of the file you can see NZQA data attached.

13.7.2 Importing Data from Other Schools

To import exported data from another school using ClassRoom Manager/Student Manager you must have first at least entered the students' names. The import routine attempts to identify students on the import file against those already in the database. The main export screen is shown below.
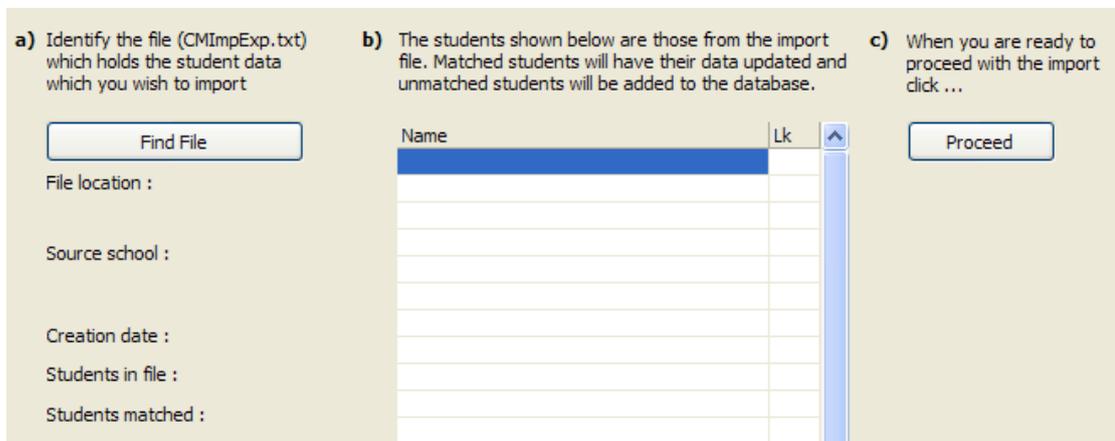
Figure 100: The import screen

The first step in the process is to find the file named, as detailed above, CMImpExp.txt. Click 'Find file' and a file-search dialogue will appear, as shown below.
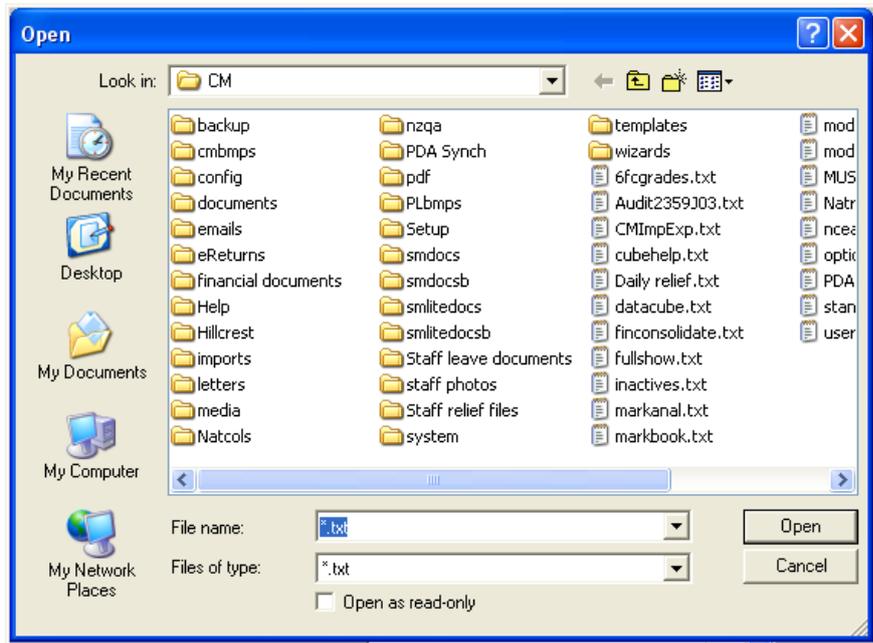
Figure 101: The file identification screen

Select the file and its students will be loaded as shown below.

Figure 102: The import screen showing identified students

You can see that all of the students on the file have been matched against those already in the database. Their data can be successfully imported. Click the 'Proceed' button to do so and, at the end of the process, a message will be displayed reporting the number of students and the number of items of data successfully imported.
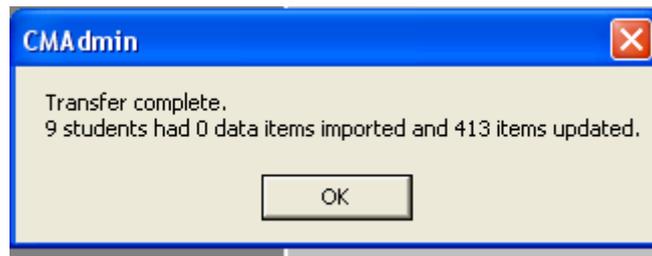
Figure 103: The 'mission successful' message

13.7.3 The General Data Export Process

To export data for a purpose other than to another school, design export profiles to return later, select a profile, and reapply it to a different bunch of students. You can, of course, simply design and use a profile without saving it for later reuse. The first step of the process is shown below.
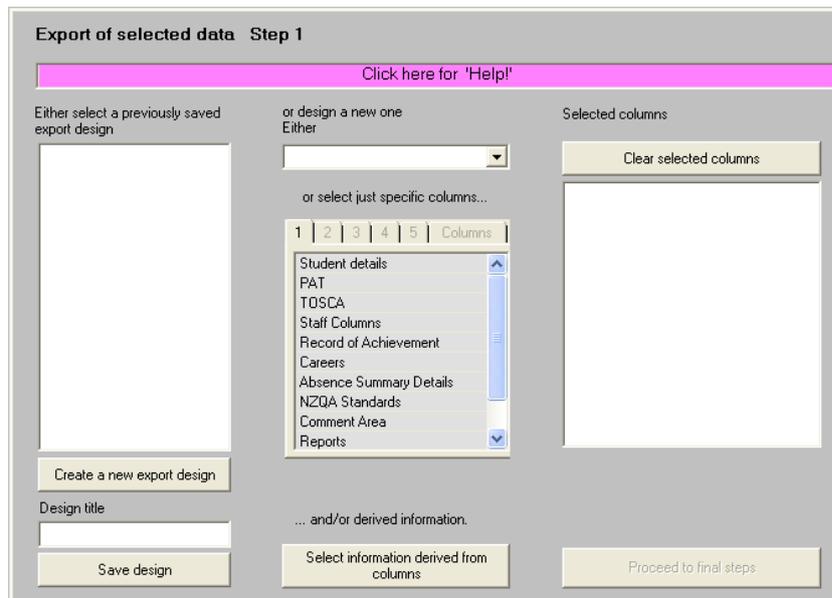
Figure 104: The general export screen – step 1

The left list displays any previously designed profiles, from which you can select a profile for reuse. As there is no previously designed profile, you need to design one.

At the top of the screen is a pink title bar which, if you click on it, drops down an instant help screen. To hide this screen click on the pink bar at the bottom labelled 'Hide help'.
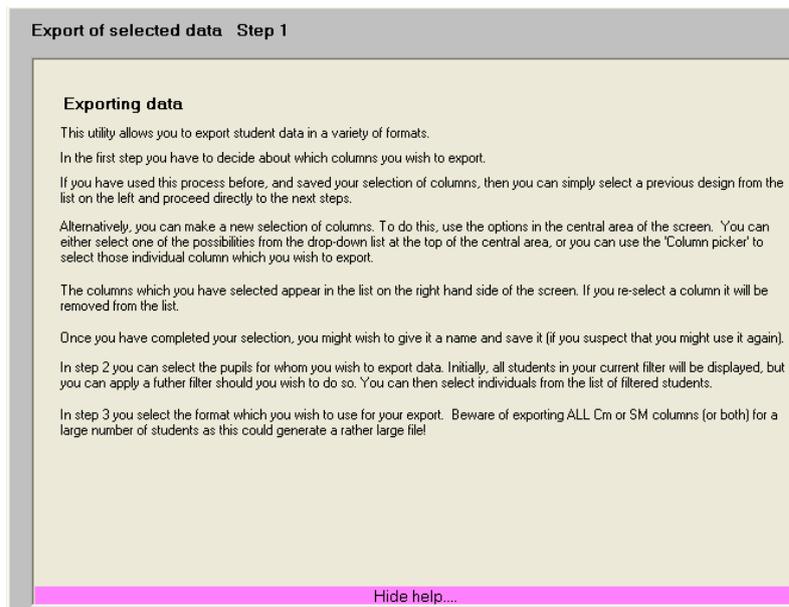
Figure 105: The instant 'help' screen

To design an export profile of your own:

1 Give it a name at the bottom left of the screen
2 Specify the columns which you wish to export. You can do this in two ways:
   2.1 Select one of the global export options from the pulldown at the top of the centre column
   2.2 And/or select individual columns from the column picking tool at the bottom of the centre column.

You can also select 'derived' information. This is information which is not stored in columns but is derived from it. For example Current age in yy.mm format or their 'Time at this school' in the same format. This process uses the 'code insertion' tool used in the word processing behind the {a} button. This tool is explained fully in an appendix to this user guide. An example of a 'code insertion' tab is shown below.
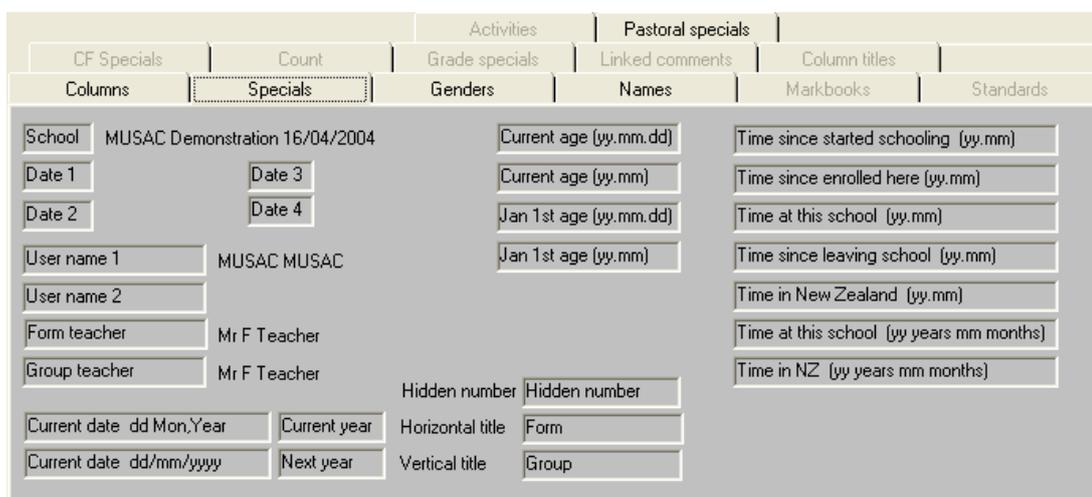
Figure 106: Select of derived information

In the example below, I selected 'All national CM columns' from the drop-down.
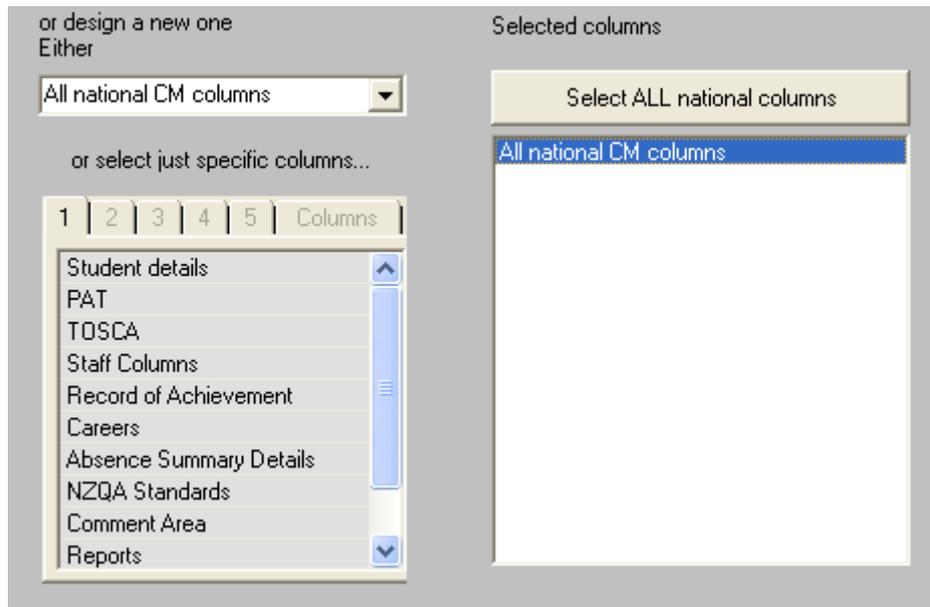
Figure 107: Selection of 'All CM national columns'

The other alternatives in the dropdown are shown below. These allow me, with a single click, to select ALL national columns from CM, from SM or from both.
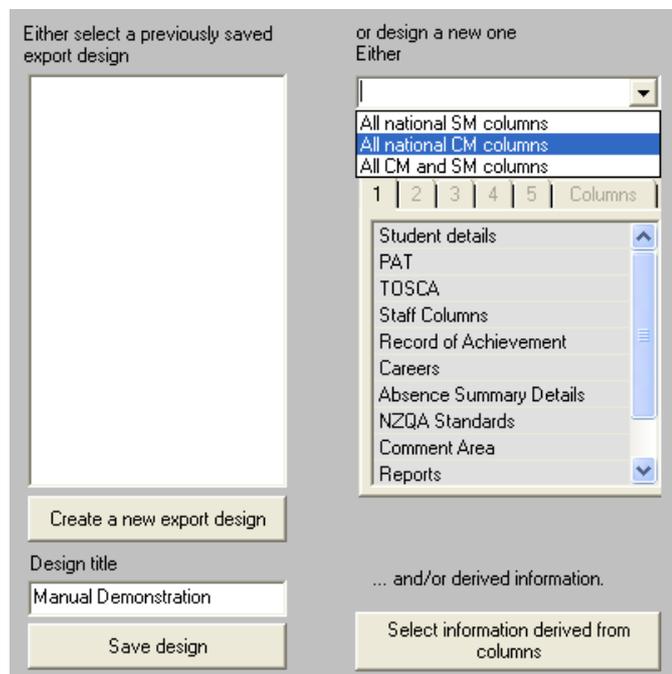
Figure 108: The selection possibilities

Once I 'Save design', my new profile will be added to the list of available profiles. Click the button 'Proceed to final steps' and the following screen dealing with the final three steps is displayed.
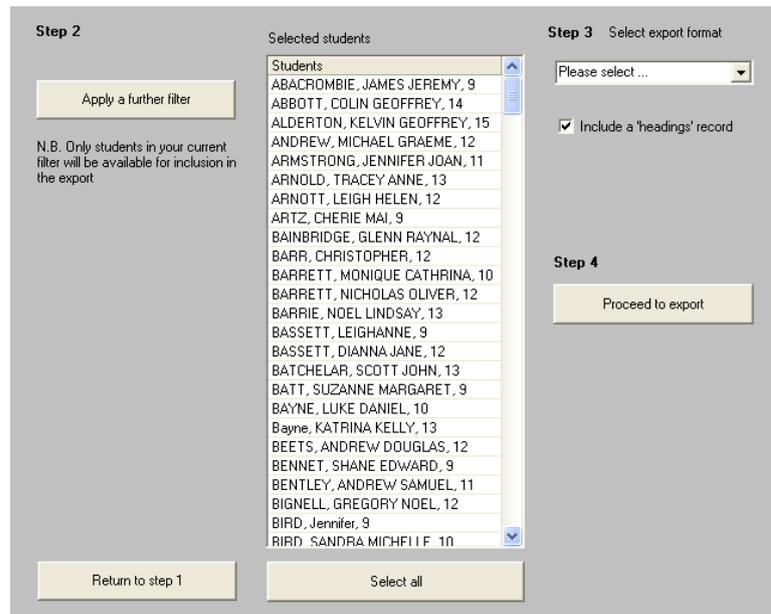
Figure 109: The second screen – the final steps

This is where we select the students and the export format. Initially all students are displayed for selection. The first column allows you to apply a further filter to these, using the student selection tool (See the relevant appendix for full details).
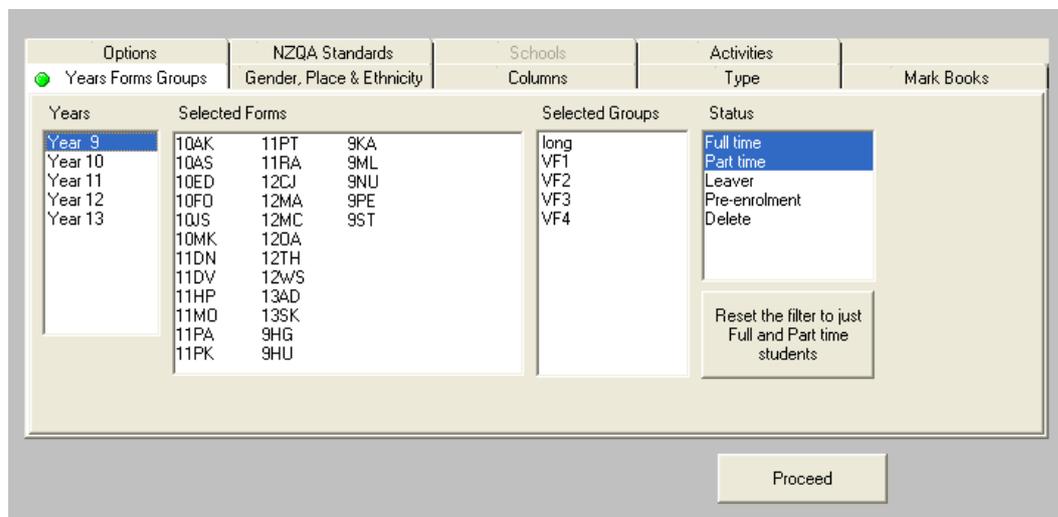
Figure 110: The 'Extra filter' process

Once you have applied your filter the resulting students will be displayed from which you can either 'Select all' or, by clicking on the list, individuals.
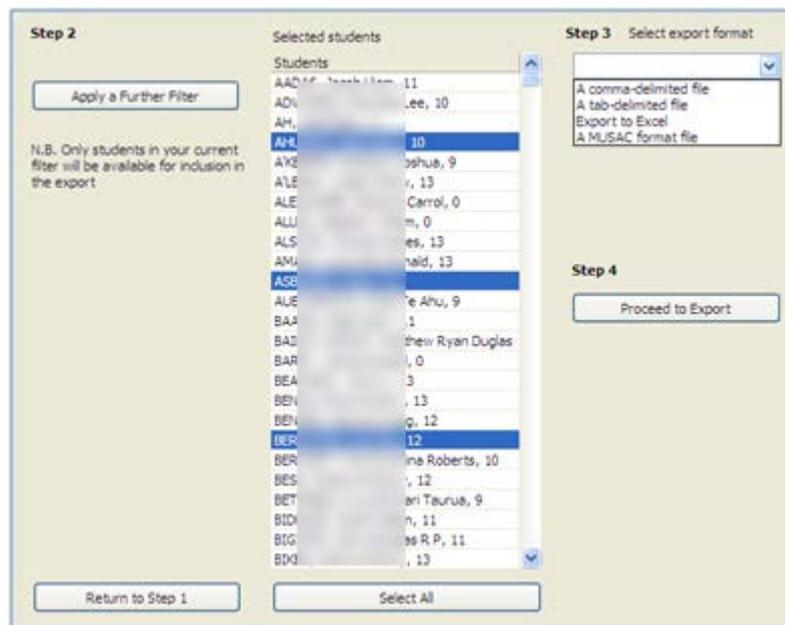
Figure 111: Selection of students and export format

Then, in step 3, you select the export format you wish to use. These are listed in the illustration above:

- A comma-delimited file
- A tab-delimited file
- Export to Excel
- A MUSAC format file

If you selected the 'Excel' option then, at the conclusion of the export process you would find yourself in Excel with your data displayed. The MUSAC format is selected for this demonstration.

Finally, when you click on 'Proceed to export' the following dialogue, if necessary, will appear.
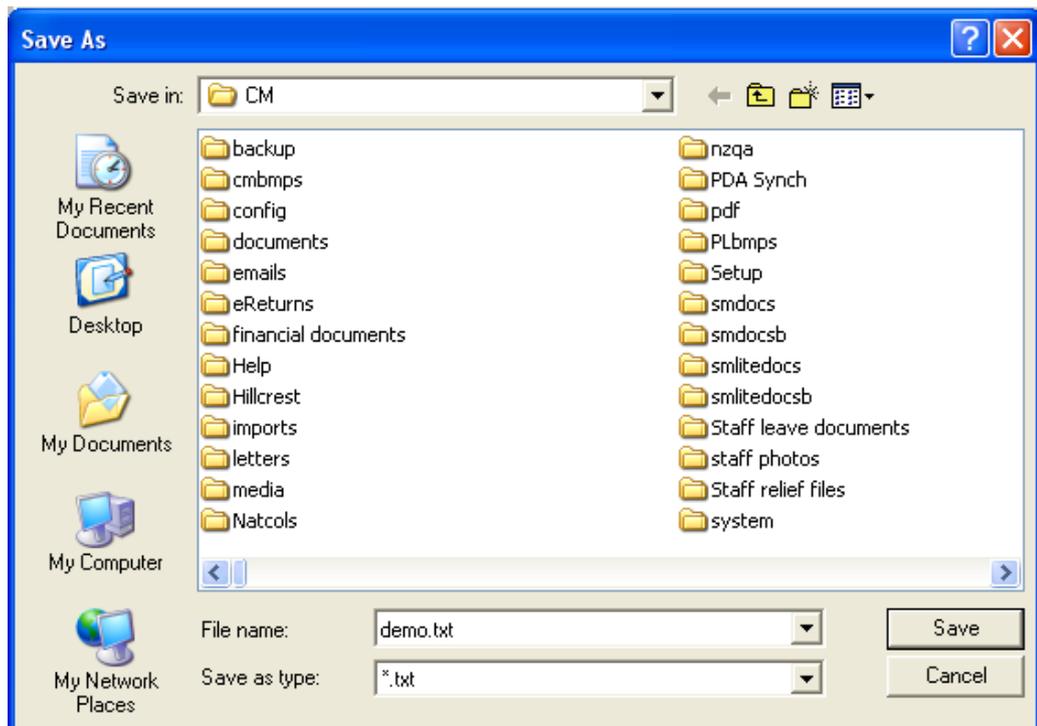
Figure 112: The export file path and name

At the conclusion of the export process the Step 4 area will appear as shown below.

Figure 113: The conclusion of the export process

Export files have a 'first record' which consists of the column headings. Two portions of an example using the 'MUSAC' format are shown below.

The MUSAC format = headings information
1,Familyname
2,First names
3,Preferred name
16,Year
17,Form
18,Group
22,Gender
23,Date of birth
29,Status
244,Ethnicity
1062,Date Sat ListComp Yr8
1063,Age at Test ListComp Yr8
1064,Raw Score ListComp Yr8
1065,Level Score ListComp Yr8

1066,Class Percentile ListComp Yr8

The MUSAC format – student information
1,BENNET
2,SHANE EDWARD
3,SHANE
16,9
17,9ST
22,Male
23,9/09/1988
29,Full time
244,NZ European/Pakeha
1320,12/08/1999
1321,12.11
1322,24
1323,32
1324,60
1325,70
1338,5
1339,6
99001,9MUOA
99002,9HOJS
100001,9MUOA
100002,9HOJS
101001,9MUOA

13.8 PDF Setup

This utility is to allocate each student:
- A user login name for PDF creation
- A password
- An email address within the school
- The user logins is then used to generate student specific subdirectories into which PDF copies of their reports can be automatically stored.

From 'Other Utilities' on the main menu click 'PDF Setup'. The main screen follows.

Figure 114: PDF report settings

To generate a login for the storage of reports:

1   Select the format which you wish to use for each student's login.
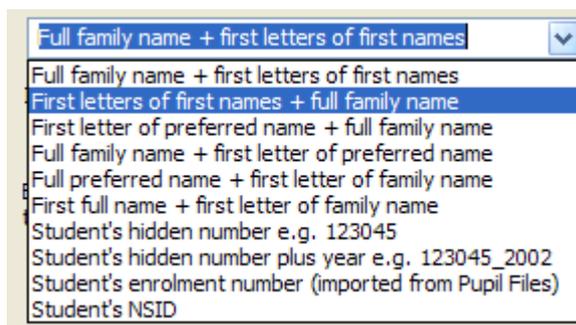
Figure 115: Some of the user login possibilities

2   Specify the email domain as shown above.

Click 'Generate' and the allocation process will take place. Several student-specific items of information are generated, stored in a set of columns which are also automatically installed for you if not already there.

To print information generated, from CM Administrator Utilities click 'View the Log File'. Select the required lines and click 'Print (Selection)'.

The new columns are found under the columns category 'Internet connection details' as shown below. These columns can be added to documents in the same way that any other columns are added (via CMTeacher).
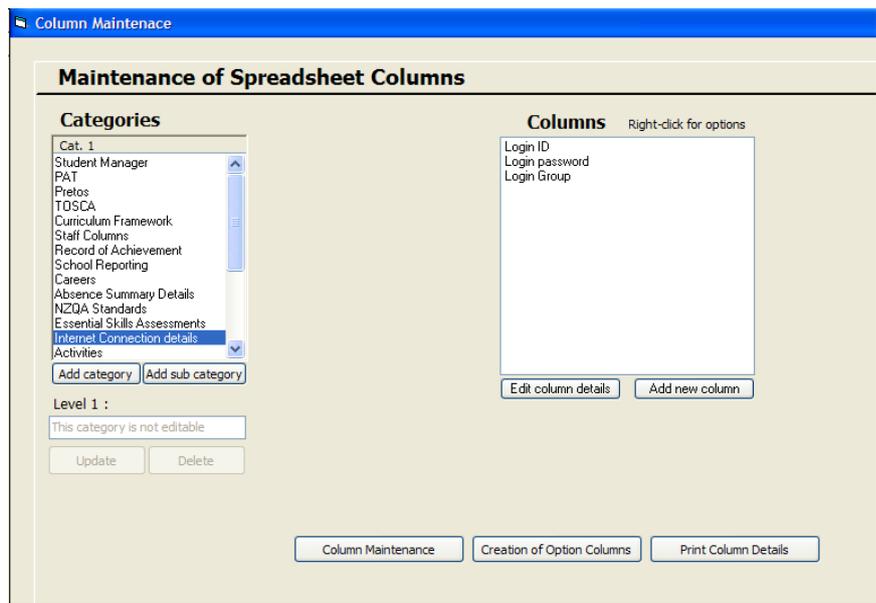
Figure 116: The internet connection columns

Once the process has been completed you may revisit this screen to view/edit students' information. Click on the 'View/edit' button at the bottom of the screen and the following window will appear.
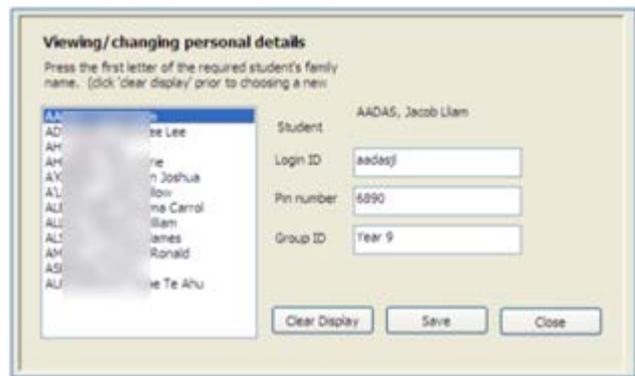
Figure 117: Viewing a student's connection details

Initially the left hand list will be blank. Press any letter and students whose surnames begin with that letter will be listed. Select any student from the list and their details will be displayed. You can edit these details if necessary.

13.9 Viewing the Log File

Each time a user makes a change to the database, or accesses a particular function in ClassRoom Manager, this action is recorded on the log file. This utility allows, provided you have the rights, to view the log file from CM Administrator Utilities > View the Log File.

Each time a user enters the module or performs a particular operation this information is recorded in the module log file, a section of which is shown below.

Figure 118: A section of the log file

At the bottom of the screen is a text entry box wherein you can type a word or phrase to search for. Click 'Search' to start searching from the top of the file, and click repeatedly to move to the next occurrence.

Figure 119: Searching for a particular word or phrase

Alternatively, by clicking in a column heading you may have that column sorted, making it then easy to find all occurrences of a particular entry within the file. Once you have found that for which you are looking, you can highlight them by dragging the cursor over them, and you then have the option to print the highlighted selection using the relevant button at the bottom of the screen.

Figure 120: Highlighting a section for printing

13.10 School-links Export

Using the most recent version of ClassRoom Manager Administrator, School-links Data Transfer is available by clicking 'Other Utilities' from the main menu:

followed by 'School-links Export'.

From the School-links Data Export screen, tick the year groups you wish to export (the number of students in each will be reported). To aid selection use the dropdown for sorting options and when the selection is complete, click 'Export'. A file of student and caregivers' details (`SchoolLinks<mySchool>.CSV`) is available for export to a new `<CMDir>`
`SchoolLinks folder` for exporting to **school-links**.
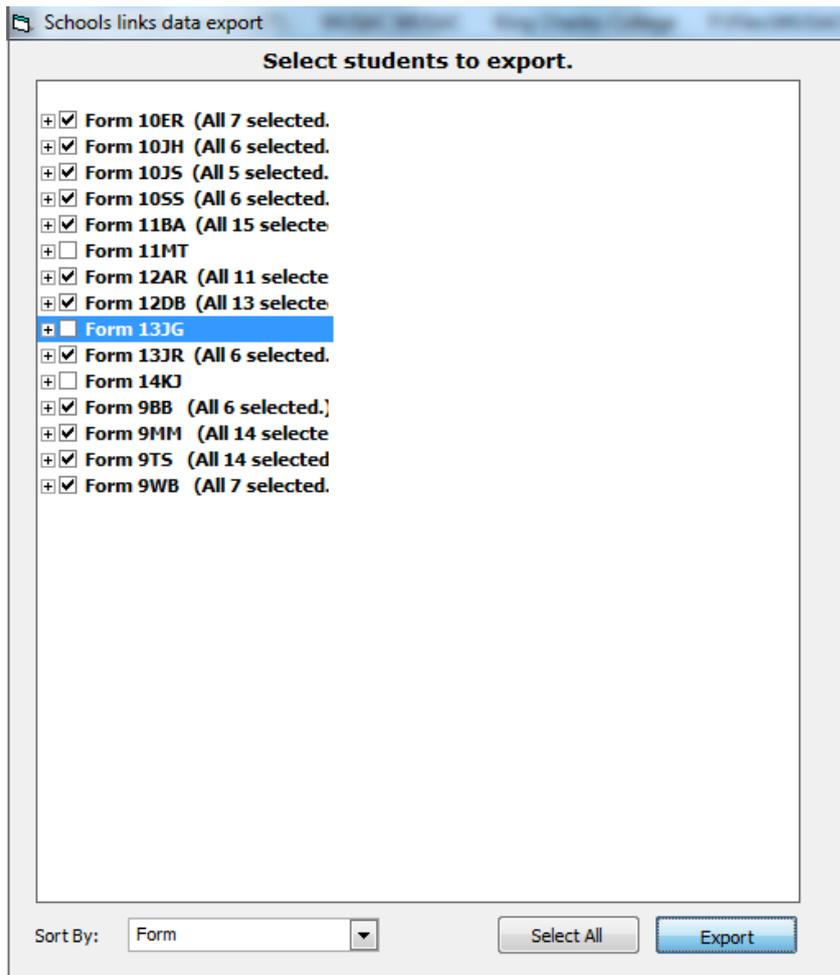
A .csv file is produced together with a message indicating the location of the file for export.

14 Electronic Markbooks
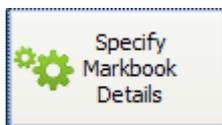
14.1 An Overview of Electronic Markbooks

Electronic markbooks are computerised versions of traditional teachers' markbooks. They are subject- or class-based, with member students being listed down the left hand side of the grid and teacher-defined columns across the top.

Markbooks in CM are mainly used by teachers in secondary schools, particularly for the recording of NCEA results. It should be noted that results recorded by other providers which have been assessed and submitted to NZQA already, can also be imported using the 'Imports from NZQA' options, via the NZQA website, and Emergency Grades for external standards may be included during submission.

Up to 100 columns common to all students and teachers are in the markbook. In addition CM markbooks allow for an extra one hundred columns teacher-specific columns. The HOD can view all students in a particular subject and find that the first 100 columns are the same for all students, whereas the next 100 may vary from teacher to teacher.

In addition to the 200 columns each student may have up to eight report comments recorded. All marks and comments may be embedded directly into reports so that the entry of a mark or comment in a markbook is sufficient to cause the mark or comment to appear directly on the report.

The screen behind the Electronic Markbooks button in CMAdmin offers a number of global markbook functions and also allows you to set up common column headings and other functions.

From the Utilities menu click 'Specify Markbook Details'. The main screen follows.
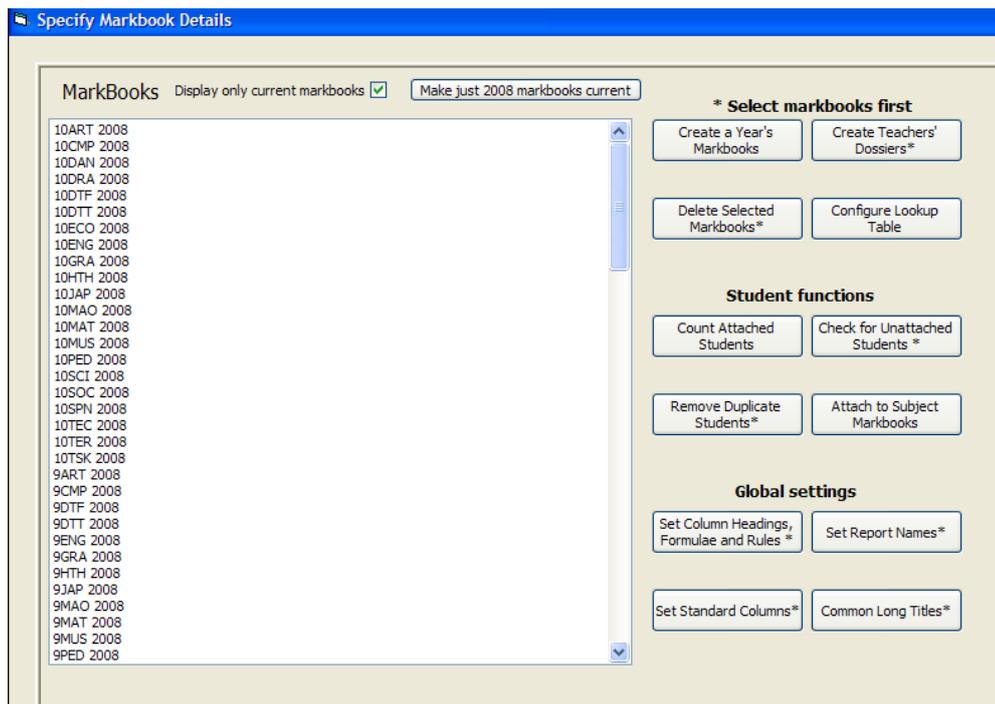
Figure 121: The main Markbook screen in CMAdmin

14.2 Select markbooks first panel

14.2.1 Create a Year's Markbooks

Click 'Create a Year's Markbooks' for the Markbook creation screen, shown below.
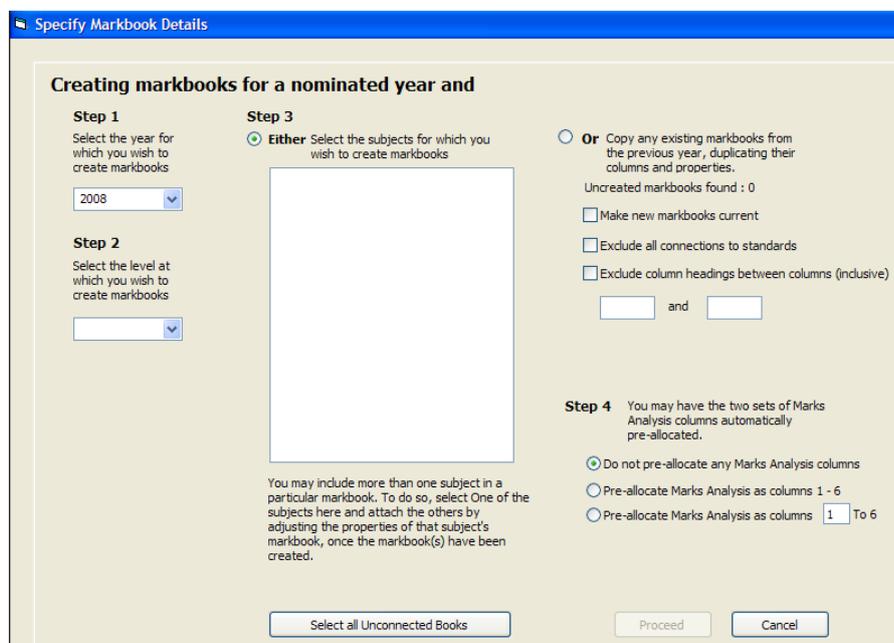
Figure 122: The Electronic Markbooks screen

Step 1 Select the year. This defaults to the current year and is therefore almost certainly
        correct.

Step 2 Select the level to create markbooks. Systematically begin with the first – in our case
        Year 9.
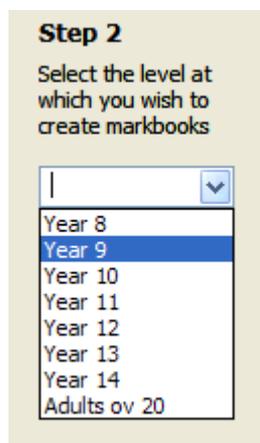
Figure 123: Selecting a year level

This causes all of the subjects (extracted from the core and option lines for year 9 to be
displayed. Click the button below the list to select them all….
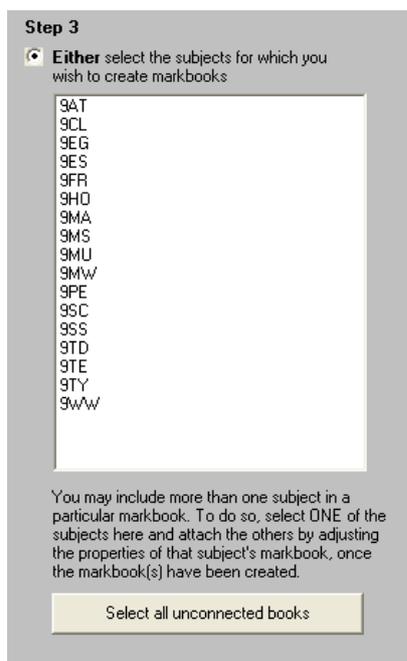
Figure 124: Selecting subjects

… then click 'Proceed' at the lower right hand corner of the screen.
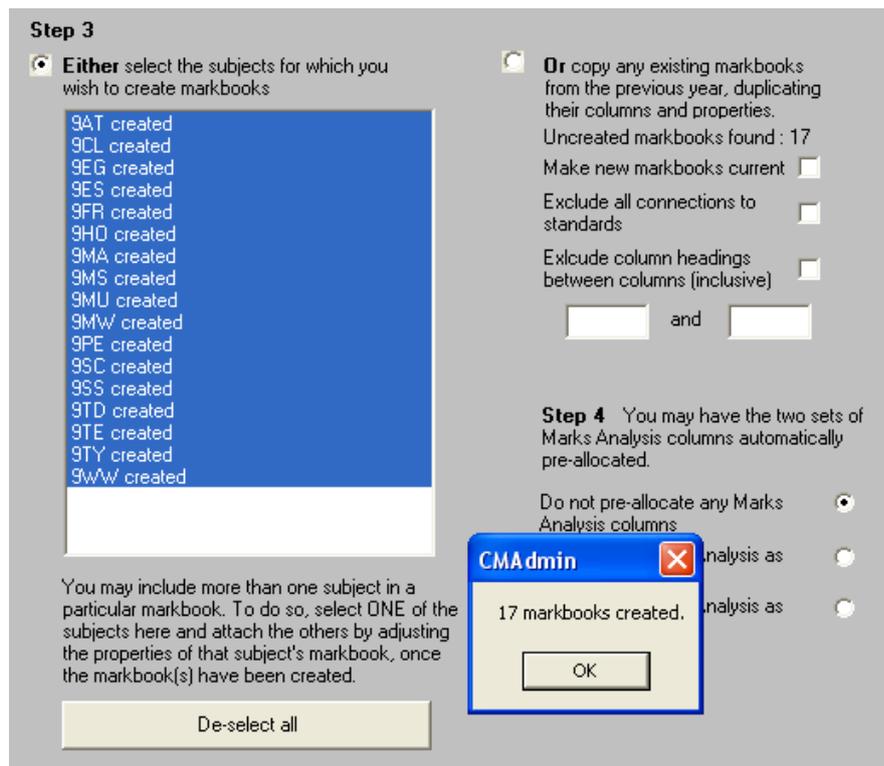
Figure 125: Creation complete

Markbooks will be created for all of the selected subjects. Should you be returning to this screen for a subsequent year you can use the alternative displayed on the right side of the screen. This allows you to duplicate the markbooks which you used in the previous year. This means you can have all your markbook column headings (refer 'The design of markbooks') retained.

You can include or exclude columns devoted to NZQA standards (See NZQA section of this user guide). You can exclude a particular range of column headings.

Choices are available relating to columns devoted to the purposes of Marks Analysis. Some schools use it to determine their most successful students. (Refer 'Marks Analysis').
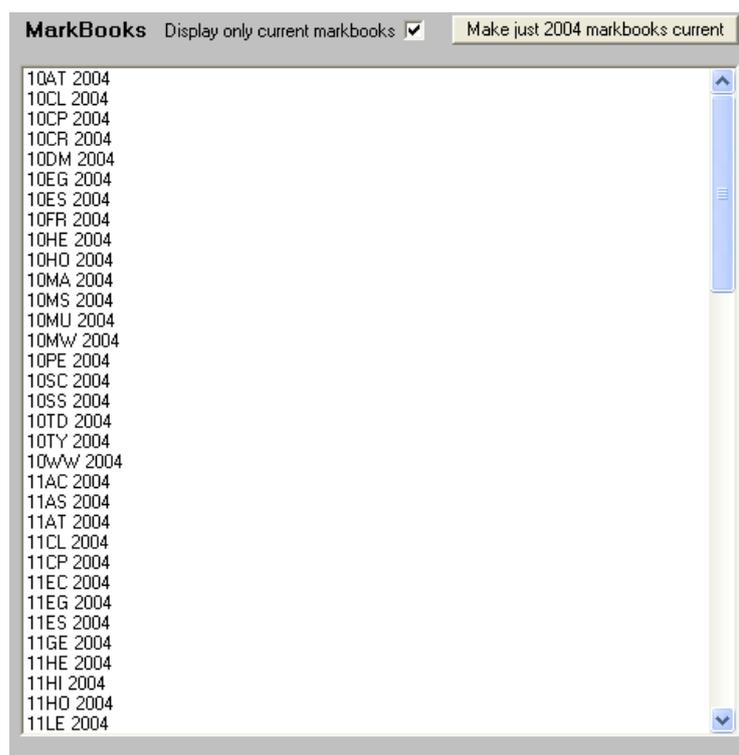
Figure 126: All have been created

Once we have completed the creation of markbooks for all year levels, return to the main markbook screen and our markbooks will be displayed, as shown above.

Please note: Due to the inability of an alphabetic sort to know that 9 comes before 10, all of the year 9 markbooks are listed at the bottom, after year 13.

14.2.2 Creating Teachers' Dossiers

This global process allows you, in one step, to create dossiers for all of the teachers who teach subjects – and that covers most of them! Once these dossiers have been created teachers will be able to individually access their markbooks via CMTeacher seeing only their own students within each markbook.

HODs can be given dossiers wherein their dossiers give them access to all students in a particular subject. Anyone entering CMTeacher with high-level access rights will be able to see all markbooks.

The main creation screen is shown below. To reach this screen select all the year 12 markbooks from the main screen then click 'Creating Teachers' Dossiers.
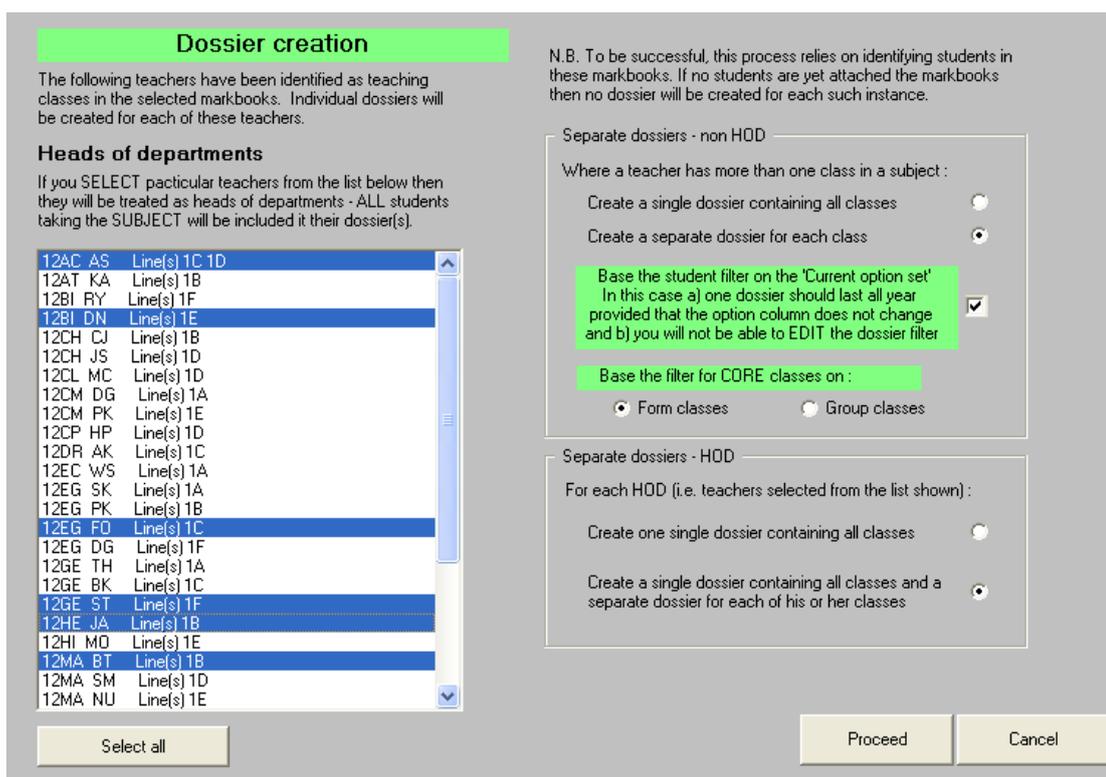
Figure 127: Identification of HODs

On the left of the screen is listed all of the teachers identified from options attached to students. Each line shows the subject and the teacher followed by the option line or lines found. You can see that the first teacher (AS) teaches 12AC in lines C and D in the first set of option columns.

I have identified the HODs by clicking on them, now highlighted in blue.

On the right is where decisions are made for what will happen to each of the possible scenarios.

The top half of the screen refers to teachers who are NOT HODs and you have the choice of creating one or more dossiers for each when they have more than one class. Schools which change option sets during the year have, in the past, had to return to this process each time to update teachers' dossiers. Now you can click on the box beside the green message to create dossiers which will last all year. This works by excluding the student filter from the dossier, causing it to calculate its own filter each time it is accessed looking for each student taking the particular subject in the SAME option line. The process assumes that, while the teacher may or may not change, the student is still taking the subject in the same option line throughout the year. This will cover most schools. If not then you should NOT select this method.

If you are creating dossiers for core classes then you must indicate whether these classes are based on horizontal class groupings (e.g. Form classes) or vertical ones (e.g. House, Whanau etc)

HoDs have a single dossier where ALL students staking the subject will appear in their markbook. They can also elect to have individual dossiers for their own classes.

At the end of the creation process a message appears and you can also see how many dossiers were created.
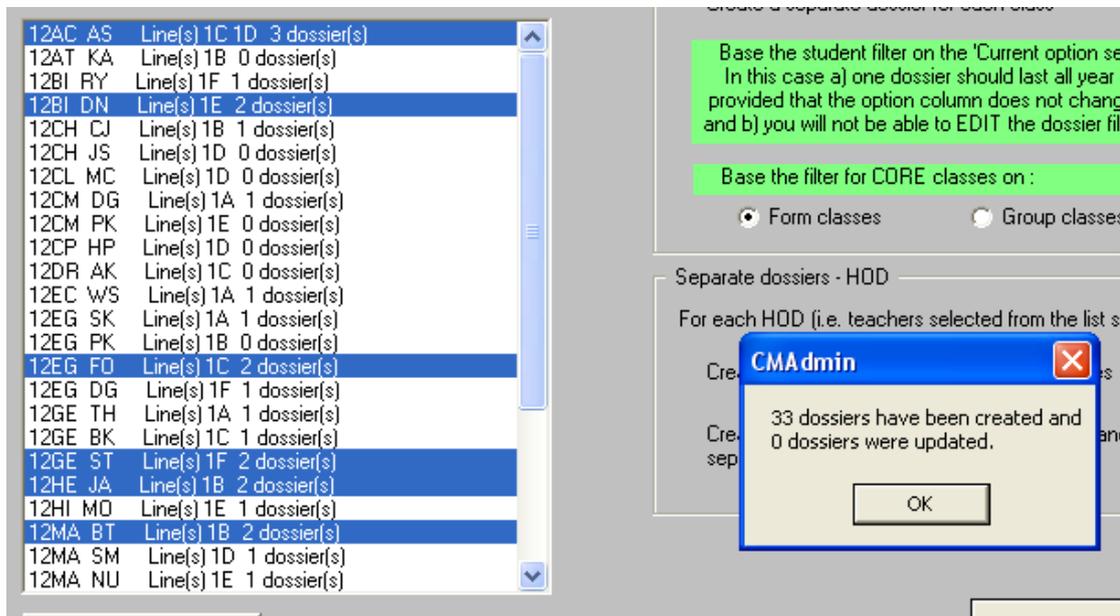
Figure 128: Most dossiers have been created

Some dossiers were not created because the program was unable to identify the teacher from their code. A list, which can be printed, is provided of these teachers who are, apparently, not yet registered within ClassRoom Manager. An example list is shown below.
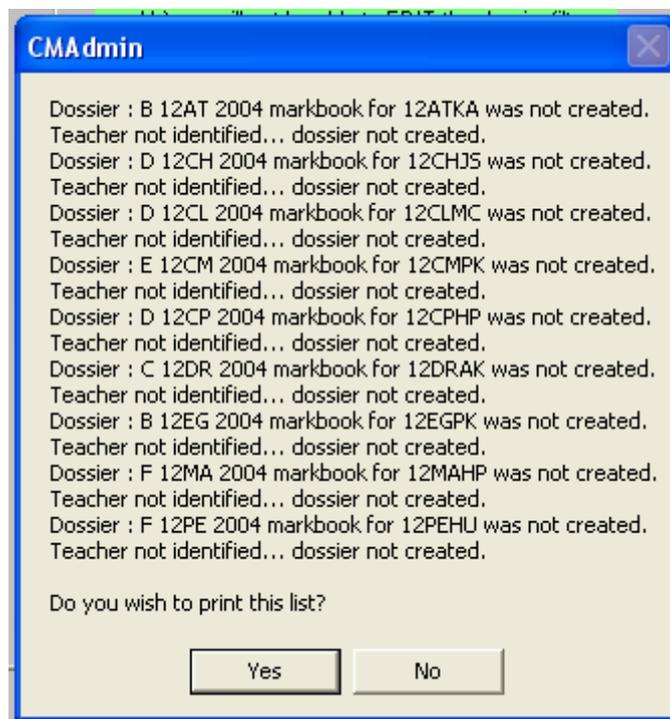
Figure 129: The 'missing' teachers

14.2.3 Deleting Markbooks

The 'Delete selected markbooks' process allows you to remove a markbook from the database. Of course, you would not do this lightly as students currently attached would then have their markbook results go 'into limbo'. These could only be retrieved by creating another markbook for the subject and reconnecting the student to the new markbook.

I've elected to remove the 12TD markbook in the illustration below.
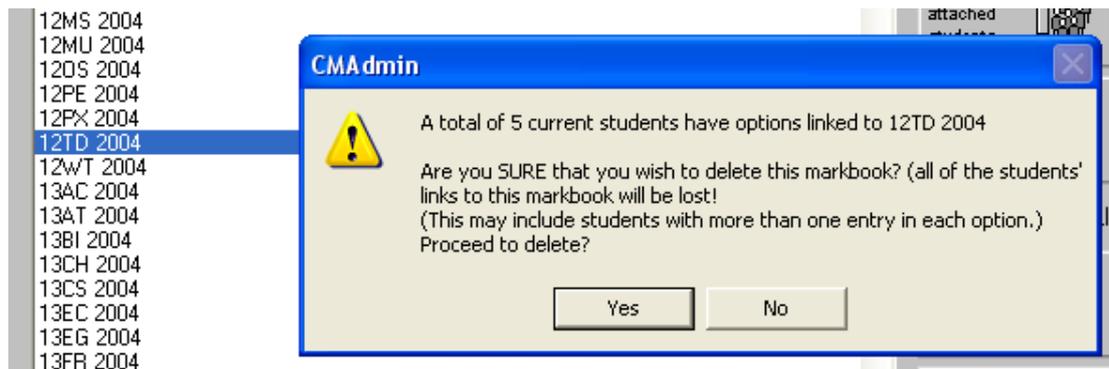
Figure 130: Deleting a markbook

When I click on the delete button, having selected one or more markbooks, then, book by book, each is checked and a message similar to above is displayed.

Confirmation actions the markbook definition (but not the students' records, to be deleted.

14.2.4 Editing the markbook lookup table

An example of the lookup table is shown below.

Figure 131: A markbook lookup table

The lookup table allows you to specify a number of codes and their longer meanings. As each markbook result is restricted to a maximum of eight characters you might wish that, when appearing in reports, that these codes are replaced by their longer equivalents.

This single table applies to ALL markbooks and you should be careful to avoid codes such as N, A, M, E, X, F which are used in markbooks to record NCEA standard results. (Alternatively, you could add these codes to the list? This would not be a good idea as many NCEA reports require just the single letter to be returned and this is suitably interpreted during the printing of the report.

14.3 The Four Student Functions

14.3.1 Counting Students Attached To Markbooks

Select one or more markbooks from the main list then click on this button. The number of students attached to each will be identified and displayed as shown in the illustration below.
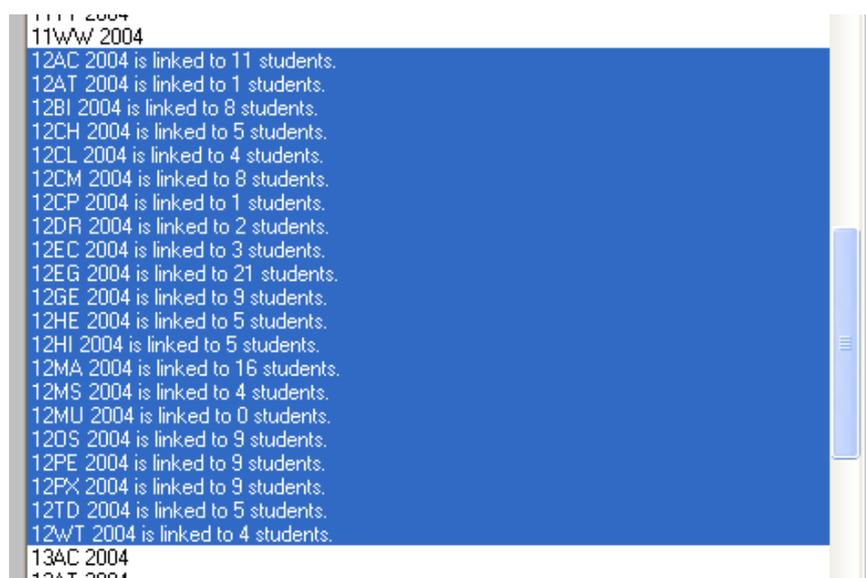
Figure 132: Counting attached students

14.3.2 Checking For Unattached Students

The 'Check for unattached students' process goes through all of the students taking any of the selected subjects to see whether or not they are connected to the markbook for that subject. Select markbooks then click on the button and the results will be displayed as shown below.

Figure 133: Counting unattached students

14.3.3 Removal of Duplicate Students

Select the markbooks which you wish to check and click 'Remove duplicate students'.

Each markbook will have its members checked for duplication and, if found, the duplicate will be removed. (Technical aside: All marks and comments on a student are stored against their FIRST markbook entry for a particular year. If subsequent entries are made, due to the same option occurring in a second or subsequent set of options, then all subsequent entries are pointed back to the first.)

14.3.4 Connecting Student to Markbooks
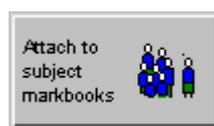
To register students as members of a markbook, click the 'Update Markbook Details' button. Earlier markbooks were created for the current year.
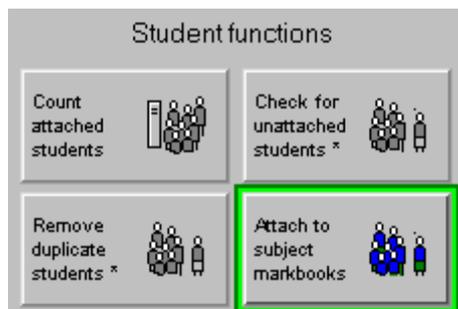
Figure 134: Attach subjects to markbooks

Click 'Attach subjects to markbooks' a new screen appears with three buttons in the top left hand corner.
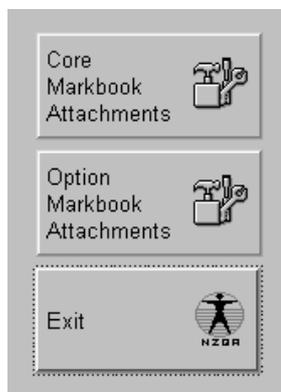
Figure 135: Attaching both core and options

Click on the 'Core markbook attachments' button and the attachment screen will appear.

Figure 136: Attaching core subjects to markbooks

As above, there are a large number of core subjects waiting to be attached to markbooks.

Before proceeding to attach core subjects, you MUST establish a link to the current timetable (assuming that you are using MUSAC's Timetable software). As mentioned previously, it is the

link to a timetable which enables the markbooks to include the codes of the teachers who teach particular core classes.

To establish a timetable link, click on the button labelled "alter timetable link'. A dialogue will appear and on it you should click in the area where the timetable path is displayed.

Figure 137: The timetable link dialogue
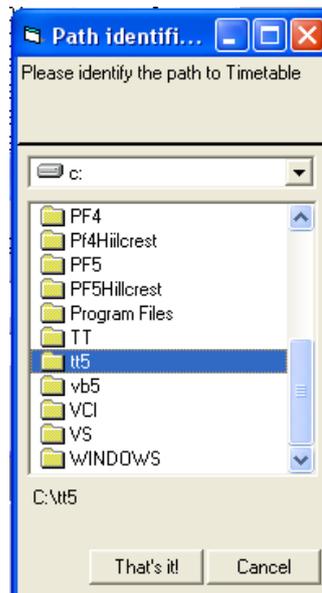
Figure 138: Identifying the timetable path

Once you have identified the path you will return to the first dialogue via which you can select the timetable itself as shown below.
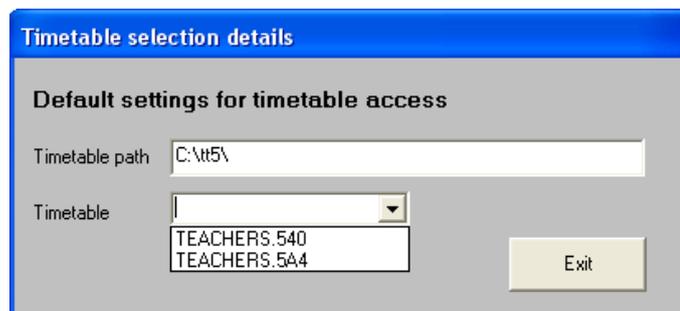
Figure 139: Selecting the timetable

Now that the timetable link has been established, click on the 'Proceed' button and all students taking the core subjects will be attached to the core markbooks.

To connect the option subjects select the year level and 'Search for connections'. The screen will display the numbers of students both connected and unconnected.

Figure 140: Attaching option subjects to markbooks

Click on the "proceed' button and those unattached will be attached.

14.4 Global Settings

This group of buttons allows you to carry out specifications for more than one markbook at a time. Select those markbooks to which you wish to apply the settings and click on the button to access the desired setting process.

14.4.1 Setting Column Headings and Rules

Each markbook has 200 columns and each column may have a separate title, maximum school, date and weighting. (The weightings are used within markbooks to combine marks 'according to weightings'). This utility allows you to set these details globally (i.e. all at once) for columns in a selected group of markbooks.

Selected are my Year 10 core subjects.

Figure 141: Selecting some subjects

After clicking the 'Column Headings' button the main screen is as shown below.

Figure 142: The screen before setting column headings

You can see the empty column settings in the table on the left. On the right are the selected markbooks and several other buttons.I'll set some headings in columns 10 to 15. The results of my efforts are shown below.

Figure 143: The new headings

To use column 10 (in all of the selected subjects) to hold the mid-year report mark, this column has a maximum mark of 100, and a date 'June 2004'. I'm not setting a weighting for this column. Weightings will be discussed in full in the CMTeacher chapter on Markbooks.

For example the student's 'Place in class' would have no maximum, date, or weighting.

Then I've set up four more columns titled Homework, Attitude, Manner and Progress respectively. These will be used to hold grades A to E to be printed on the subject reports.

Globally set Marks Analysis settings.

You can set the 'Send in' column, the 'Return out' column and the 'Return grade' column for each of two sets of results, presumably for midyear and end-of-year. See the illustration below for an example of the column settings.

Figure 144: Marks Analysis headings

Globally configure comment headings

Figure 145: Comment titles

Initially the headings for the eight comments in each markbook are not very exciting, Comment 1, Comment 2, etc. You can globally make them much more useful by entering them here for the markbooks which you have selected. In the example above I've change the first four.

The maximum number of characters teachers can use for their report comments has been set above at 250.

Globally set Record of Achievement links.

One of the objects which can be placed on a document is a 'Record of Achievement' list. This extracts information from each students' markbooks and reports them as a brief summary. To do this you must link to up to four columns in a markbook. This process allows you to set those links.

In the example below two columns are linked and, in both cases, requested that the teacher name associated with the column be reported. This will make much more sense to you if you read the CMTeacher user guide relating to the 'Record of Achievement' object.

The first two columns of a Record of
Achievement subject list are fixed
e.g. Year, Subject

You may nominate up to four further columns
from the selected markbooks the contents of
which will then be displayed in columns 3 to 6
of your Record of Achievement subject list.

If you wish to display the teacher's name
in your list then check the 'Teacher' box
instead.

NZQA Score	NZQA Grade

Extra column 1 [201]   Teacher ☑

Extra column 2 [202]   Teacher ☑

Extra column 3 [   ]   Teacher ☐

Extra column 4 [   ]   Teacher ☐

Click on a column to select or enter number
or select NZQA Score or grade above

Return to previous display

Figure 146: Record of Achievement connections

Column rules have been mentioned in the columns section.

No.	Title	Maximum	Date	Weight
1				
2				
3				
4				
5				
6				
7				
8				
9				
10	Midyear report mark	100	June 2004	
11	Midyear report place			
12	Homework			
13	Attitude			
14	Manner			
15	Progress			
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Global setting of markbook column rules

This process allows you to set the data entry rules
for multiple columns from multiple markbooks
simultaneously

Step 1   Select the columns from the list shown.
(Use Ctrl to multi-select or drag)

Step 2   Enter the acceptable entries below,
pressing <Enter. between each one.
No entries will cancel any existing
rules.

A
B
C
D
E
|

Step 3   Click 'Save' to record your rules. These
will overwrite any existing rules.

Save

Return to previous display

N.B. 9999 in the 'Maxmum' column indicates a locked column for NZQA
standards, and 8888 and 9999 in the 'Weight' column indicate External
and Internal assessment. DO NOT CHANGE THESE!

Figure 147: Setting column rules

Column rules specify the possible entries a teacher can make in a particular column. In the
example above I've selected column number 12 – the 'Homework' column – and, on the right
hand side, I've specified the possible entries as the letters A through E. If teachers attempt to
enter anything other than these then a small window will appear asking them to select one of
these possibilities.

Globally set column formulae

It may be that you wish to apply a certain formula to a column in a markbook and to apply the same formula to the same column in multiple markbooks.
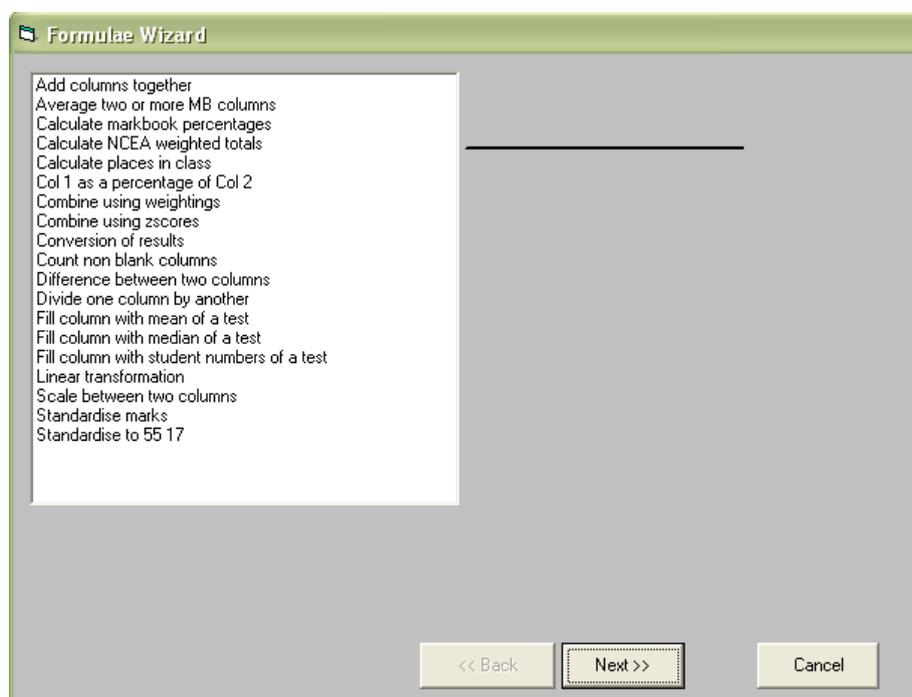
Figure 148: Selecting a formula

On choosing this option, the first set of the formula specification wizard will appear, as shown above. Follow its various steps to specify the formula and your resulting selections will be applied to the nominated column in all selected markbook. For further details on the formula wizard see CMTeacher - 7. Working with electronic markbooks: Section 8 – The popup menu functions.

Globally lock / unlock all columns

This utility allows you to lock or unlock all column headings and/or data. Simply specify your requests via the two sets of option buttons then click on the button below to have you requests actioned.

14.4.2 Setting Report Names

Each markbook has a name (e.g. 10AT 2004) but that is not really suitable for entry on to a report. In addition to the markbook name you can also specify a 'report name'. This utility allows you to do that for several selected markbooks.
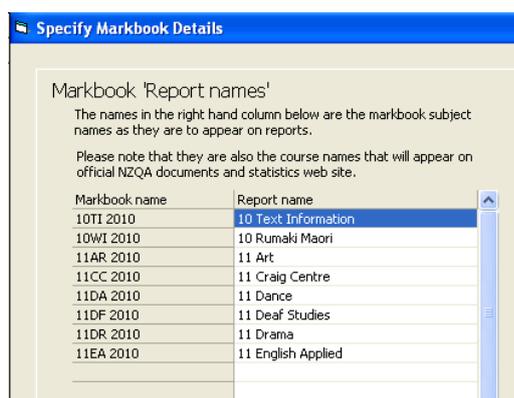
Figure 149: Setting report subject names

When the 'Report name' is added to a report design then it is these names which will appear on the printed report.

14.4.3 Setting NCEA Standard Columns

This topic is dealt with fully in the MUSAC NZQA user guide.

Teachers record students' results (including 'Excellence') for both NZQA Unit standards and NCEA standards in their markbooks. At the same time, these results are recorded in a section of the database devoted to students' standards.

Standards must be attached to columns within markbooks for this process.

To make it possible to produce reports on standards using a 'Generic report' – i.e. a single report which will work for all subjects – it is imperative that the standards be attached to the same columns in each markbook. Of course the number of standards attached will differ from subject to subject but they MUST start at the same number column in each markbook.

You might also consider it useful to have the results in every second column rather than in a contiguous run. This allows you to enter 'Progress' results which are not submitted to NZQA but are used for interim reports.

The main screen is shown below. On the left side is a list of the selected markbooks. Alongside each entry is the number of standards attached to the subject (regardless of whether or not they are attached columns in the markbook for that subject), and a list of the standards attached.

In the example the subject 12 Chemistry is selected. The right side now displays the seven level 2 standards attached to 12 Chemistry. You can also see that these have already been attached to columns 10, 12, 14, 16, 18, 20 and 22 in this markbook.

The first time that you enter this process none of the subjects will have columns attached to their markbooks. Select all of those subjects for which you wish to attach the standards to columns. The right hand side will then not display the standard codes (as these differ from

subject to subject) but will display the numbers 1, 2, 3 … up to the maximum number of columns required for the subject with the most standards.

Figure 150: Connecting standards to markbook columns

Your task is to then enter the numbers of the columns to which you wish to attach the standards in the right hand column of the grid. An example of a completed set is shown below.

Figure 151: 13 columns connected

At the end of the process, once you have saved your changes, a list of the allocations is displayed. You may print this list if you wish. An example of this display is shown below.
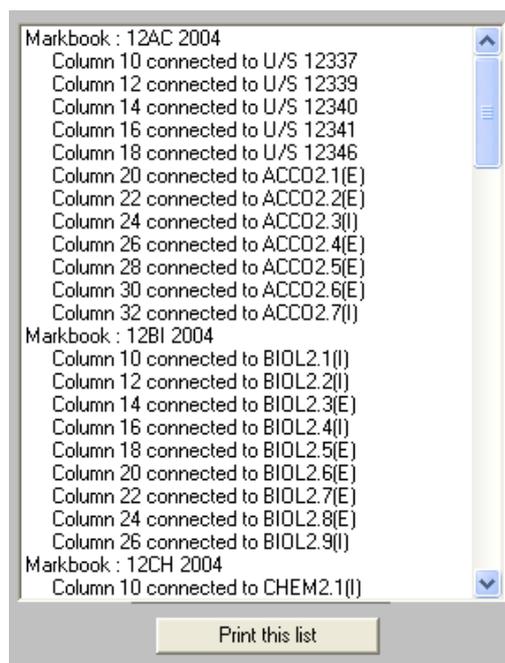
Figure 152: The results of the process

14.4.4 Setting Common Long Titles

Each markbook column, besides having a title, a maximum, a date and a weighting also has a 'long title'. This can be automatically included in a report.

To set these globally (i.e. more than one markbook at a time) select those markbooks which you wish to process and click the button. The following screen will appear.
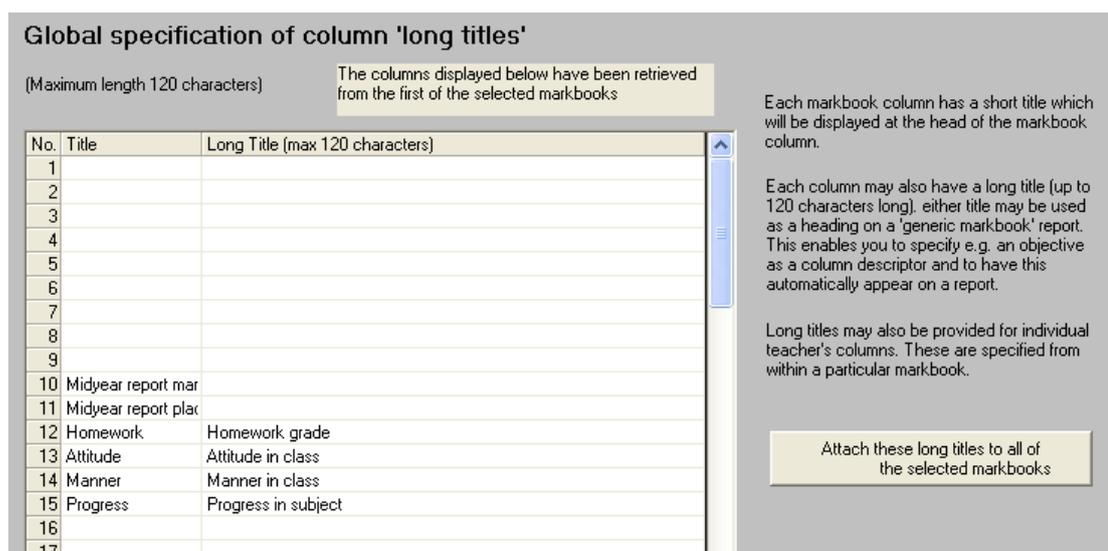
Figure 153: Setting column long titles

I've selected the Year 10 core subjects and have entered long titles for four of the headings which we set earlier in this chapter.

A button at the bottom of this screen enables you to print the long titles for the selected markbooks.

This brings us to the end of the global processes. Of course we can also make all these settings, and others, for an individual markbook, as follows.

14.5 Individual Markbook Settings

To access this process select the markbook with which you wish to deal from the main screen. The individual settings can then be accessed by repeatedly clicking the 'Next' button at the bottom of the screen.
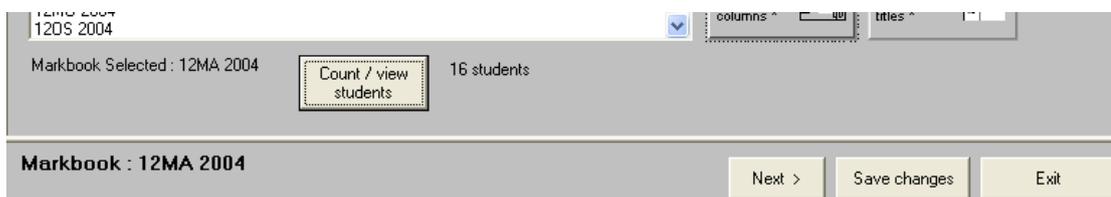
Figure 154: Selection of one markbook

For this example I've selected the markbook '12MA 2004' near the bottom of the screen as shown above. Just below the markbook list is a button labelled 'Count / view students'. I've already clicked on it once as the number of students in '12MA 2004" is shown as 16. When you click on it the screen is replaced by a list of the students in the markbook, as shown below.
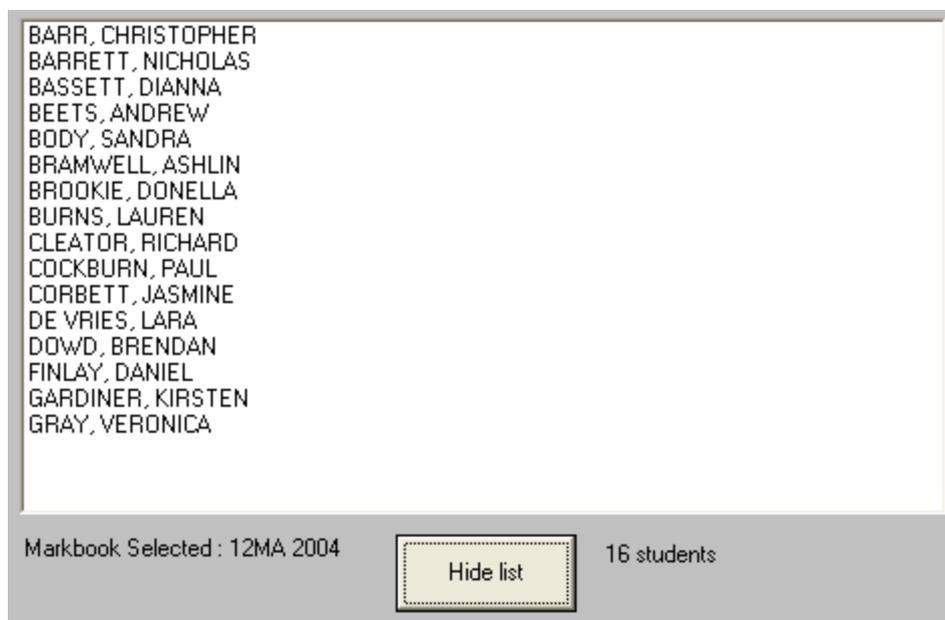
Figure 155: View / counting the students

In the bottom line of the screen are three more buttons. Use the first of these, 'Next', to move forwards through the next few screens. Once you are under way a 'Back' button will appear which you can use to return to the previous screen. If, at any stage, you have completed the changes which you wish to make then you can click on the 'Save changes' button to do just that.

You can also click on the 'Exit' button at any stage to exit from this process.

The first screen, shown below, tells you which subject or subjects are connected to this markbook. Thus it is possible for example to connect several different maths subjects to the one maths markbook. This assumes, of course, that you wish to use the same column headings for all connected subjects.
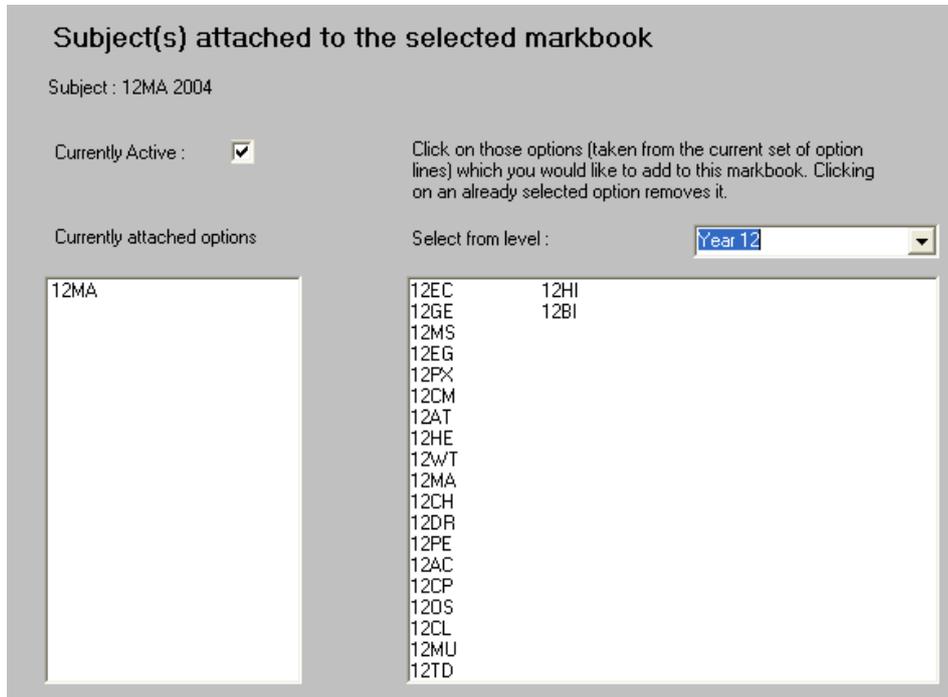
Figure 156: Setting the attached subject(s)

The second screen allows you to set up your column headings for just the selected markbook. We've already seen how to do it for more than one markbook.

Figure 157: Setting column titles

The column headings shown belong to '12MA 2004'. There are two types of columns shown. The first bunch are ordinary result columns. I've set up a couple of tests, along with columns to hold their scaled results and I also have a couple of matching columns for the results from the mid year exam.

Finally, I've added a 'Combined' column which I am going to use to store the result of combining the two scaled test columns and the 'Mid year scaled' column according to the weightings which I've entered in the relevant column.

The second group of columns are the NZQA columns. Some unit standards and some achievement standards are shown. Their 'Short description' is displayed in the 'Title' column, their code is displayed in the 'Date' column, and the number in the 'Weight' column indicates whether they are internally or externally assessed. All unit standards are internally assessed. '9999' indicates an internally assessed achievement standard and '8888' indicates an externally assessed achievement standard.

The next two columns indicate whether or not each column "title' and 'Date' heading is locked or not. This prevents users from altering them inside the markbooks. You can lock or unlock all columns for this markbook using the small lock symbols at the bottom of the screen.

On the right hand side of this screen are the areas to specify both Marks Analysis and record of Achievement links, described earlier.

Next we come to 'Several other settings'.

On the following screen you can specify:
- The format you wish to use for students' names
- How you wish to have 0* marks treated. A mark of 0 with an asterisk will be either

included or excluded from class statistics according to the setting you specify here.

- The colour of the border of your markbook. The default setting of orange is that of the last paper markbook which I used, many years ago.
- The number of decimal places which you wish to have displayed when printing results from the markbook. Marks may be stored as, e.g. 46.78 as a result of a scaling process but, should you specify 'zero' decimal places then the score would be rounded to '47' when printed.

Finally, we have already met the 'Subject name' earlier in this chapter. This is the name of the subject as it will appear on students' reports. It would be annoying to have to visit this page separately for each markbook so we introduced a global process described earlier.

The next screen allows you to specify the report comment titles and, individually, the maximum number of characters which teachers are allowed to use in their report comments. An entry of zero or leaving the entry blank indicates that no limit has been placed on the number of characters allowed.

Figure 158: Setting comment titles and maximums

Next we come to the 'Long titles' screen which has also been described in the global process section.

Figure 159: Setting column long titles

The final screen is one which we you can use to move a column/s within the markbook. The three steps necessary to achieve this are detailed at the bottom of the screen.

Figure 160: Moving columns within markbooks

Select one or more columns (by dragging your mouse over them).

Indicate whether you wish to move the selected columns forwards or backwards and by how much.

Proceed.

The program will object if you try to move a column or columns over the top of other existing columns.

All of these individual markbook settings may also be done from within a particular markbook itself which is accessed via CMTeacher where the various functions, formulae and processes available are covered.

15   Marks Analysis

What's in this chapter?
An Introduction to Marks Analysis
The percentile analysis process
Loading student data
Accessing the spreadsheet
Printing lists
Percentile Analysis
Allocation of grades

15.1 Marks Analysis

Note: These processes were largely superceded by NCEA and are only used by a few schools, therefore no recent development has taken place.

This utility takes a single final mark from each subject from each student at a particular level, and moderates these marks against each other in an effort to produce equitable distributions upon which to base the allocation of grades.

No automated system for this purpose can ever be perfect and some reliance must be placed on Professional Judgement. There are some inadequacies of the system, so there are also recommended procedures to mitigate against these.

At the heart of the process is Percentiles Analysis. In contrast to Means Analysis, the basic concept behind the process is that the distribution of results achieved by students taking a particular subject should have the same shape as the distribution of all of the other results achieved by the same students. Behind this process is the assumption that students taking a particular subject will perform, in that subject, to their 'general' level of ability as reflected in all of their marks. While this assumption is debatable, provided that the number of students taking the subject in question is sufficiently large, it is a reasonable basis for the comparison of results.

In statistical terms a sample of thirty is considered to be large enough to form the basis of reliable prediction. There are few schools in New Zealand who have a minimum of thirty students in each of their senior classes, so some account must be taken of the possible unsatisfactory redistributions which the process produces.

15.2 The Percentiles Analysis Process

Marks Analysis is processed solely via the CMAdmin program. This is a centralised function - not one which should be generally available to everybody around the school!

Marks Analysis is accessed via 'Other Utilities'. Click 'Marks Analysis' and the following screen will become visible.
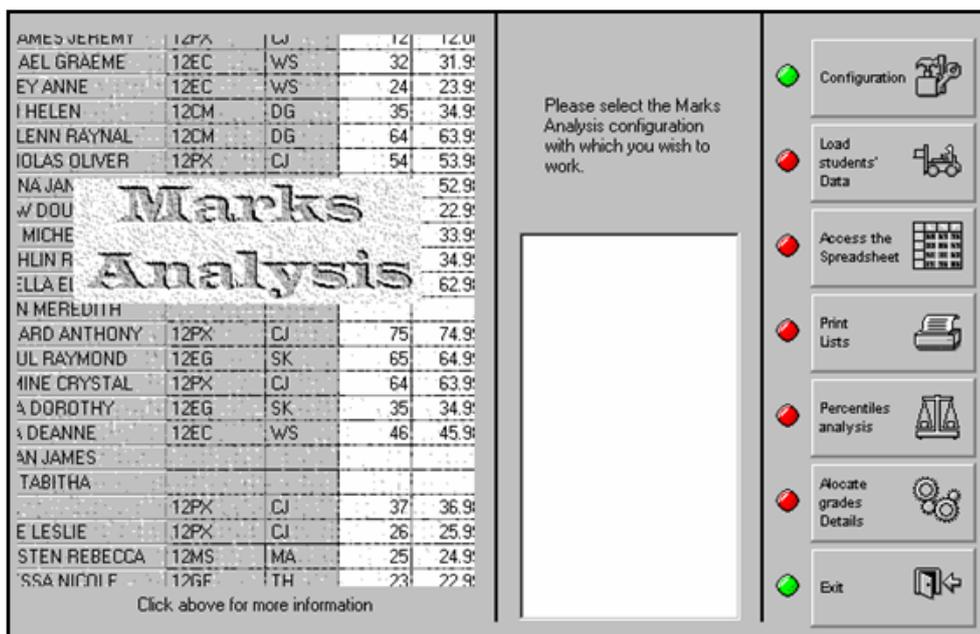
Figure 161: The main menu screen for Marks Analysis

This screen is in three parts. On the left had side of the screen is a picture. If you click on this picture then a window will appear offering you further information about the Marks Analysis process. The text for this has come from this user guide.

In the centre is a list of all of the exiting Marks Analysis configurations. Each configuration will relate to a particular level and a particular group (one or two) within each year. e.g. 'Year 12 midyear 1999' . Initially, of course, this list will be empty.

On the right hand side of the screen is a column of buttons beside each of which is a red or green 'light'. These indicate whether or not the functionality behind each button is currently available. Only after you have fulfilled the requirement of early processes will later buttons become activated. Initially, only the first and last buttons will have green lights.

15.2.1 Configuration

Click on the top button and the configuration screen will appear.

Figure 162: The configuration screen

This screen has three columns. In the left hand column is listed the various configurations available, in case you wish to make any alterations. Below this list are three buttons which allow you to:

- Create a new configuration
- Delete an existing configuration
- Save any changes you have made to either a new or existing configuration.

The centre column lists most of the characteristics of a configuration and the third column allows you to specify subjects to be excluded at two levels of the process.

Let's create a new configuration. Click on the 'Create new' button and enter the following details in the centre column.

1. Title eg. 'Year 12 Midyear 1999' (to distinguish from and End-or-Year' configuration)
2. From the pull-down list, select the level to which the analysis is to apply.
3. From the pull-down list, select the year to which the analysis is to apply. (I know that you have entered both of these into the title already but the title itself is relatively free form.)
4. Enter a password which will be used to gain future access to this particular analysis. Once this configuration has been saved, you will need this password to access it, either for the purpose of running the process or making future alterations or even deleting it!
5. Each year, you may create one or more sets of option lines Any sets which you have created will be listed in a box in the centre of the screen. Your task is to identify that set (or sets) which you wish to include in the analysis being configured. For example, at Year 12 it will probably be sufficient to select just the current set of options, but if you are wishing to process your year 9 students (and some schools certainly do prior to writing reports) then you will probably also wish to include the Core set - to have subjects such as English, Maths, Social Studies, Science etc included).

To select one or more of the sets, click on them in the list, and their number will be added to the data field which indicates those selected.

The sixth item, choice of divisor to be used in the calculation of standard deviations, has no impact on the process of Percentiles Analysis. However it is possible to obtain reports via Marks Analysis which include means and standard deviations of distributions and that there are those who wish to know exactly what has gone on during the calculation of these figures.

You are aware that each markbook holds two sets of columns relating to marks Analysis. One is presumably used for a mid-year process and the other for the end-of-year process. The final choice in the centre column is to specify which of the two groups of columns you wish to use for this particular analysis.

Moving to the right hand column. You have two levels of excluding subjects from the analysis. The first is the higher level. You may exclude subjects COMPLETELY from the results grid. Such subjects will not even be listed against each student. A typical subject in this category is 'General Studies' - a subject which is not assessed and does form part of the overall assessment process.

If you wish to exclude subjects at this level then click on the small 'three dots' button at the right hand end of the 'results grid' data entry area. A list of subjects will appear below from which you may select those subjects which you wish to exclude.

The second category of subject exclusion is those subjects for which you wish to allocate grades but which you wish to exclude from the Percentiles Analysis regardless of the number of students involved. (You may choose to have further subjects excluded from Percentiles Analysis on the basis of size later in the process).
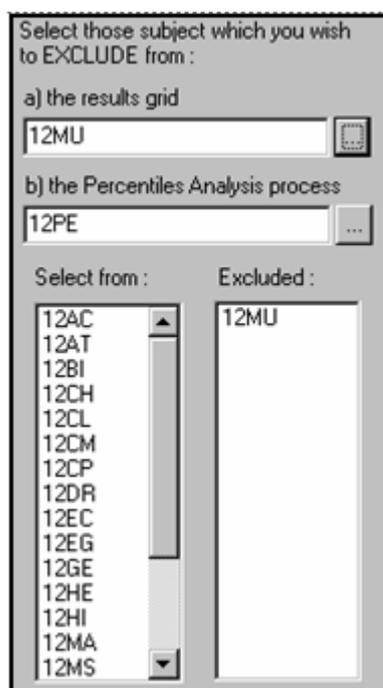
Figure 163: Excluded subjects

Once configuration is complete click on the 'Save changes' button at the left side of the screen to return to the main Mark Analysis screen.

If, at any stage, you wish to discontinue the process of adjusting configuration, click 'Menu' in the bottom right corner of the screen to return to the main Marks Analysis menu screen.

Once you have correctly configured one or more analyses then these will be listed in the centre column of the menu screen.

To proceed, select the one which you wish to use. You will be asked for the password and, provided that you enter it correctly, the second light will switch from red to green, giving you the go-ahead for loading students' data.

15.3 Loading Students' Data

Click on this button and the program will check for all the markbooks relating to the chosen configuration. When a markbook is found, the raw score, moderated score, and grades are memorised for each student.

At the completion of this process one of three things will happen.

If all markbooks were found and all raw scores were successfully identified then all of the lights will turn green, allowing you to proceed through all phases of the process.
If all markbooks were found but a few (less than 11) raw scores were found to be missing then a message box will appear on the screen listing those students with missing subjects.
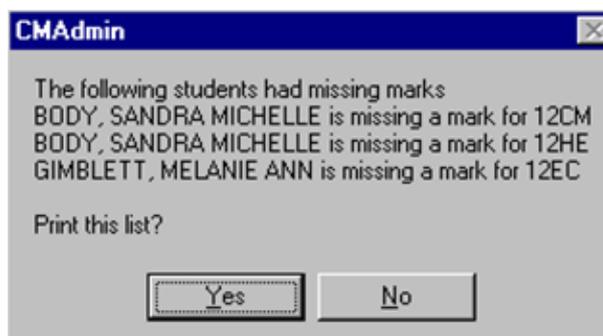
Figure 164: Missing marks message (1)

You may print this list to enable you to track them quickly. The next button will get the green light, allowing you to access the spreadsheet. After viewing the list, a screen will appear - the same screen as appears in case three below.

Figure 165: Missing marks message (2)

If markbooks are missing, or do not have their three Marks Analysis columns correctly specified, or marks are missing, a screen will advise you.

On the left is a list of all of the markbooks involved. These will fit into one of three possibilities.

Figure 166: Markbook connections

If any markbooks are missing only their name will appear on the left list and a button will appear in the top right corner of the screen allowing you to have all of them automatically created. As a part of this process, the new markbooks will also be automatically connected to any students taking the subject or subjects involved.

If any of the markbooks do not have the three necessary column connections to Marks Analysis specified then this will also be reported on the screen. You can rectify the situation immediately by clicking on one of the offenders in the list. This will bring up another screen which will allow you to specify the necessary connections. To make a connection, click on the data entry box where the missing connection is to be entered then click on the column to which you wish to connect it. The column number will be entered in the box for you. Alternatively, you may type the column number into the box.
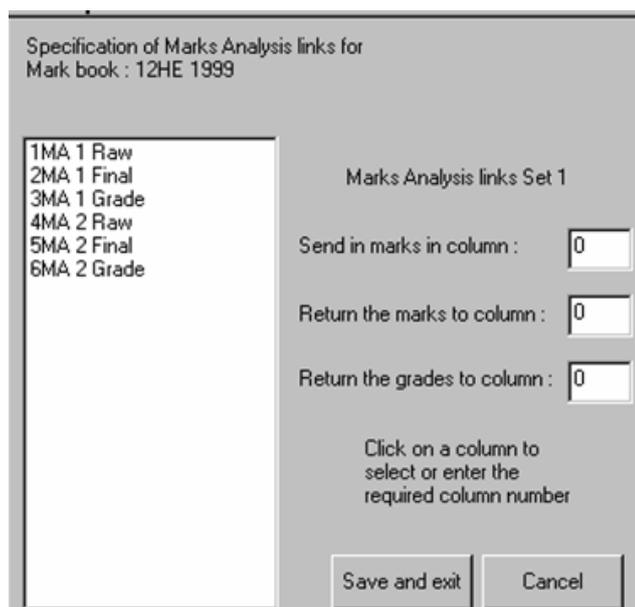
Figure 167: Marks Analysis column connections

Markbooks which exist and have correctly specified Marks Analysis columns will have an extended message to this effect on the left hand list.

The other problem which can prevent you from proceeding to list printing and percentiles analysis is that raw scores may not have been found in the specified columns in the markbooks. If there were less than eleven of these then you would have already received a message to that effect. If there are more than eleven then the number of missing marks will be reported on the screen. Your job is to return to the markbooks involved and to ensure that they are available.

If all markbooks were available and correctly connected then at least the next two buttons, to access the spreadsheet and to print lists, will have received the go-ahead.

If you were required to create or connect markbooks then, only completion of this task and on return to the main menu screen, you will find that you must, once again, select the required analysis and re-load the students' marks. This time, if all marks are found then all buttons will become active. If only marks are missing then, on return to the menu screen you will be able to proceed to access the spreadsheet and to print lists.

15.4 Accessing the spreadsheet

The third button will lead you to the spreadsheet which displays each of the students, their included subjects, and their raw marks, their moderated marks and their grades. Initially of course, the moderated mark and grade columns will be empty.

Figure 168: The Marks Analysis spreadsheet

Down the left side are the students. Across the top are the column headings for each of the configured option lines in each of the requested sets of options.

At the bottom of the screen are some buttons whose functions we shall examine shortly. To the right of the students' names is a column headed Mod. Average.

For many years schools have used students' averages to provide guideline means for teachers of Year 12 subjects. This 'Moderating mean' column is used to hold figures which serve to give a general indication of the overall ability of each student. I have used a generic term, as this process may be carried out at any level of the school.

You have two options for the entry of these scores. The first is to type them in to the first column alongside each student. The second is to calculate the averages by typing in the component scores. This is done via the fourth button at the bottom of the screen.

15.4.1 The buttons at the bottom of the screen

The first three buttons allow you to toggle on and off the display of each of the results columns - the raw marks, the moderated marks and the grades respectively.

Calculating average scores

The fourth button causes a different portion of the spreadsheet to be displayed. This may be used for the entry of scores which you wish to contribute to the moderating averages.

Figure 169: Single subject data entry

To use this function, simply type in up to five scores for each student. These will be averaged and displayed in the right hand column.

Once you have finished, click 'Return' to return to the spreadsheet with the newly entered averages shown in the left column.

The component scores are not stored anywhere and will be lost on exit from the Marks Analysis routine.

15.4.2 Copy Excluded Raw To Moderated

If a subject/s has been included on the spreadsheet but excluded from percentiles analysis then it follows that you are expecting to allocate grades to these subjects. Grades may only be allocated where moderated scores are found. This button offers the ability to copy all raw scores of excluded subjects into their moderated score columns without further processing. It is presumed that the raw scores which you have entered are also to be used as the 'moderated scores' for those subjects excluded from percentiles analysis.

15.4.3 The Entry of Raw Scores

It is intended that markbooks be used for the entry of raw scores. Each teacher or HOD is responsible for the maintenance of adequate markbooks and the supply of the raw scores, suitably scaled, via a nominated column therein.

However, for those who wish to bypass the markbook stage, you can enter the raw scores directly on to the spreadsheet. They will be stored back into the nominated columns in the various markbooks. To make this even easier, you can right-click on a subject and have a small spreadsheet of just this subject's raw scores appear upon which you may enter the relevant scores.

Figure 170: Single subject raw score entry

15.4.4 Omitting an Individual Student's Subject

If a student takes a particular subject but is NOT submitting it for moderation (e.g. a student takes 6th form maths but is not submitting it for Sixth Form Certificate) then you should enter the score 'Omit' in either the raw score column or the moderated score column for this student. Repeat this process for any such students not submitting particular subjects. They will not take part in either percentiles analysis or grade allocation. (The word 'omit' is not case sensitive within the program.)

15.4.5 The Removal of Moderated Scores and Grades

Should you have been through the process of percentiles analysis and wish to repeat the process under perhaps different conditions then you will find it convenient to click on the sixth and last button at the bottom of the screen. This automatically removes all moderated scores and grades. You could enter 'Omit' in the RAW score column....

Once you have completed the entry of all raw scores then, on return to the menu via the 'menu' button in the bottom right hand corner of the screen, you should reload students' data to have all scores recognised. The benefit of this is that the 'percentiles Analysis' and 'Grade Allocation' buttons will receive their green lights.

15.5 Printing Lists

The next button provides access to a fairly wide range of lists and tables relating to the Marks Analysis process.

There are a number of types of lists shown below.

Figure 171: The various lists

Each of the lists is previewed to screen and print to your printer. When a list is visible on screen you may:
- double left-click to enlarge the presentation
- double right-click to reduce the presentation
- drag the mouse around to scroll the list

Each of the following pages illustrates one version of each of the various lists. In all cases, the school name (and therefore some of the headings) has been removed. The students involved are extremely fictitious.

15.5.1 Student By Student Summary

This list simply lists all students and their subjects along with any of the three score columns which you have elected to include (by clicking on the relevant check boxes - which are initially set to include all three).

Student	Set1 Line U	Set1 Line V	Set1 Line W	Set1 Line X	Set1 Line Y	Set1 Line Z
ABACROMBIE, JAMES JEREMY	12PX CJ			12MA SM		
Raw mark	12			51.5		
ANDREW, MICHAEL GRAEME	12EC WS	12EG PK	12GE BK	12AC AS	12CM PK	12PE PE
Raw mark	32	24	35	64	25	42
ARNOLD, TRACEY ANNE	12EC WS			12CP HP		
Raw mark	24			75		
ARNOTT, LEIGH HELEN	12CM DG	12MA BT	12AC AS	12CP HP	12OS WS	12GE ST
Raw mark	35	61.75	61	8	63	53
BAINBRIDGE, GLENN RAYNAL	12CM DG	12CH CJ	12PX TY	12CP HP	12TD PA	12MA HP
Raw mark	64	32	71	96	53	78.42
BARRETT, NICHOLAS OLIVER	12PX CJ	12CH CJ	12AC AS	12MA SM	12BI DN	12EG DG
Raw mark	54	42	72	77.51	51	71
BASSETT, DIANNA JANE	12GE TH	12CH CJ	12EG FO	12MA SM	12BI DN	12PE PE
Raw mark	53	52	62	87.87	26	41
BEETS, ANDREW DOUGLAS	12EG SK	12HE JA	12PX TY	12MA SM		12PE PE
Raw mark	45	62	26	88.02		42
BODY, SANDRA MICHELLE	12CM DG	12HE JA	12AC AS	12MA SM	12OS WS	12GE ST
Raw mark	43	76	73	89.83	63	53
BRAMWELL, ASHLIN ROBIN	12EG SK	12WT TM	12PX TY	12MA SM	12CM PK	12PE PE
Raw mark	35	62	63	89.17	52	63
BROOKIE, DONELLA ELIZABETH	12EC WS	12HE JA	12GE BK	12CL MC	12HI MO	12EG DG
Raw mark	63	72	51	57	41	52
BURNS, LAUREN MEREDITH			12PE PE	12CH JS		
Raw mark			41	85		
CLEATOR, RICHARD ANTHONY	12PX CJ	12MA BT	12EG FO	12CP HP	12BI DN	12PE PE
Raw mark	75	67.00	42	74	52	42
COCKBURN, PAUL RAYMOND	12EG SK	12HE JA	12AC AS	12CP HP	12MA NU	12PE PE
Raw mark	65	36	35	35	61.91	43

Figure 172: The student by student summary list

15.5.2 Subject Summary Statistics

This table lists each of the subjects involved and shows the number of students with scores and the means and standard deviations of these scores. You may include either the raw scores, the moderated scores, or both.

Marks Summary	Raw scores		
Subject	Count	Mean	Std.Dev.
12EC	13	43.69	11.87
12GE	24	43.17	13.76
12MS	5	41.80	13.89
12EG	38	45.74	14.59
12PX	17	49.65	19.30
12CM	21	47.48	17.07
12AT	7	52.14	13.58
12HE	12	52.00	15.89
12WT	3	36.67	17.93
12MA	37	62.70	18.26
12CH	18	48.33	11.45
12DR	7	52.86	11.06
12PE	28	50.96	12.22
12AC	18	49.83	17.43
12CP	10	59.40	23.66
12OS	13	60.08	13.30
12CL	7	59.86	7.30
12TD	4	59.75	7.79
12HI	5	54.40	12.64
12BI	26	40.31	16.89
Totals	313	50.25	17.00

Figure 173: The subject summary statistics

15.5.3 Moderating Scores Summary Statistics

This list provides the average of the mean and standard deviation of the moderating scores for each subject, which some schools use as guidelines for the current year. Please remember that the standard deviations are standard deviations of scores which are themselves means. This results in a standard deviation which is approximately half[1] of that which you would expect from true individual scores.

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[1] 'Half' derives from the formula which involves dividing by the square root of the number of contributing scores - in this case frequently four?

Subject	Count	Mean	Std.Dev.
12EC	13	58.63	6.07
12GE	24	54.83	8.48
12MS	5	64.62	6.94
12EG	38	57.17	6.86
12PX	17	54.34	7.84
12CM	21	57.20	10.57
12AT	7	61.97	11.14
12HE	12	54.68	10.79
12WT	3	59.30	3.56
12MA	37	56.70	6.97
12CH	18	56.84	9.14
12DR	7	60.11	9.13
12PE	28	56.44	8.44
12AC	18	57.17	8.19
12CP	10	56.05	5.08
12OS	13	56.08	9.01
12CL	7	57.07	7.82
12TD	4	51.85	7.86
12HI	5	60.86	10.06
12BI	26	53.77	7.88
Totals	313	56.60	8.47

Figure 174: Moderating scores

Individual Subject Lists

The centre column provides a list of the subjects involved. You may select one or more of these for printing, and you may elect to include or exclude the various marks and a blank column.

Finally, the list may be sorted on either the students' names or the first of the marks to be included.

Student	Raw
BODY, SANDRA MICHELLE	89.83
BRAMWELL, ASHLIN ROBIN	89.17
CORBETT, JASMINE CRYSTAL	88.38
BEETS, ANDREW DOUGLAS	88.02
BASSETT, DIANNA JANE	87.87
THOMPSON, PAULA JANE	79.08
BAINBRIDGE, GLENN RAYNAL	78.42
MORLEY, TINA SHAREE	78.13
BARRETT, NICHOLAS OLIVER	77.51
TEMPLEMAN, CAROL ANN	76.64
MINGINS, SHERYL ANNE	74.37
SANSON, STEPHEN ANDREW	73.53
TAPLIN, AWHITIA LEE-ANDRA	72.84
TROTMAN, EMMA JANE	72.36
MCNEILLY, JOANNE MARIE	71.41
CLEATOR, RICHARD ANTHONY	67.00
CRUSE, TERESA DOROTHY	65.39
WICKENDEN, KATERINA MARIA	63.72
SINCLAIR, STEVIE DIANE	62.71
STERNE, FABIAN KYLE	62.05
COCKBURN, PAUL RAYMOND	61.91
. . .	
FINLAY, DANIEL	20.89
GERRITSEN, TESSA NICOLE	18.36

Total students	37
Mean(s)	62.70
Standard deviation(s)	18.26

Figure 175: An individual subject list

15.5.4 Ranked Mark Table

This is the 'discussion document' which is at the heart of Marks Analysis. Perhaps the most useful version (a small portion of which is reproduced below) the third option. The other two list each subject under its own column. If you select the third options then you may elect to include or exclude any allocated grades. All versions list all marks from highest to lowest.

Figure 176: The ranked mark table

15.5.5 Mark Distribution Table

This is a two-page table showing the distribution of either the raw or moderated marks, subject by subject, 100% down to 0%.

Figure 177: The mark distribution table

15.5.6 Grade Distribution Table

This is a one-page table showing the distribution of grades, subject by subject.

Subject	1	2	3	4	5	6	7	8	9	Allocated	Unallocated	Total
12EC	1	0	4	1	3	0	2	2	0	13	0	13
12GE	1	2	5	2	5	1	5	2	1	24	0	24
12MS	0	1	0	1	1	1	1	0	0	5	0	5
12EG	2	7	1	6	9	4	5	2	2	38	0	38
12PX	3	0	3	1	5	1	2	0	2	17	0	17
12CM	3	1	1	7	1	3	1	2	2	21	0	21
12AT	0	0	1	2	2	0	1	0	1	7	0	7
12HE	1	2	0	2	2	1	3	1	0	12	0	12
12WT	0	0	2	0	0	0	1	0	0	3	0	3
12MA	5	1	3	6	2	6	6	5	3	37	0	37
12CH	1	3	4	0	2	6	0	1	1	18	0	18
12DR	0	1	0	2	1	0	1	2	0	7	0	7
12PE	1	4	4	2	5	9	0	2	1	28	0	28
12AC	1	3	1	5	1	3	0	3	1	18	0	18
12CP	1	0	3	0	3	0	1	1	1	10	0	10
12OS	0	1	1	1	5	2	1	2	0	13	0	13
12CL	0	1	1	1	2	0	2	0	0	7	0	7
12TD	0	1	0	1	2	0	0	0	0	4	0	4
12HI	0	0	1	1	1	2	0	0	0	5	0	5
12BI	1	4	2	2	5	5	3	2	2	26	0	26
Totals	21	32	37	43	57	44	35	27	17	313	0	313

Figure 178: The grade distribution table

15.6 Percentiles Analysis

The screen is divided into two. The left hand column contains both the settings involved and the progress indicators showing you the various steps involved. The right hand side of the screen is reserved for the display of data relating to each of the four steps.

15.6.1 The Settings

Figure 179: The percentiles analysis screen

15.6.2 The Inclusion or Exclusion of Each Subject.

When each subject is scanned to identify the distributions of its marks and its 'other' marks (those results achieved by the students taking this subject in their other subjects) you may elect to include the subject in question in with the 'other' subjects or to omit its results from the 'other' subjects distribution. If you EXCLUDE, then you slightly accentuate the difference between each subject and its others. If you INCLUDE then you modify the 'others' distribution' to be slightly more like the subject's own distribution. My inclination has always been to exclude.

There is a third alternative - the Ministry of Education recommendations. Their system 'includes' each subject in with its 'others'. Further discussion of this follows almost immediately.

15.6.3 The Percentile Points to Be Used

You have a choice of three sets of percentiles. This choice determines at which points each of the two distributions (for each subject) a comparison will be made.

a 5, 50, 95
b 5, 25, 50, 75, 97
c 5, 15, 25, 50, 75, 85, 95

I favour the second of these as a compromise between too many and too few points.

If you elect to use the Ministry recommendations in the 'Include/Exclude area above, then you have no choice in the use of percentiles. The Ministry's system involves three different sets of percentiles, each chosen according to the number of 'takers' - the number of students taking a particular subject.

Takers	Percentiles used
<10	25, 50, 75
10-19	10, 50, 90
>19	5, 25, 50, 75, 95

Figure 180: The percentiles used

This is a sensible attempt to solve the problem presented by subjects with few students. It does seem strange to wish to calculate seven percentiles for a subject with only three scores! If you choose the Ministry recommendation then you do not have the ability to exclude subjects with fewer than a certain number of students - all subjects are automatically included.

15.6.4 The Minimum Number of Students

You may elect to exclude subjects which have fewer than a nominated number of students. As suggested earlier, percentiles analysis involves the reshaping of a distribution to match that of the students' other subjects. If the number of students involved is small then students, particularly those at the extremes, can be treated rather severely. In the extreme case of a subject with one student, that student would presumably end up on the median, regardless of his or her ability!?

What then is a reasonable number of students to cause a subject to be included in the analysis. My suggestion has always been twelve. If twelve students are taking a subject then the pool of 'other' subjects' should have around fifty scores - leading to a well defined distribution. In the case of small subjects, nothing beats exclusion, consultation, and professional judgement!

Having made your decisions, it is time to proceed. At the bottom of the left hand column are four panels each representing a phase of the process. Below them is the button which causes each next step to be performed. Between steps a table is produced on the right hand display detailing the results of the previous step.

Step 1 - Gathering scores

The entire spreadsheet is surveyed, accumulating the scores for each subject into its distribution and into its 'others' distribution.
The table lists these numbers and indicates whether or not each subject is included or excluded.

Step 2 - Calculating percentiles

This step involves applying the calculation process to these distributions to identify the various percentiles which will be then used in the next step.

Step 3 - Performing the analysis

This is a rather grand title for the process of simply running through each of the students' raw scores, identifying their position vis a vis the percentiles for the subject involved, and rescaling these to occupy equivalent positions vis a vis the percentiles of the subjects' 'others'. A rather longer document is generated, listing the results of each scaling, student by student.

Percentiles of included subjects								
Subject	Students	5th	25th	50th	75th	95th	Mean	StdDev
12EC	13	8.40	30.00	46.00	52.50	74.10	43.69	11.87
others	56	20.40	35.75	51.13	62.19	79.45	49.20	17.33
12GE	24	16.25	32.38	41.83	52.25	72.25	43.17	13.76
others	114	20.75	36.75	50.27	62.30	74.25	49.69	16.41
12MS	5	7.50	28.00	41.00	56.00	89.50	41.80	13.89
others	15	1.60	43.00	52.00	64.00	79.20	52.00	17.59
12EG	38	22.90	34.10	43.50	58.50	71.15	45.74	14.59
others	179	21.00	40.20	51.56	62.43	77.00	50.16	16.97
12PX	17	10.80	31.50	53.00	63.75	77.50	49.65	19.30
others	77	24.60	41.41	51.67	62.92	83.50	53.17	17.26
12CM	21	21.20	32.50	48.67	62.00	74.90	47.48	17.07
others	93	23.70	41.65	51.89	62.07	77.30	51.91	15.24
12AT	7	9.60	42.00	56.00	63.00	86.00	52.14	13.58
others	28	13.45	41.08	51.50	60.63	75.65	48.18	16.16
12HE	12	20.15	35.63	48.50	70.25	83.75	52.00	15.89
others	47	23.00	39.67	51.00	62.75	86.80	51.64	17.16
12WT	3	4.60	23.00	25.00	62.00	92.40	36.67	17.93
others	11	15.60	35.00	62.00	63.00	93.40	55.27	17.89
12MA	37	19.35	51.50	63.00	77.17	89.10	62.62	18.32
others	178	20.70	34.89	45.88	61.85	74.01	47.76	16.32
12CH	18	30.40	39.29	42.75	52.25	85.75	48.33	11.45
others	81	14.40	33.20	51.00	63.31	78.90	48.96	19.29
12DR	7	14.40	46.00	52.00	58.00	89.60	52.86	11.06

Figure 181: Performing the analysis

Step 4 - Rescaling to the old mean.

The process of scaling and rounding tends to generate a 'northwards drift' - a slight increase in the overall mean. To bring this back to the mean of the original raw scores, a rescaling occurs. This may well need to be iterated more than once since, as described earlier, the three-point linear interpolation used does not guarantee that the old mean -> new mean scaling produces

the required new mean after one iteration. The process will proceed automatically until the new mean has been returned to within a very small fraction of one percent of the old mean.

Student	Subject	Before	After
ABACROMBIE, JAMES JEREMY	12PX	12.00	25.57
ABACROMBIE, JAMES JEREMY	12MA	51.50	34.89
ANDREW, MICHAEL GRAEME	12EC	32.00	37.67
ANDREW, MICHAEL GRAEME	12EG	24.00	22.89
ANDREW, MICHAEL GRAEME	12GE	35.00	40.50
ANDREW, MICHAEL GRAEME	12AC	64.00	64.12
ANDREW, MICHAEL GRAEME	12CM	25.00	29.74
ARNOLD, TRACEY ANNE	12EC	24.00	31.49
ARNOLD, TRACEY ANNE	12CP	75.00	63.26
ARNOTT, LEIGH HELEN	12CM	35.00	43.23
ARNOTT, LEIGH HELEN	12MA	61.75	44.68
ARNOTT, LEIGH HELEN	12AC	61.00	62.10
ARNOTT, LEIGH HELEN	12CP	8.00	22.94
ARNOTT, LEIGH HELEN	12OS	63.00	53.34
ARNOTT, LEIGH HELEN	12GE	53.00	62.74
BAINBRIDGE, GLENN RAYNAL	12CM	64.00	64.43
BAINBRIDGE, GLENN RAYNAL	12CH	32.00	17.78
BAINBRIDGE, GLENN RAYNAL	12PX	71.00	73.77

Cycle 1 : Initial scaling of scores

Figure 182: The rescaling process – individual student details

Cycle 1 : Rescaling back to original mean

Waitakere College
Marks Analysis
Time : 03:08:23   Date : 19/08/1999

Rescaling to original mean (50.18)

Round	Mean
1	50.82
2	50.33
3	50.21
Overall mean	50.19

Figure 183: The rescaling process – summary of details

That completes the first cycle. I have generally found that a single cycle is sufficient to produce acceptable results.

One of the benefits of this new version is that you may try another cycle then return to base and start again. In fact, you may restart as often as you like, each time trying different settings, until you reach results which most closely match your needs. It cannot be said often enough: **The successful use of percentiles analysis MUST involve professional judgement.**

I well remember, when the DOS Marks Analysis was first released, receiving a phone call from a school who were not happy with marks reported rounded to one decimal place. They were distressed that it was too difficult to distinguish between two students scoring 71.1%!!! They needed more accuracy!!! OK, they got it - I changed the program to give two decimal places - but I was in despair that they were prepared to place such absolute reliance on scores obtained in probably quite unreliable tests.

Finally, before going on to the final step - the allocation of grades - here is a small section entitled:

15.6.5 The Calculation of Percentiles

The calculation of percentiles in this package is based on the understanding that students' scores in any subject are part of a continuous distribution between 0% and 100%. This was agreed upon after much discussion with Ministry of Education staff.

The formula for calculating the nth percentile is:

$P(n) = sb + (person - cnb) \times (sh - sb) / (nh - cnb)$
where
  person $= (t+1) \times n/100$
  where
    t is the number of students taking the subject
    n = is the percentile sought

Eg. for the 50th percentile out of 10 people (n = 50, t = 10), person = 5.5 i.e. half way between the 5th and 6th scores - 5 scores below and 5 scores above.

cnb is the cumulative number of scores below (but not including) the group containing the sought person.
sb is the score below - the score obtained by the person or group just below, but not including, the person sought.
nh is the number of students here, in the group which contains the person sought.
sh is the score obtained by those in the group containing the person sought.

There is one more confusing detail. To match the t+1, where 1 is added to the number of takers to produce the correct ratio, you must (temporarily) add a fictitious score of 100 to the group to allow for the correct placement of percentiles ABOVE the top scorer. Thus it should be possible to calculate the 95th percentile of a group of six scores, remembering that we treat the scores as being part of a continuous distribution. In this case, the 95th percentile is the score obtained by the 6.65th person. (person = (6+1) x 95/100 = 6.65)

This is indeed, as expected, above the top score and, with an imaginary extra top score of 100, yields a realistic answer.

The process must treat all marks fairly and the above formula does seem to do that, even in small groups.

15.7 Allocation of Grades

The final step in the process (well, almost) is the allocation of grades.

Provided that all expected moderated marks can be found (and if not you will be given a list of those students whose marks are missing!) then you can proceed with this process.
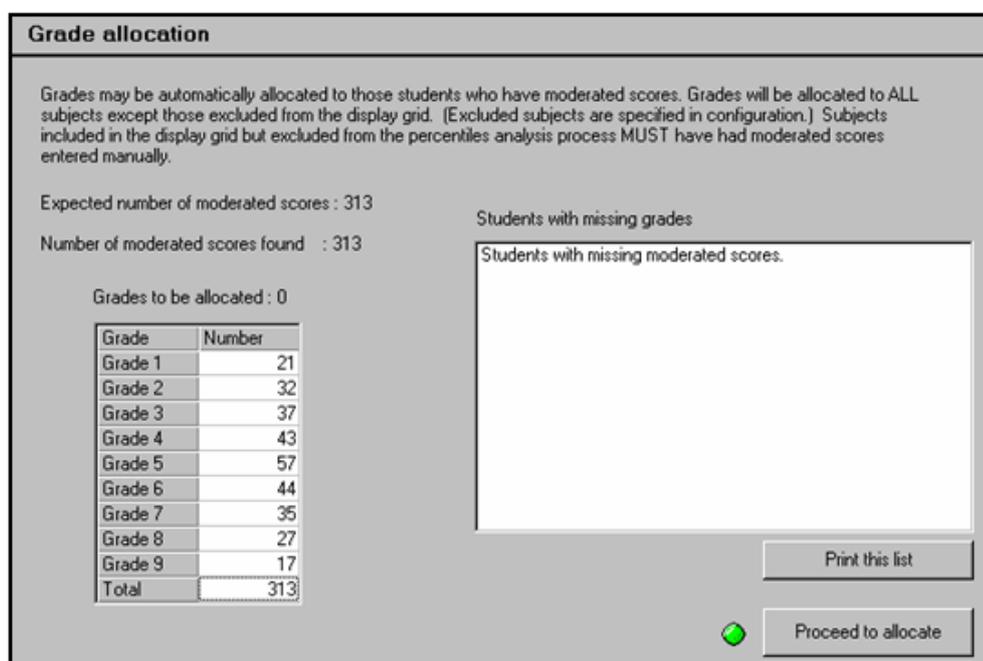
Figure 184: The allocation of grades

The only thing you have to do is to fill in the number of each grade which you have available to distribute into the table on the left hand side of the screen. Above the table is reported the total number of grades required and, as each number is filled in on the table, the number left to be allocated is also shown above.

Once the numbers match the total number required the small red light will change to green and you can proceed to click the 'Proceed' button which will cause the following:

All of the students contributing scores are identified and sorted into descending order. Grades are then allocated from the top down and the results are then stored back on the spreadsheet - and also into the connected columns in each of the contributing markbooks.

Finally (there is always one more thing) you should return to the menu, to Print Lists, and print the 'Ranked Mark Grid'. This is the 'discussion document' which forms the basis of ongoing consultations and deliberations concerning the suitability of the initial grade distribution. After this process has been completed, you should return to the spreadsheet to make any necessary manual alterations to the distribution. This may also involve the alteration of moderated marks.

16   Activities

What's in this chapter?
Overview and creation of activities
Printouts from activities
Copying activities
Creating documents and dossiers

Click 'Specify Activity Details' for the following screen:
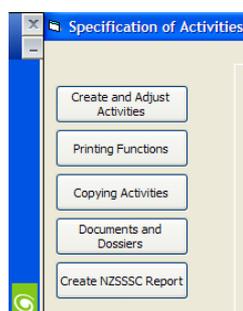
16.1 An Overview of Activities

ClassRoom Manager was designed to work with student specific data – their name, date of birth, score in maths, their reading age in Year 4 and later came 'activities' for example, the choir.

Each activity can have some properties of its own which may be different to all other activities. (The choir will have a practice day, a song book and a robe colour).

It also requires a timetable or schedule. (The choir will have a list of practices and concerts, each of which will have a date, a time and maybe a song...).

Students may require columns dedicated to their relationship within the activity. (Choir members may have a highest note, a favourite song etc). There may be awards associated with the activity annual awards etc.

Students must be selected to make them members of the activity.

Print out various information relating to the activity – student lists etc, be able to copy the details of activities from one year to the next, and automatically create documents and dossiers for our activities.

16.2 The creation of activities

The main activity screen follows.
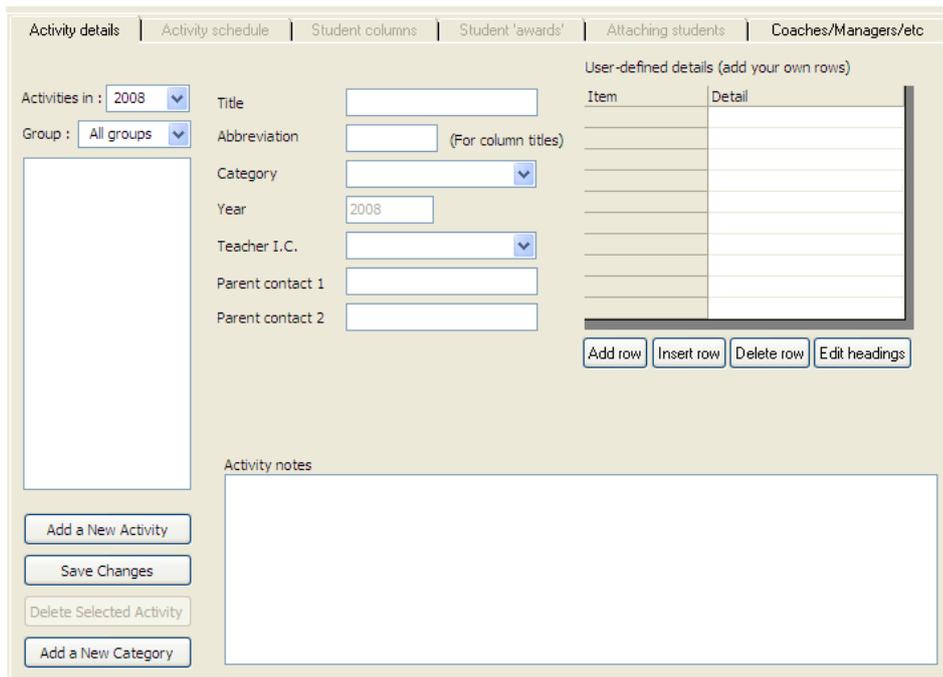
Figure 185: The activity creation screen

On the left of the screen is a list of our current year's activities. You can visit a previous year by changing the year selected at the top of the list.

Activities are also divided into categories (columns associated with activities will appear in the column structure associated with these categories) which initially include 'Sports team', 'Cultural group', 'Music group' and 'Activity group'. Initially all groups are shown but you can narrow the list down to your chosen area using the pulldown selector below the year.

Add our choir to the list of activities. Click on the 'Add a new activity' button, and then fill in the details on the fields shown below.
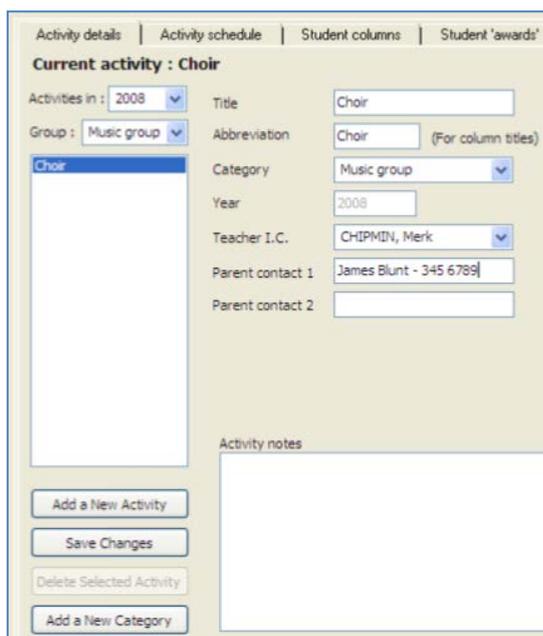
Figure 186: Specifying activity details

You will note that there is a button whereby you may add new categories of your own. Once you have completed the entries click the 'Save changes' button and the new activity will be added to the list for the displayed year.

On the right of the screen is an area where you can add your activity-specific details. Buttons at the bottom of this area allow you to add, insert and delete rows from the list and to edit the row headings. In the example below I've added three choir-specific details.
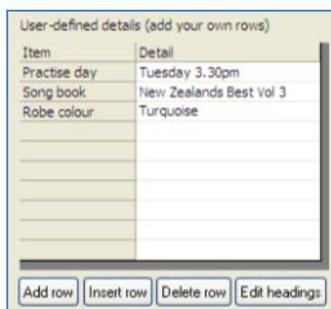
Figure 187: Activity-specific details

The second tab, 'Activity schedule', allows you to set up a grid which may be used to represent a timetable, a schedule, a results sheet – or all of these combined. The screen initially appears as follows.

Buttons down the right side allow you to add, insert delete and move rows and columns and to edit the headings.

A button at the bottom of the screen allows you to copy the schedule to another activity.

At the bottom of the screen you can also enter a title for the schedule. Its default title is the imaginative 'Schedtitle'!
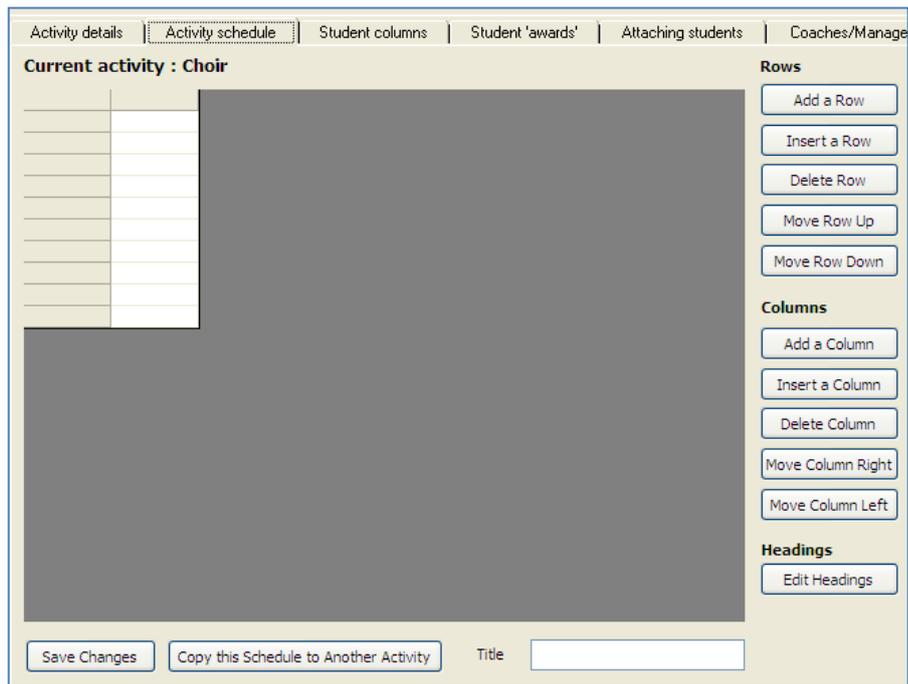
Figure 188: The activity schedule designer

Headings and entries are added to produce the schedule shown below.

Figure 189: A schedule designed

The third tab, 'Student columns' allows you to enter some column titles and types. This will result in the creation of CM columns under the categories (which, in this case, will be):

- Activities
- Music groups
- 2008
- Choir
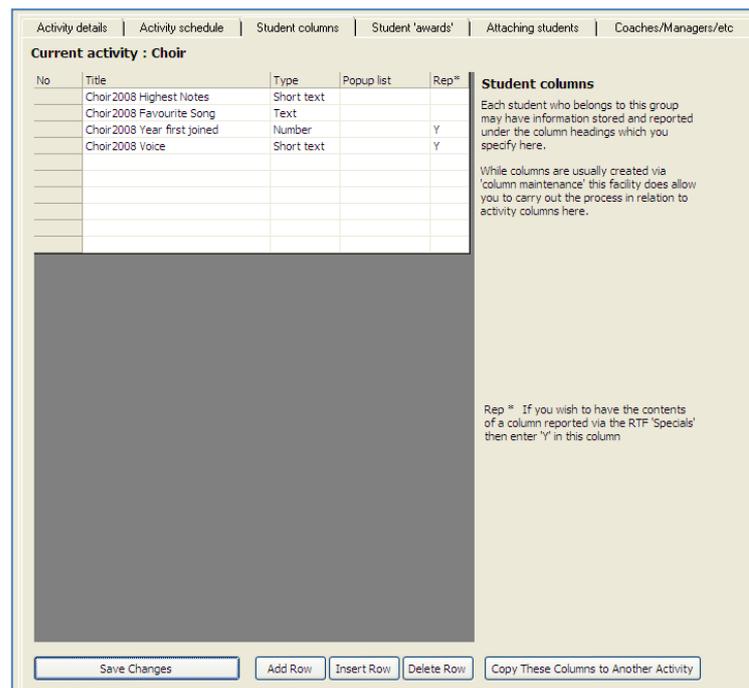
Figure 190: Student-specific columns

Four columns are added, as shown above. A 'Y' in the 'Rep*' column is added to indicate these are to be included in the activities summary which it is possible to include in a user-defined document under the {a} button in the word processor. By omitting the 'Y' from the first two I do NOT wish to include each student's 'Highest note' and 'Favourite song' in their report – presumably a 'Record of Achievement' type document.

The next tab is titled 'Student awards'. On this screen you can create awards which can later be allocated to students on an annual basis. In the screen below three awards are added, but not yet allocated as students are not yet attached to this activity.
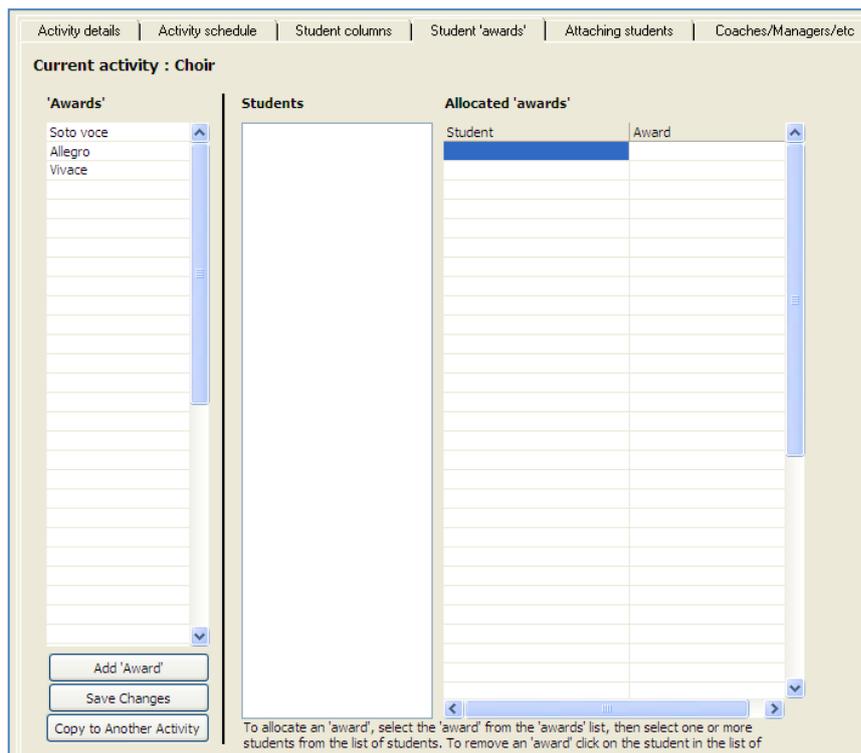
Figure 191: The creation of awards

Let's then turn our attention to the attachment of students to the activity. This is done via the fifth and final tab: 'Attaching students'.
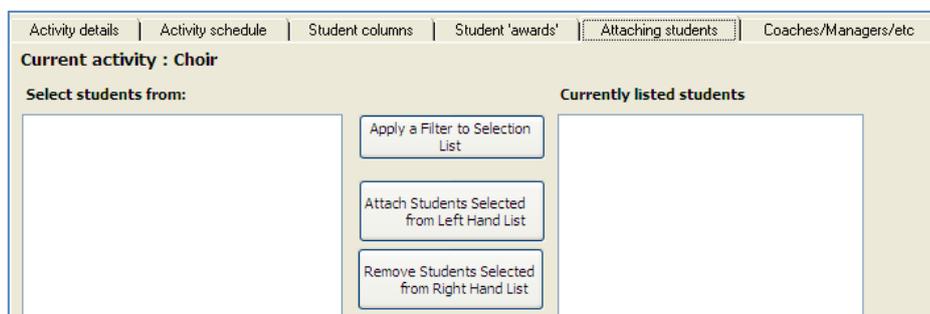
Figure 192: The student attachment screen

Initially this screen is blank as we have not yet applied a filter to view the students from which we wish to select. Click on the 'Apply a filter..' button and make your initial selection. (The filter process used is described in an appendix.)

All full and part-time students are selected and, from these, the choir members. Once done, click 'Attach students...' and choir members now appear in the list on the right side of the screen.
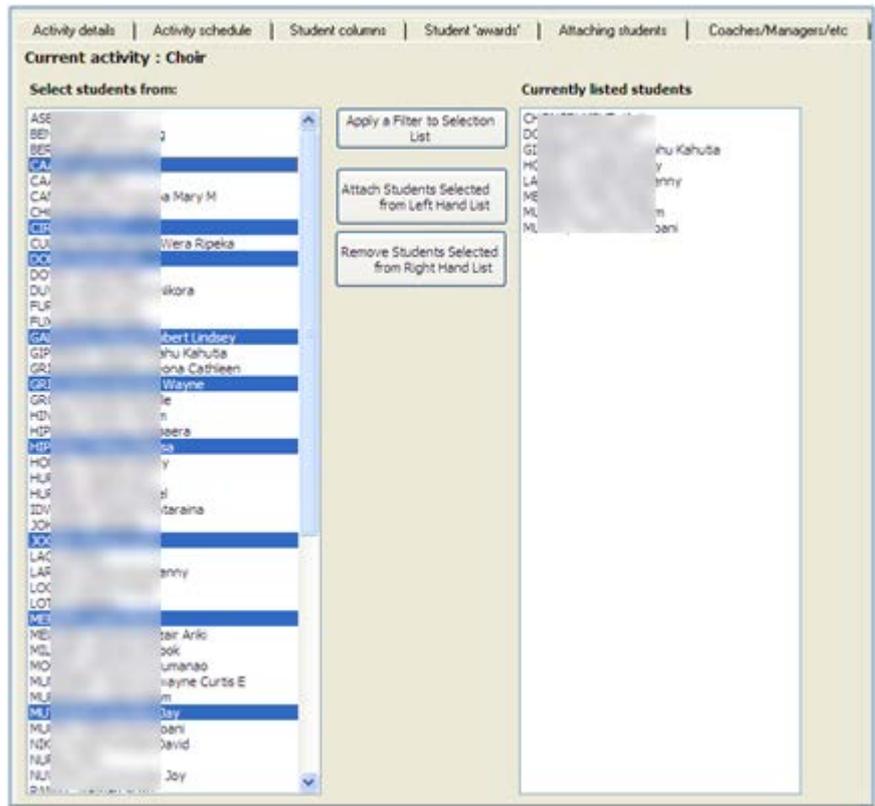
Figure 193: Students have been added to the 'Choir'

Now to the 'awards' tab to allocate awards to members of the choir. Click on the award then the student/s to receive the selected award.
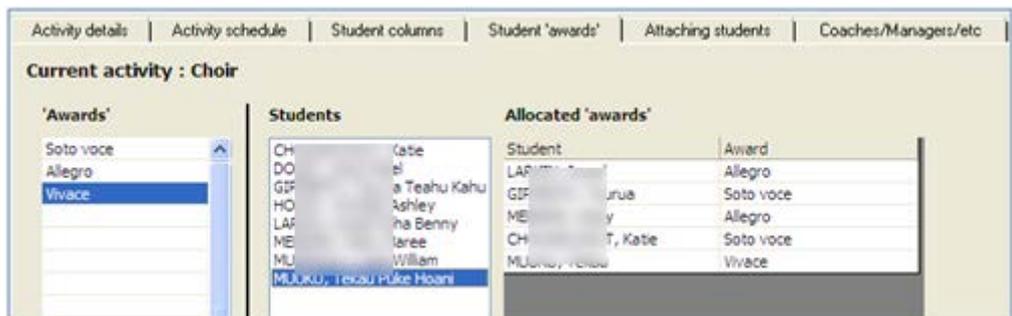
Figure 194: The allocation of awards

16.3 Printing Activity lists

On the left of the screen you must select:
- The year
- The activity group
- The requested activities
- The required list format

There are different list formats, as follows. Once decided, click 'Generate lists' at the bottom of the screen and the lists will appear in the printer object on the right side of the screen. Options:

- move forward and backwards through the pages of your lists using the buttons at the top of the printer.

- enlarge or reduce the display by either clicking on the magnifying glass or, by double-clicking on the image itself. Double right-clicking reduces the image size. Once the image is enlarged you can drag it around to view different parts of a list using your mouse.

- print the pages using the Print button at the top of the screen.
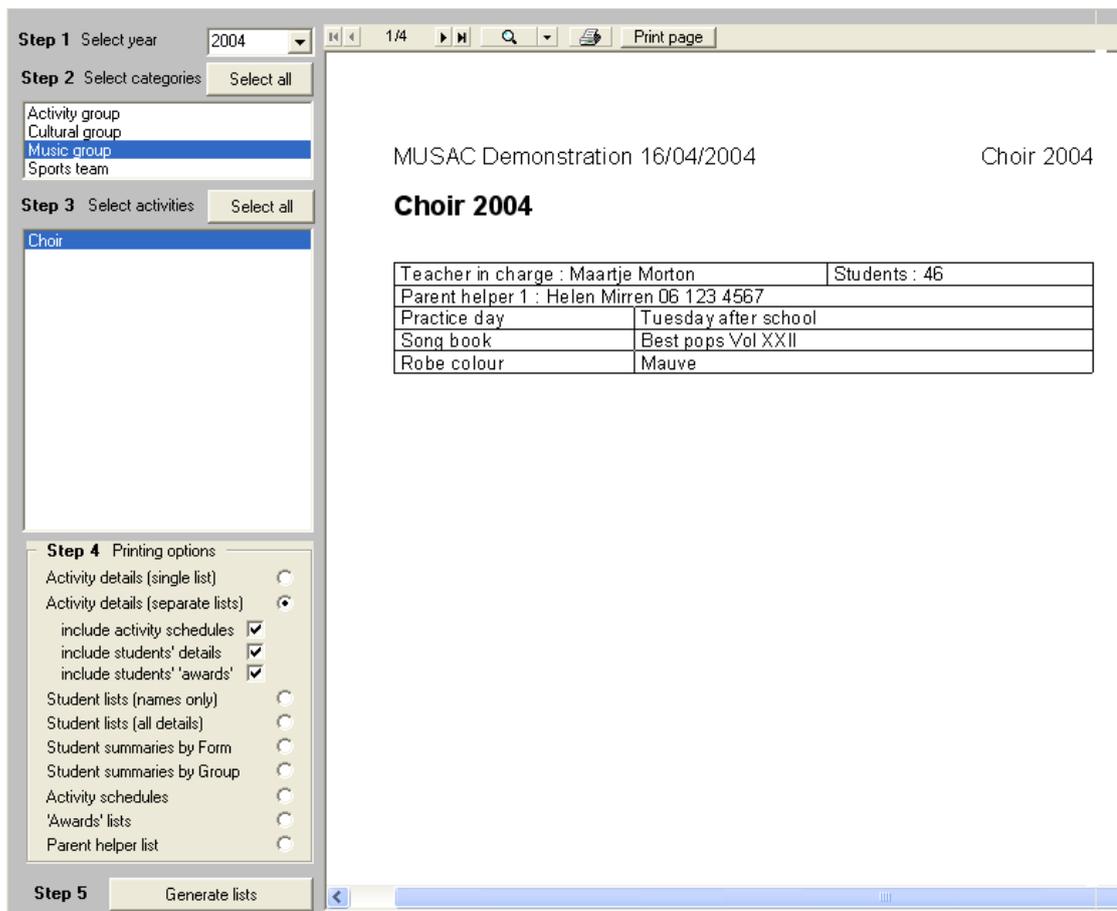
Figure 195: The list printing screen

The first example of a list is shown above with more below. (My schedule lacks a sensible name).

MUSAC Demonstration 16/04/2004   Choir 2004

Choir 2004 Schedtitle

	Meeting	Time	Song
Jan 28th	Music	4-6pm	Yesterday
Feb 16th	Hall	4-6pm	I am I said
Feb 28th	Hall	4-6pm	Constantly
Mar 13th	Auditorium	4-5pm	Nessum Dorme
Mar 27th	Hall	4-6pm	Ave Maria
Apr 10th	Music	4-6pm	Po Kare Kare Ana

Figure 196: The Choir schedule for 2004

MUSAC Demonstration 16/04/2004   Choir 2004

Choir 2004 student information

Student	CH2004 Highest Note	CH2004 Favourite song	CH2004 Years first joined	CH2004 Voice
BARR, CHRISTOPHER				
BASSETT, DIANNA				
BAYNE, LUKE				
BIRD, Jennifer				
BRIND, DAKIN				
BURNHAM, SOPHIA				
CAMPBELL, GRANT				
CHRISTIE, MICHAEL				
CLOSE, SCOTT				
COLLINS, SALATIELA				
COOKE, PAULINE				
DAVIS, REGAN				
DOWD, BRENDAN				
ELLIOT, KATHARINE				
FINLAY, HEATHER				
GIMBLETT, MELANIE				
GURNEY, GRANT				
HARRIS, DANIEL				
HEKE, VINCENT				
HING, TAPAHIA				
HULL, DEBBIE				
HURIWAI, GARTH				
Hapeta, DONNA				
INGLE, JENINE				
MACDONALD, JARROD				
MALLON, CAROLL				
MAYZE, NATHAN				
MCDONALD, TARA				
MONK, CARWYN				
PAKI, JODIE				
PINK, GRAEME				

Figure 197: The list of choir members

MUSAC Demonstration 16/04/2004   Choir 2004

PINK, GRAEME	Basso Profundo

Figure 198: The list of awards

16.4 Copying Activities From One Year to Another

This screen, shown below, allows you to copy the specifications of one or more activities from one year to the next.

Figure 199: The activity copying screen

Follow the five steps listed on the screen:
1. Select the year you are copying FROM.
2. Select the year you are copying TO.
3. Select those activities which you wish to copy. (Remember to hold down Ctrl to multi-select, or click the 'Select all' button at the bottom of the screen.
4. Select those other aspects of the activities which you wish to copy.
5. Click 'Proceed'. Once you have done so you will be able to access the activities in their new year.

16.5 Creating Documents And Dossiers For Activities

Further steps allow you to create/update documents and dossiers for your activities. This provides the teacher in charge of each activity with access to the same configuration / printing processes which we have described above but this time via CMTeacher.

Select the year
Select the activity or activities for which you wish to create documents and/or dossiers. You'll probably wish to do both. If you create dossiers then this will, if necessary, include the creation of documents.

A grid-only document is a document which is not designed to be viewed as a document. Rather it is intended that its data be accessed via a spreadsheet view rather than as a single per-student view. Actually, it's the same document but we simply adjust its name a little which will cause CMTeacher to proceed directly to 'Grid mode' when the document is selected.

Indicate whether or not you wish to include, in the document, the activity specific details as well as the student specific details.

Decide which process you wish to use and click the appropriate button.

Figure 200: The creation of documents and/or dossiers for activities

17　　Exports and Imports

What's in this chapter?

1　CEM imports
2　NZSSSC imports
3　asTTle exports and imports
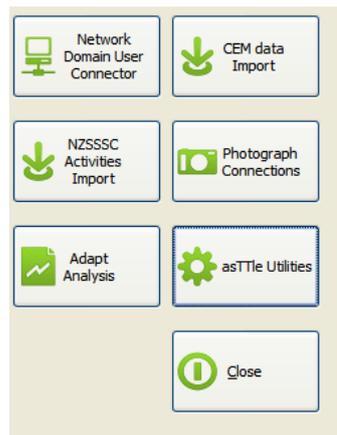
MUSAC software interacts with software from several other packages used in schools. Via CMAdmin you can export to one of them and import from three of them. (You can export to the other two via Student Manager).

17.1 CEM data Imports

The Centre for Educational Measurement (Durham University in England) offers tests for schooling. MUSAC, via Student Manager, exports the necessary details for students wishing to sit the CEM tests. Once the tests have been sat and marked they are analysed and a range of information is returned to the school. This includes tables and graphs relating to both the group and individual students.

The returned information relating to individual students can be imported in to ClassRoom Manager columns for your own storage and use via CM's own analytical and reporting tools.

The import screen is as shown below.
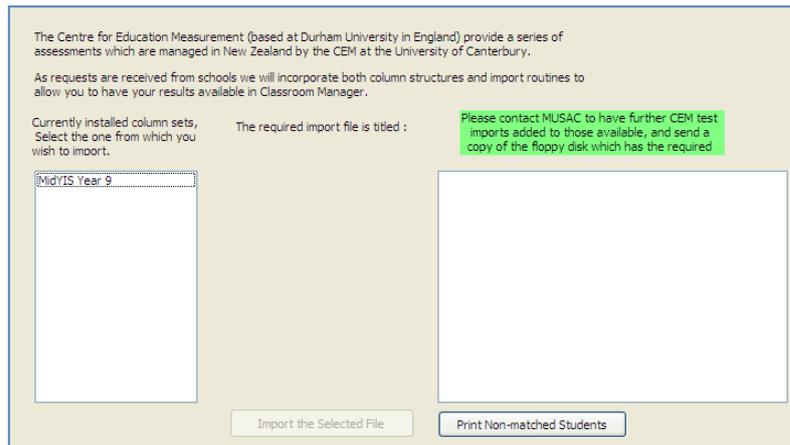
Figure 201: The CEM import screen

If your screen appears as shown above then this indicates that you have not yet installed the columns used to store the CEM data. Return to the import screen and import the CEM columns, as shown below.
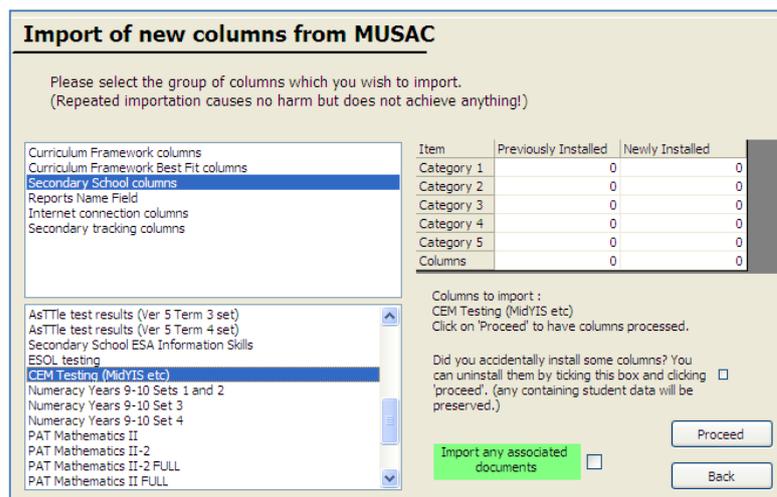
Figure 202: Import of the CEM (MidYIS) columns

Once you have installed the columns they will be available for selection on the import screen.

Select this set of columns and you will be prompted to identify the file of MidYIS data. This file will be called, eg. Stan9.csv.
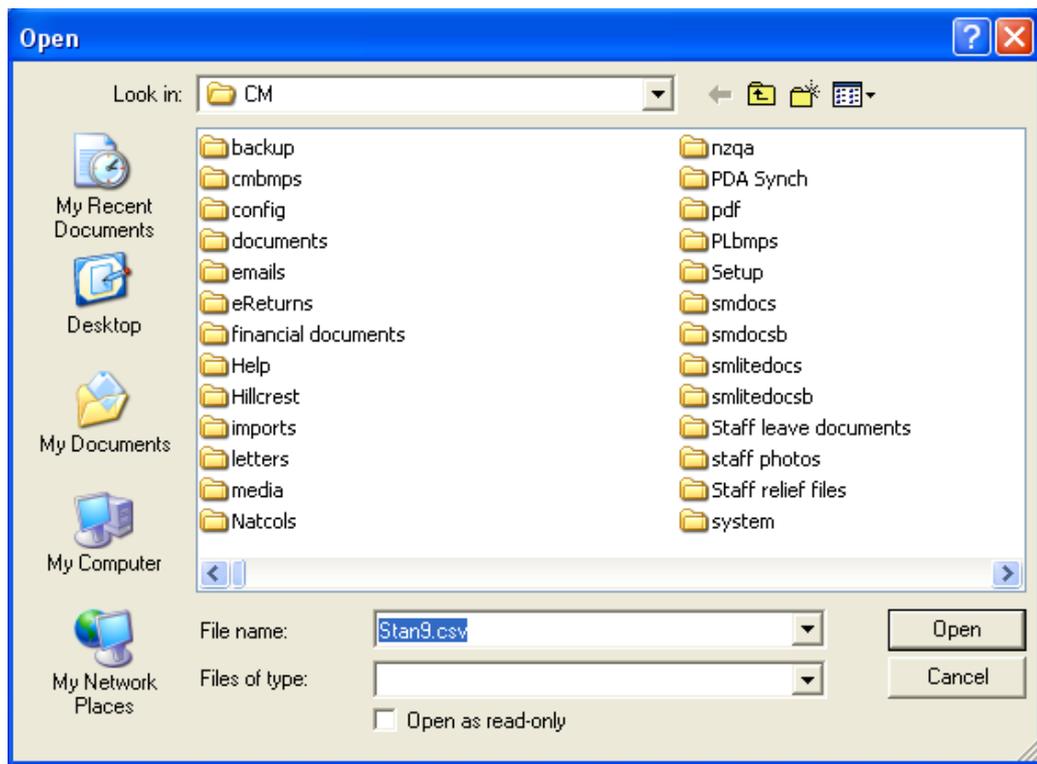
Figure 203: Identifying the CEM import file

Once you have identified the file you may proceed to import from it. Students will be matched with those in CM using their family and first names. A list of unmatched students will be displayed and made available for printing.

17.2 NZSSSC Activities import

NZSSSC offers secondary schools a sophisticated spreadsheet process for recording details relating to students and their involvement in sports within the school. Student information can be exported to the NZSSSC software from Student Manager.

NZSSSC information may now be imported back in to the Activities area of ClassRoom Manager via the following screen.
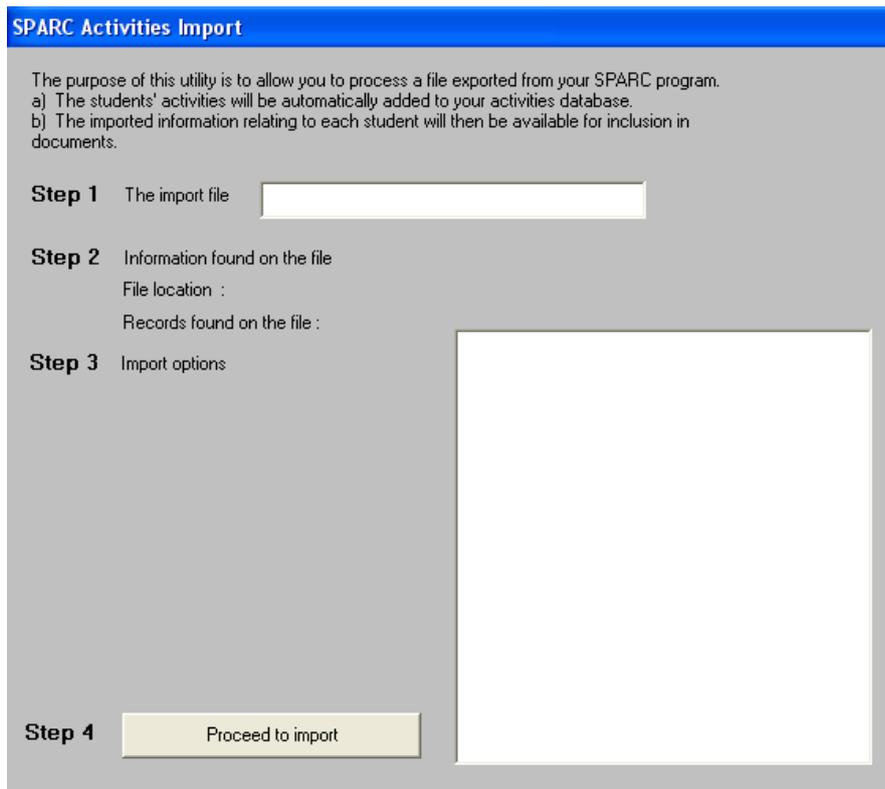
Figure 204: The NZSSSC import screen

First identify the file of data exported from the NZSSSC spreadsheet. Click in the file name area to display the following dialogue which you should use to locate the file.
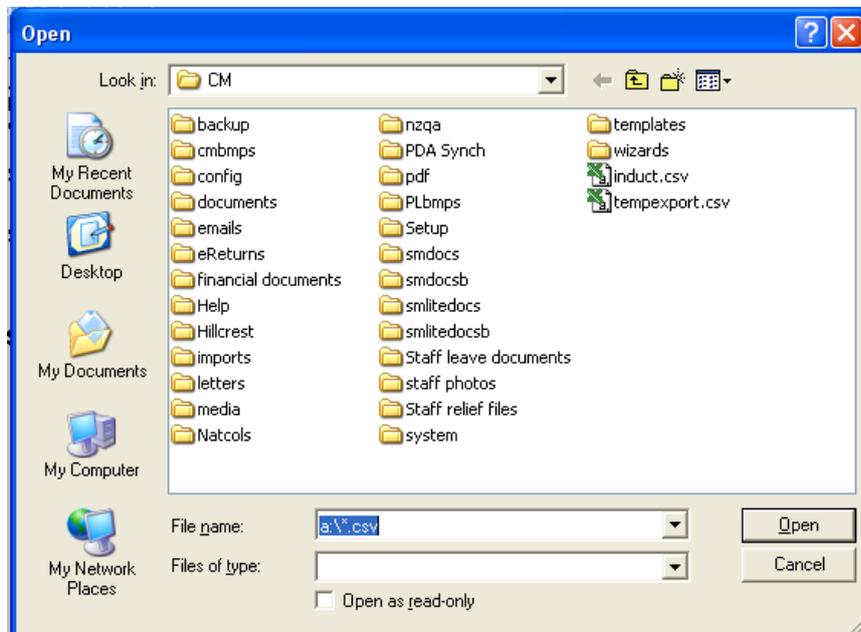
Figure 205: Locating the NZSSSC data file

This displays a summary of data found on the file.

Click on the button. Information relating to the matched students' imported data is displayed in the list window on the right side of the screen. Activities are created (if necessary) during the process.

17.3 Using e-asTTle and NZCER Import/Export Utilities

These utilities are for uploading school, student and group data from ClassRoom Manager Admin into e-asTTle and NZCER and importing back into ClassRoom Manager.

17.4 asTTle Export

In CMAdmin > Other Utilities > asTTle and NZCER Utilities the following will be displayed – click 'Export asTTle Data'.
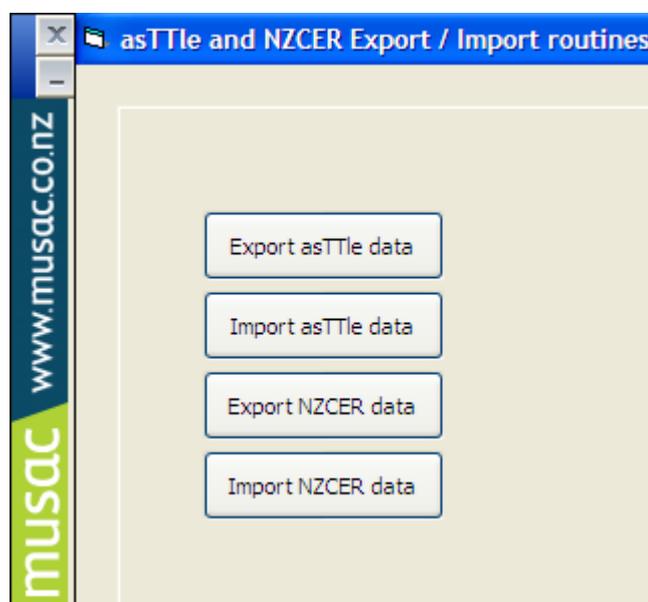
Figure 206: Initial e-asTTle and NZCER export/imports
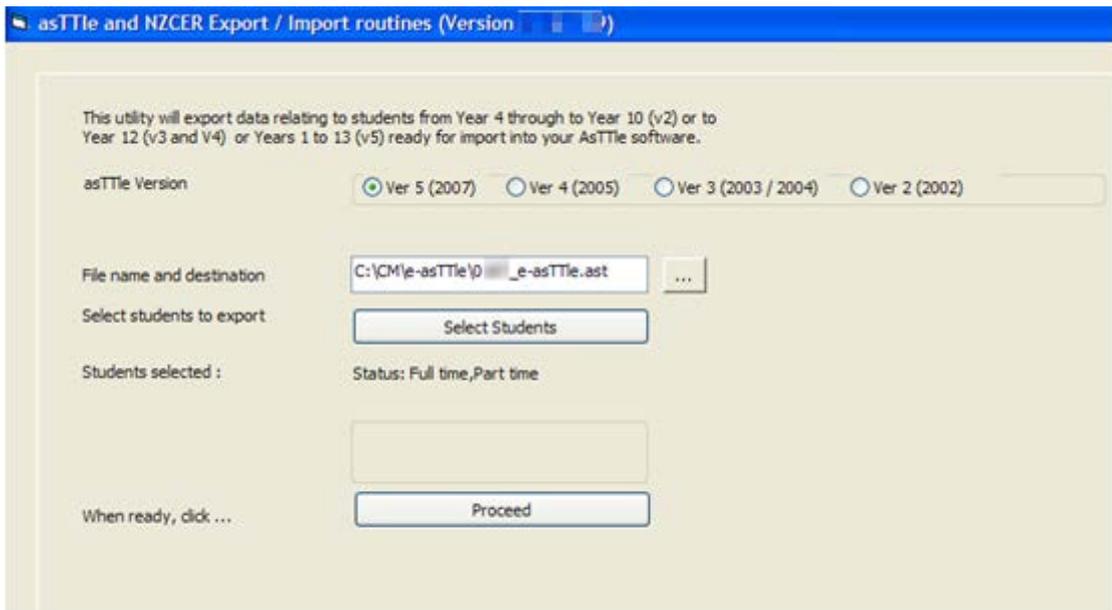
Figure 207: Settings and filter

The file name and destination defaults to CM\e-asTTle\[your school number]_e-asTTle.ast .
Please remember this location as you will need to browse for this file when uploading into the
e-asTTle program.

17.4.1 Select students to Export

Click 'Select students' to select students to export to e-asTTle.
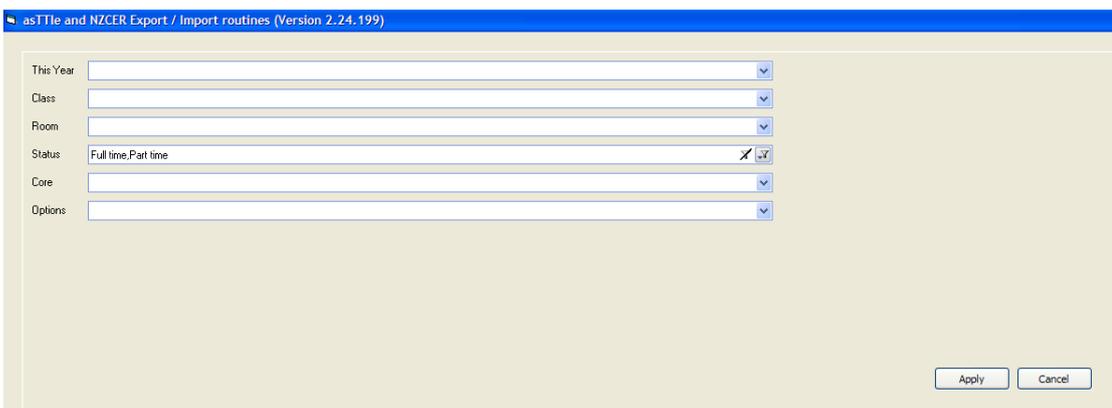
Figure 208: Classes Rooms tab selection

Click 'Apply' and the filter will then be set. Where a class has no name, the file contains 'not set'
for a blank class when exporting to e-asTTle.

17.4.2 To Export the data

To export the student data, click 'Proceed'.
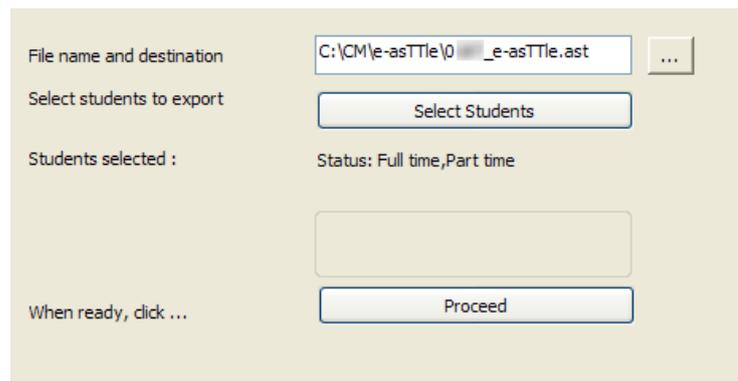
Figure 209: Confirming students selected

When exporting students there may be some students omitted from the export due to invalid data. You will have the option to print this list of students.
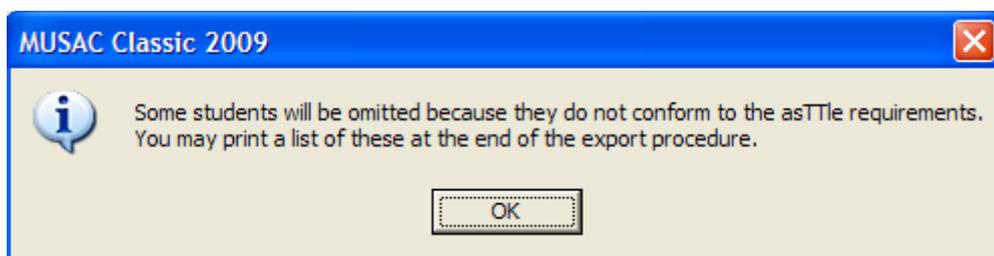
Figure 210: Confirm Print List

If you choose to say 'Yes', you will see the following dialogue box.
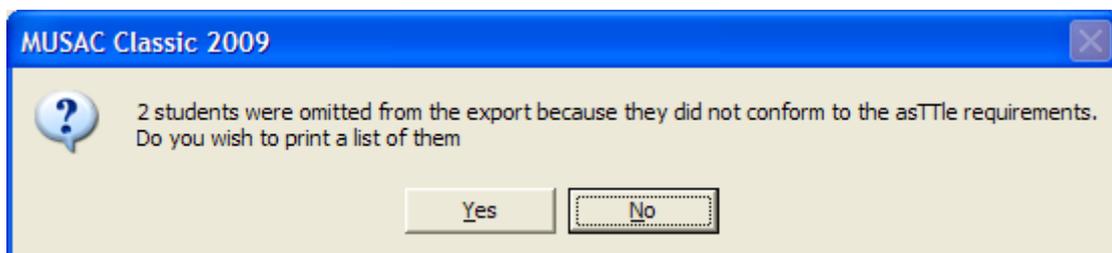
Figure 211: Omitted students list generated

A file will then be generated in the location shown in Figure 'Confirming students selected' above and may be viewed or printed.

Log into the e-asTTle web page (https://e-asttle.education.govt.nz/SCWeb/login.faces) with your username and password and select 'Import'. Browse for the file created. The file location defaults to CM\e-asTTle\. Select 'Submit'. E-asTTle is imported successfully only after the import file has been validated.

17.5 To Import data from e-asTTle

To import data from the export file created from within your asTTle software, from the initial screen click 'Import asTTle data'.
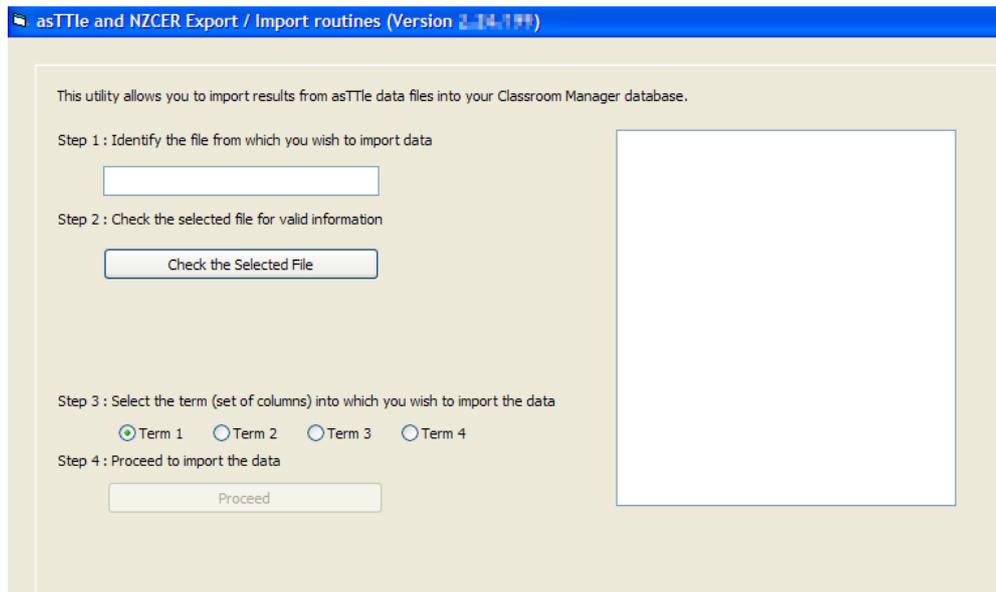
Figure 212: Import results e-asTTle screen

1.   You must identify the asTTle file – click in the Step 1 field and browse to the location.

2.   You will be required to check for validity of the information to be imported by clicking on 'Check the selected file'.

3.   Select which term (ie. set of columns) you wish to have the data copied into.

4.   Proceed with the import

If CM columns have not previously been added to the school's database then the user is prompted to add these columns:
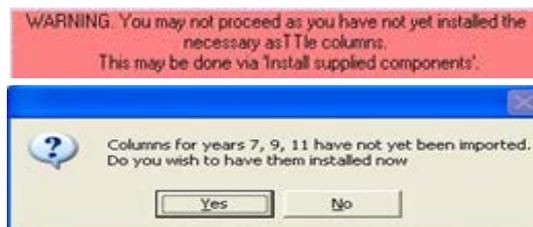
Figure 213: Prompt to add columns to database

As the student results are imported they will be listed on the right hand side of the 'Import results e-asTTle' screen.
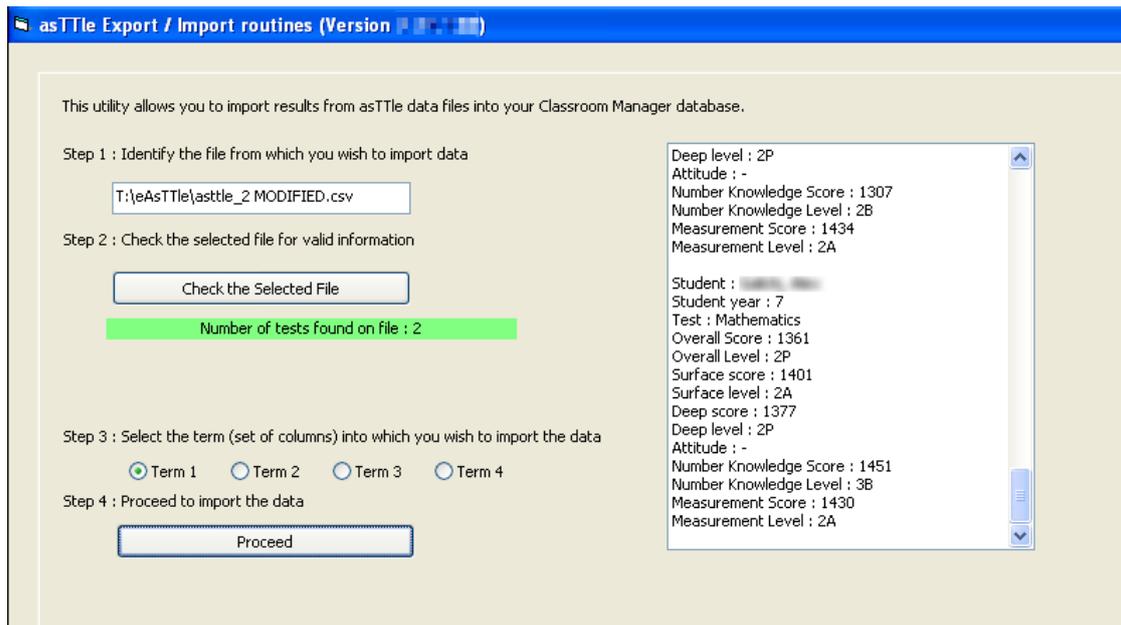
Figure 214: Data imported from asTTle

To verify data has been imported correctly, access the asTTle documents in CM Teacher and filter for the appropriate students.

17.6 NZCER Export Utility

In CMAdmin > Other Utilities > asTTle and NZCER Utilities the following will be displayed.
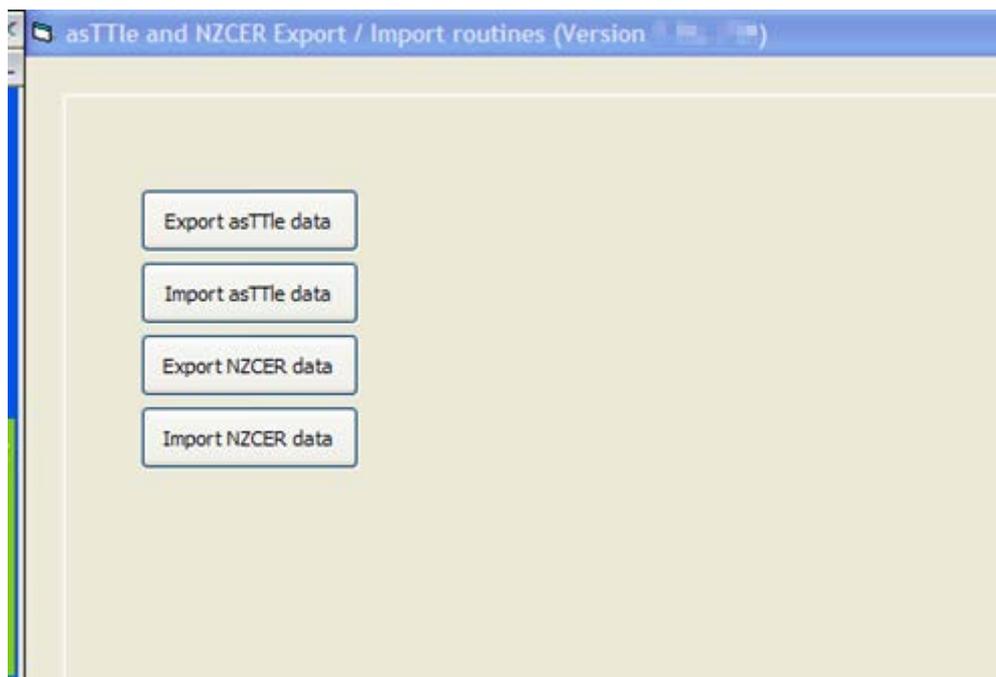
Figure 215: Opening NZCER screen

Click 'Export NZCER data'.
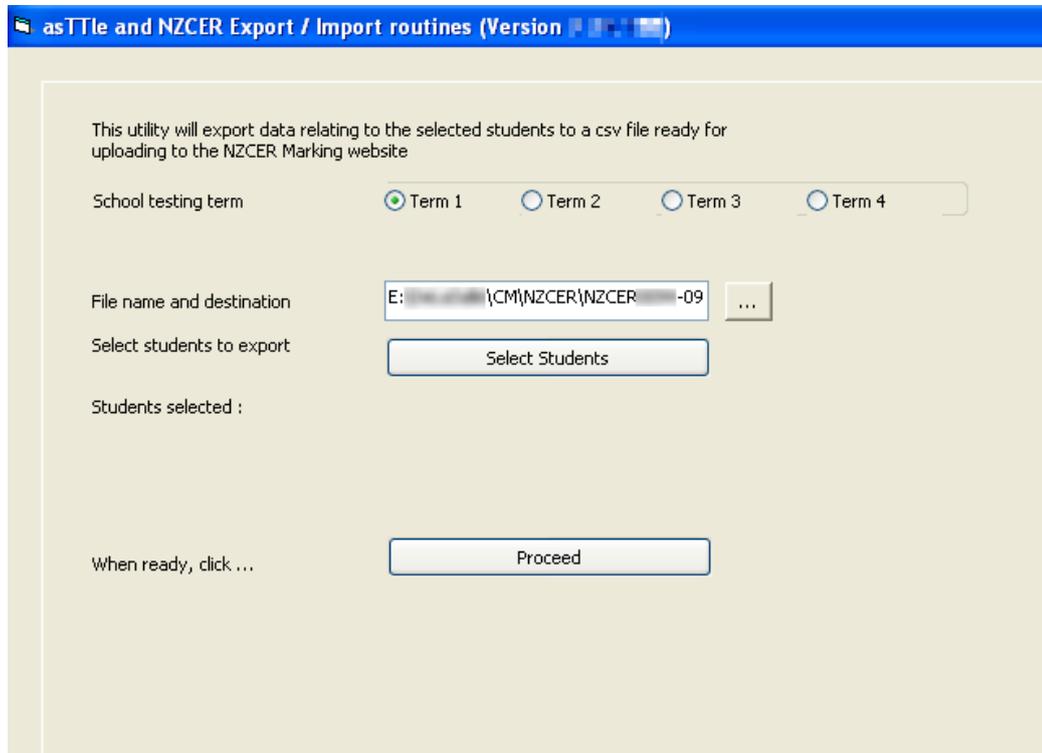
Figure 216: Settings and filter

The file name and destination defaults to CM\NZCER\NZCER[your school number]-Current year-testingterm.csv eg. CM\NZCER\NZCER1234-09-1.csv. Please remember this location as you will need to browse for this file when uploading into the NZCER program.

17.6.1 Select the school testing term

Click 'Select students' for selecting students you wish to export to NZCER.

Figure 217: Classes Rooms tab selection

Click 'Apply' and the filter will then be set.

17.6.2 To Export the data

To export the student data, click 'Proceed'.
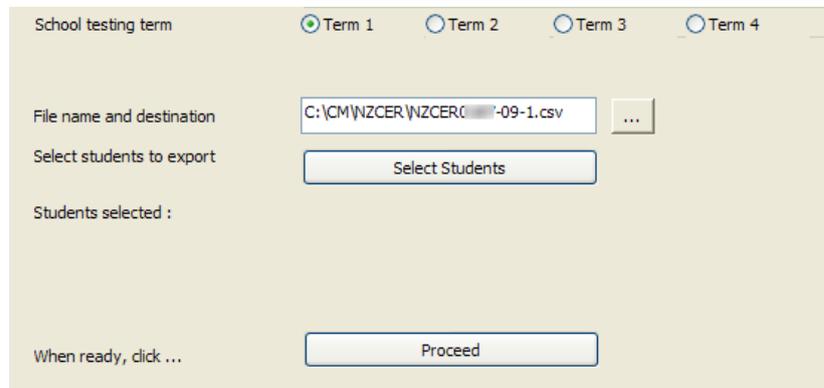
Figure 218: Confirming students selected

When exporting students there may be some students omitted from the export due to invalid data. If duplicate horizontal or vertical group names are found, the name of the duplicate will be included in the message. The group of students selected via the filter is also displayed.

You will have the option to print the list of students.
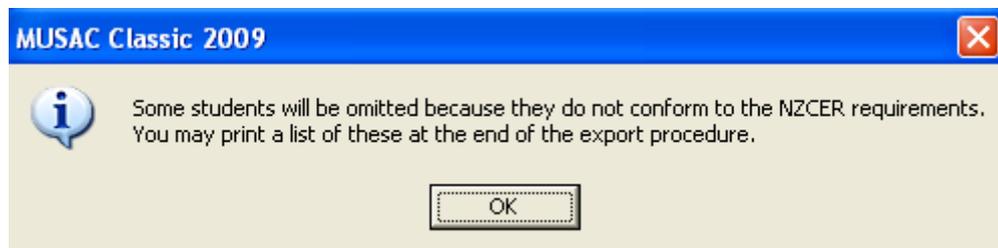
Figure 219: Confirm Print List

If you choose 'Yes', an Excel screen will display similar to the following.
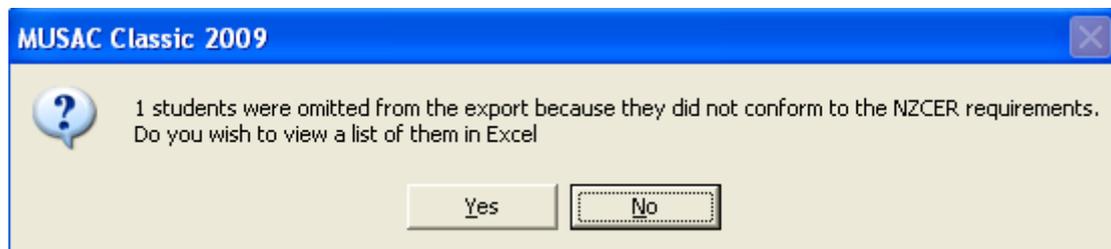
Figure 220: Omitted students list generated

A file will then be generated and opened in Excel, labelled 'NZCER upload exception report' with the date and time. There will be an error description beside the student ID, NSN and name. Examples are 'Not Full time or Part time; NSN () is missing or invalid'.

Figure 221: File Generation Confirmation

Log into the NZCER web page with your username and password and follow the NZCER process to import successfully.

17.7 NZCER Import Utility

To import data from the export file created from within your NZCER software, from the initial screen click 'Import NZCER data'.
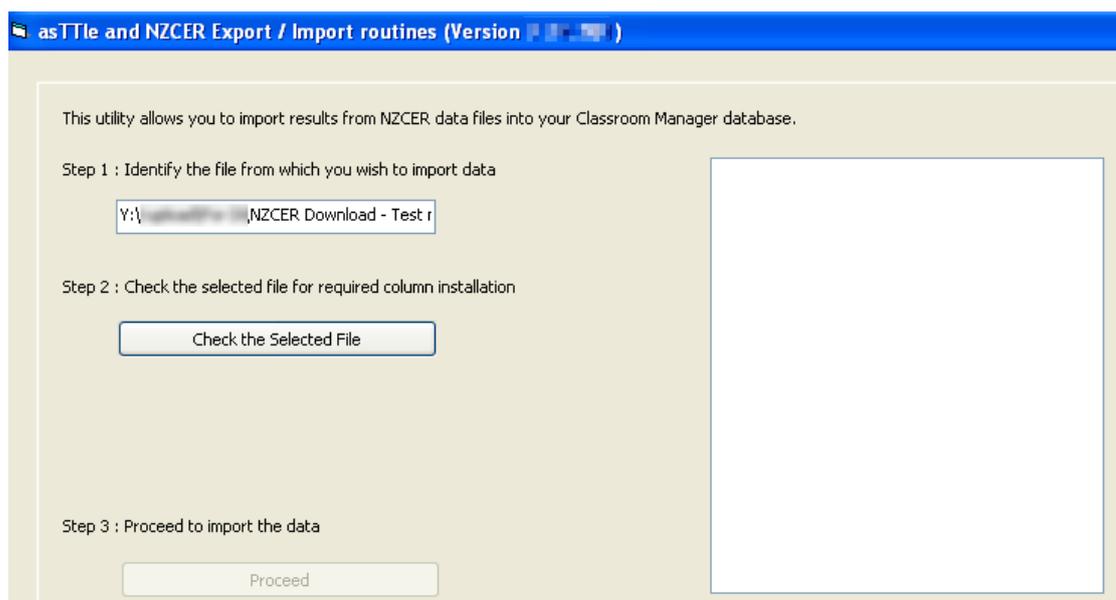
Figure 222: Import results NZCER screen

1   You must identify the NZCER file – browse to the location.

2   You will be required to check that the appropriate columns have been installed by clicking on 'Check the selected file'.

3   Proceed with the import

If CM columns have not previously been added to the school's database then the user is prompted to add these columns:
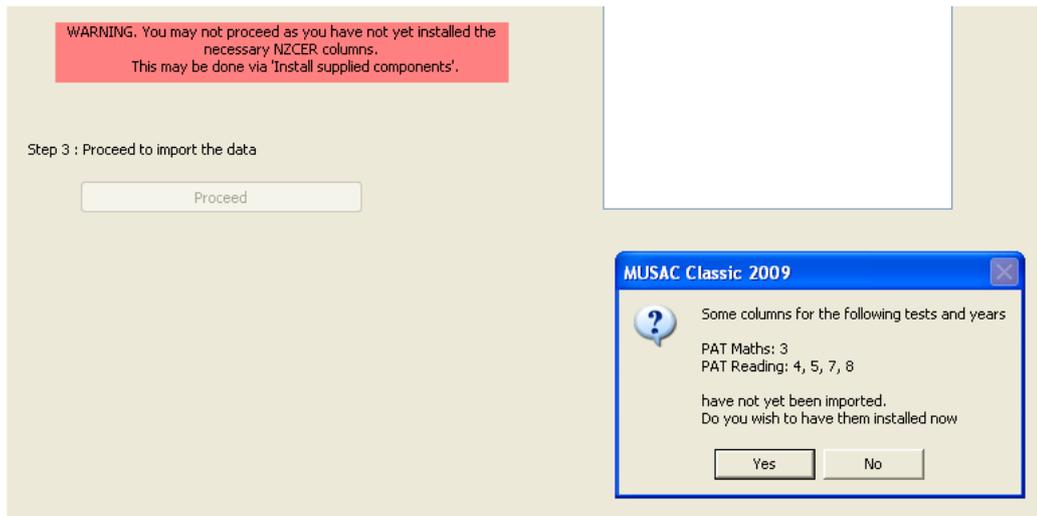
Figure 223: Prompt to add columns to database

Click 'Yes'. As the student results are imported they will display in the list on the right side:
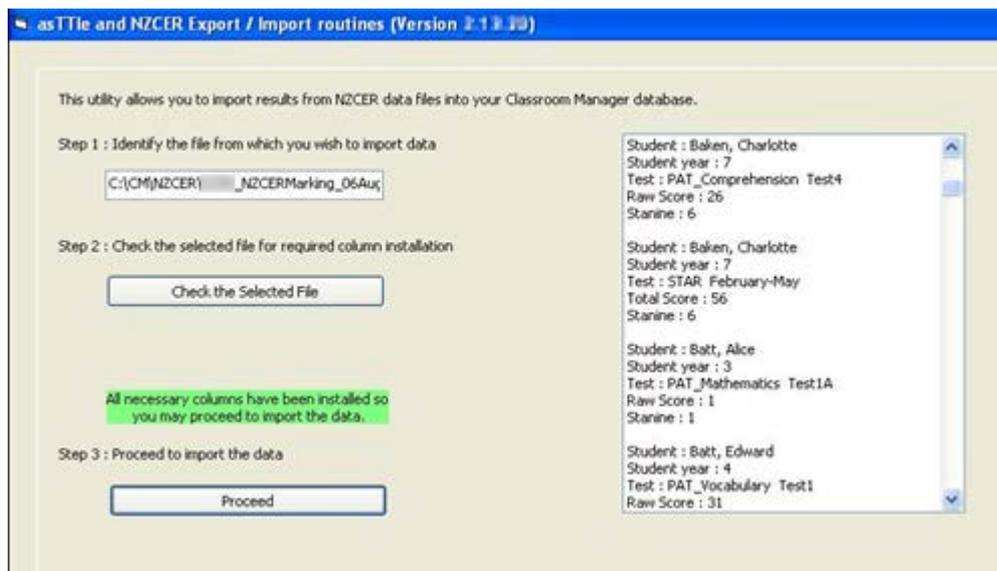
To verify data has been imported correctly access the relevant PAT or STAR documents in CM Teacher and filter for the appropriate students.

17.8 Achievement (ART) 2013-2017 Project

Figure 224: Achievement (ART) 2013-17 export

This data export creates a file to enable reporting of student Achievement (ART) 2013-17 progress via the MoE online portal. A report is created to assist checking of their data, which can be previewed on the screen and then printed if required.

1   To appear in the student export screen, and then be included in the export file, a student must have been identified as being selected for the A2013-17 programme:
  - This can be done by setting the Achievement 2013-17 flag found on the 'NZQA Full' document in CM to "Yes".
  - This flag can also be added to a document, and can be selected from the Data Assistant under >NZQA Standards, in the usual way. This is the only criteria for a student to be included. All students in the list will be included in the file.

2   Each student's data is checked to ensure that NSN, Ethnicity1 and Leaving Reason for Leavers are not missing. Missing data will be listed in an error report. The file will not be created until the missing data is supplied

3   Special Assessment Conditions - a flag has been added to indicate if your school has submitted a request to NZQA for special assessment conditions for a student. This does not indicate that approval has been granted.
  - This flag can also be accessed via the 'NZQA Full' document or by adding it to a document, via the Data Assistant under >NZQA Standards.

4   **The report is not an exact replica of the file**
  - The report includes student names where the file does not.
  - *Ethnicity1, Ethnicities2 & 3 (where available), Gender, Date of Birth and Funding Year Level* are included in the file, but not in the report.
  - *Leaving Reason* is included in the file as a MoE specified code, but is shown as a description in the report.
  - *L2/3 Possible* for the current year shows the total credits for which the student is enrolled on the export date. (Withdrawn standards are ignored).
  - A further column for *L2/3 NYA* for the current year is included in the report to indicate the number of credits that it is still possible for the student to achieve, as the year progresses. It may include standards that were already achieved in a prior year. This column is not included in the export file.

5   *L1 Lit Met and L1 Num Met* - this is based on data held in the MUSAC database. NZQA might have confirmed that the requirement has already been met. These cases are indicated by ** in the column.

6   Results of **N**, **Y**, **Z** and **V** are all considered **NOT Achieved**

7   **Duplicate Standards** are handled in the following way in the *~Gained* and *~Attempted* fields

  - Where a standard was *not achieved* in a prior year, but the student is enrolled in the same standard again in the current year, the standard is considered NYA, and therefore will not appear in the Attempted column, until it has been re-sat.

- Where a standard was *achieved* in a prior year, but the student is re-enrolled in the same standard again in the current year (in an attempt to improve their result), the standard is still considered as achieved. It will therefore appear in both the gained and attempted columns.

8   The file is saved in the `\CM\exports` folder. It is a comma-delimited (.csv) file and can be opened in Notepad or Excel. The file is dated so that a new file will not normally overwrite an older export file. The exception to this is that a previous version, **created on the same day as the new file**, will be overwritten.

- The fields in the file appear in the following order:
    - Export date
    - School ID
    - NSN
    - Ethnicity 1 (MoE specified code)
    - Ethnicity 2 (MoE specified code)
    - Ethnicity 3 (MoE specified code)
    - Gender
    - Date of Birth
    - Funding Year Level
    - Literacy Level 1 Achieved (MUSAC DATABASE calculated, not NZQA confirmed)
    - Numeracy Level 1 Achieved (MUSAC DATABASE calculated, not NZQA confirmed)
    - Level 1 Credits Gained (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Level 2 and 3 Credits Possible in the calendar year (those for which the student has enrolled and not withdrawn)
    - Level 2 Credits Gained (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Level 3 Credits Gained (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Level 1 Credits Attempted (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Level 2 Credits Attempted (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Level 3 Credits Attempted (MUSAC DATABASE calculated up to export date, not NZQA confirmed)
    - Eligible for Special Assessment Conditions (based on your school's request, not NZQA approval)
    - Last Attendance Date (for Leavers only)
    - Leaving Reason (for Leavers only)
    - Attendance Rate (half-day attendance as a percent of possible half-day attendance to export or leaving date)

18 Global Processes for Documents and Dossiers

What's in this chapter?

1 An overview of the processes
2 Global document management
3 Global teacher and dossier management
4 Photograph connections
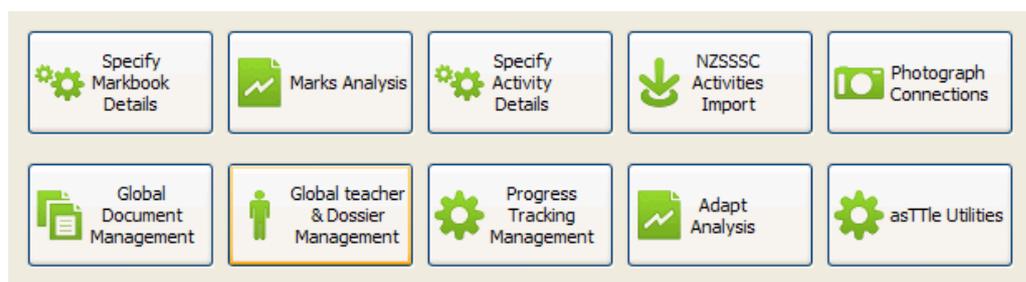
18.1 An Overview of the Processes

Each of three sets of processes, are designed to make it possible to deal with some of the components of CM in a global way rather than deal with a single teacher or a single document, or a single dossier or a single photograph.

Documents:
- Making global changes— eg. changing a year or a column link or a markbook
- Movement between directories or their deletion
- Attachment of selected documents, graphs and/or pictures to selected dossiers with one click

Teachers and their dossiers, enabling you to globally:
- Set their group memberships
- Attach comment banks to their dossiers
- Delete their dossiers
- Adjust the connection of columns to documents

Student photographs, in a section where you can:
- Connect students to their photographs
- Fill a column with a group of photograph names
- Move or copy photographs

18.2 Global Document Management

From the main menu screen click 'Global Document Management'.
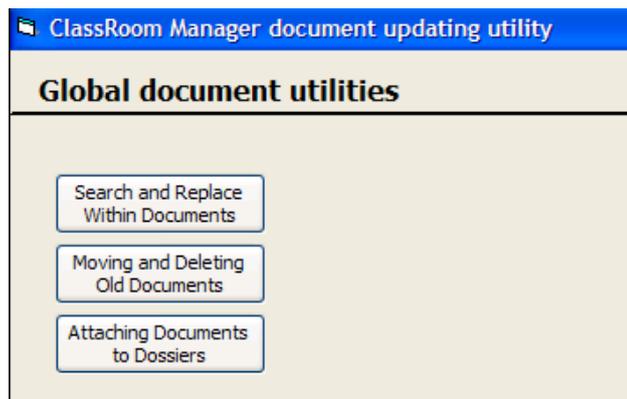
18.2.1 Search and replace within documents

The purpose of this process is to make it possible for you to select a group of documents, and to modify column connections, to change markbook connections and change text within the selected documents.

The process consists of several steps and you can move forwards and backwards between these steps using the buttons which will, when relevant, appear at the bottom of the screen, the first of which is shown below.
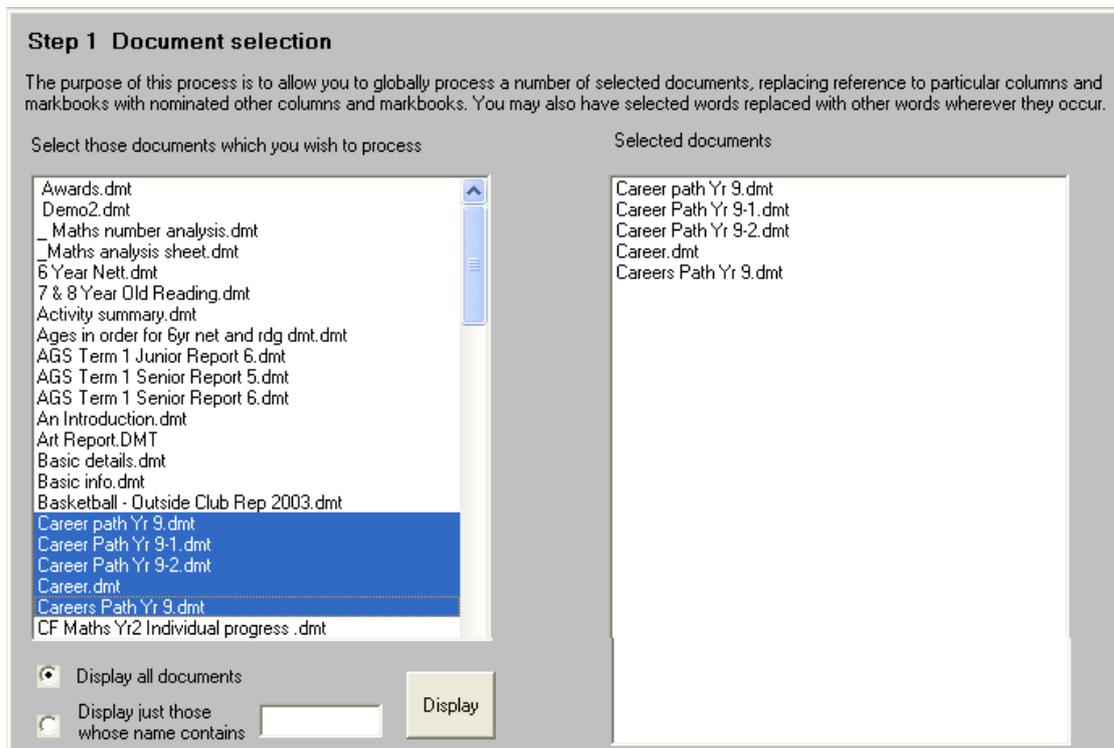
Figure 225: Selection of the documents to be processed

For this demonstration I've selected five documents relating to careers. The following changes are somewhat spurious but they serve to illustrate what is possible.

In the second step, where you indicate which column connections you wish to change, I've elected to replace the columns displaying the students year 9 hobbies with those relating to their year 10 hobbies. (Why you would wish to do this I cannot imagine – but it illustrates the process).

Select the column on the left you wish to replace, and then use the column selector on the right to identify the new column. It will appear on the right of your initial selection.

Note that this list displays all column connections found in your selected documents and, if you do NOT connect a replacement column, then the original connection will remain unchanged.

The screen below illustrates the changes to make.
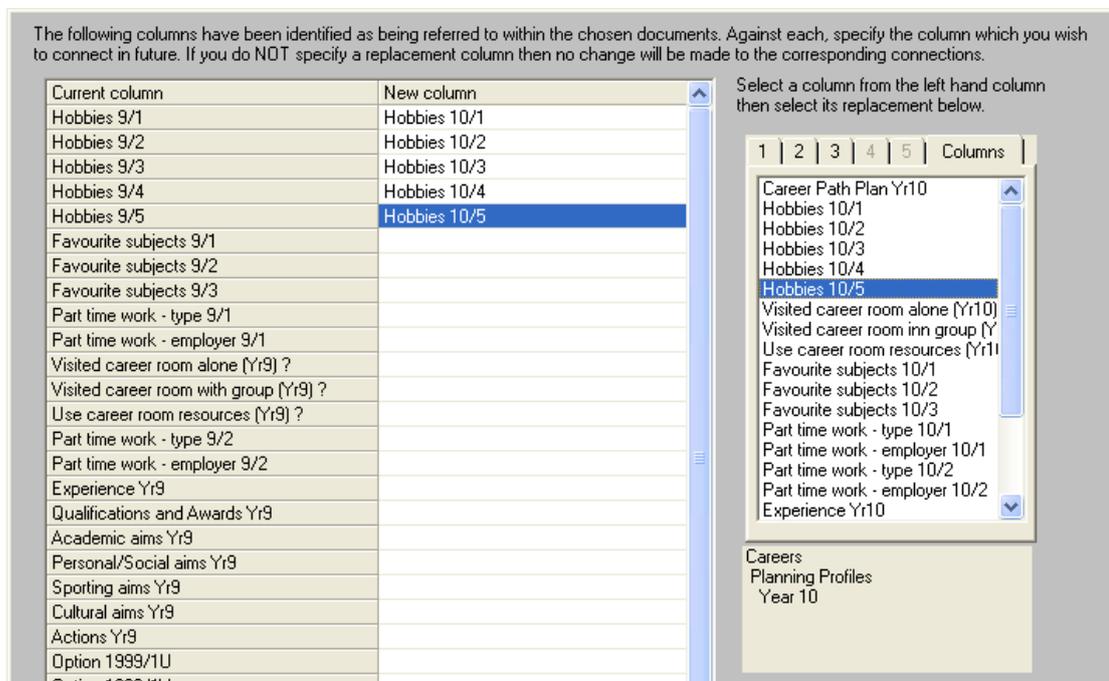
Figure 226: Redirection of the columns

The next step allows you to do the same with markbook connections. Documents can contain word processor inserts which extract and display information from within a student's markbooks. This process allows you to globally change these connections via the following screen.

The following markbooks have been identified as being referred to within the chosen documents. Against each, specify the markbook which you wish to connect in future. If you do NOT specify a replacement markbook then no change will be made to the corresponding connections.

The anticipated new markbooks have been listed for you, provided that they have been created. You may, of course, change these to alternative markbooks. N.B. Links to GENERIC markbooks have NOT been listed as these will function correctly without further change.

Current markbook	New markbook

List markbooks for: 2004

Display 'Report' names

10AT 2004
10CL 2004
10CP 2004
10CR 2004
10DM 2004
10EG 2004
10ES 2004
10FR 2004
10HE 2004
10HO 2004
10MA 2004
10MS 2004
10MU 2004
10MW 2004
10PE 2004
10SC 2004
10SS 2004
10TD 2004
10TY 2004
10WW 2004

Figure 227: Redirection of Markbooks

In the illustration above there are no markbooks to reconnect! If there were, select a markbook from the left side, and then select its replacement from the list of current markbooks displayed on the right of the screen. You can specify the year from which you wish to select the new connections at the top of the list.

Now specify text changes to make. This can be done in two areas:

Documents
Specify the text which you wish to change on the left side, then type in the replacement text on the right side. In the example below I've elected to replace '2003' with '2004' and 'Year 9' with 'Year 10'.

Document titles
The same process can be applied to document titles, and I've replaced 'Year 9' wherever it occurs in a title with 'Year 10'.
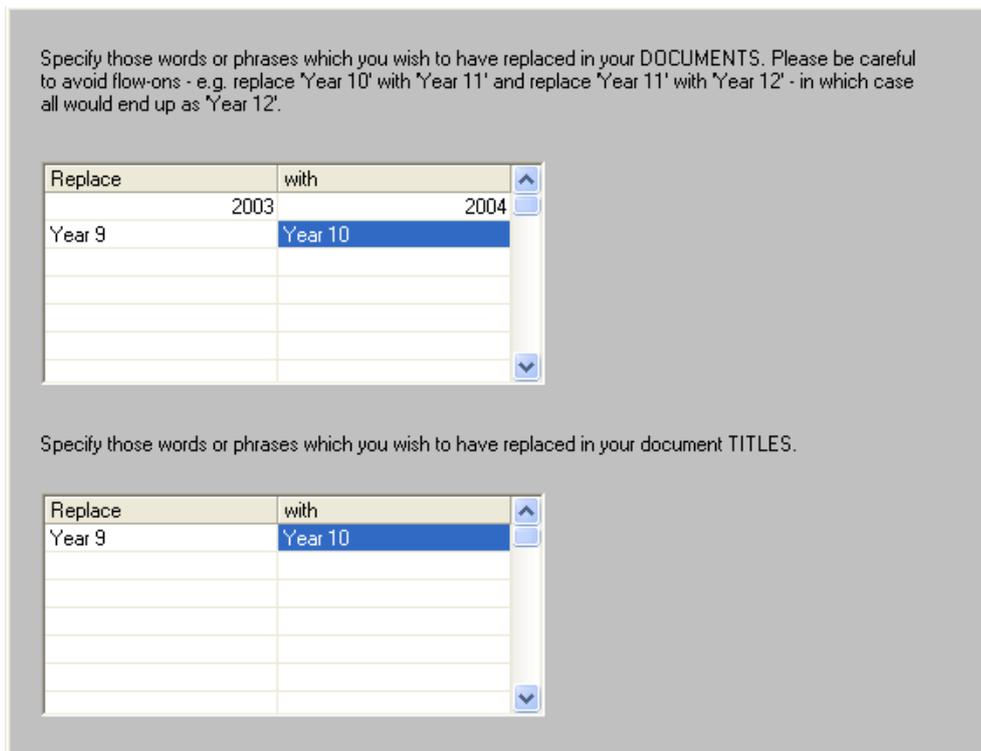
Figure 228: Replacement of text

Finally, you can also have the old versions of the documents retained in a separate subdirectory. This is done on the final screen below.
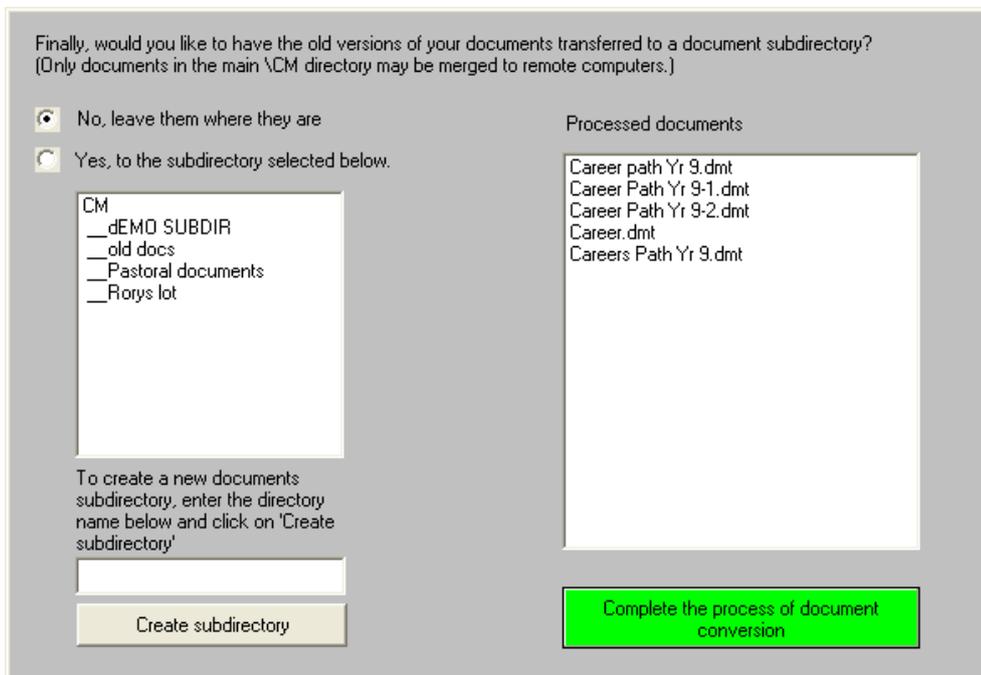
Figure 229: Moving and processing the selected documents

At the bottom of the left side you can create a new subdirectory to hold your now obsolete documents. Type a suitable name in the empty area and click on the 'Create subdirectory' button.

Please note: Document subdirectories are created under the existing subdirectory \cm\documents. The 'documents' subdirectory itself must NOT contain any documents. It is intended to serve as a holding place for the various document subdirectories which you might create.

Once in CMTeacher you can, if you have the right to do so, access the documents in the various subdirectories.

Once you have completed the decisions on this screen then click the large green button at the bottom right hand side of the screen and the various changes you have requested will be performed and the documents processed will be reported in the list area above the green button, as shown above.

18.2.2 Moving and deleting old documents

From time to time you may wish to move documents between directories or even delete them altogether. In the bottom left of the following screen is a facility to create new subdirectories and, as an example, I am going to create a subdirectory called \AGS' and to move some documents to that subdirectory.
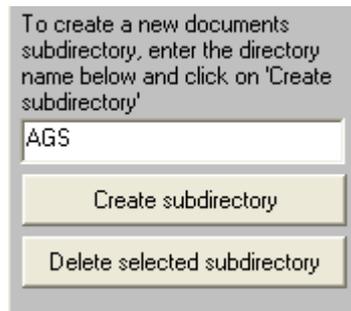
Figure 230: The creation of a new document subdirectory

 I've typed in the name of the new subdirectory and clicked 'Create subdirectory'. Now the new directory is listed, along with the previously existing ones on the main screen below.
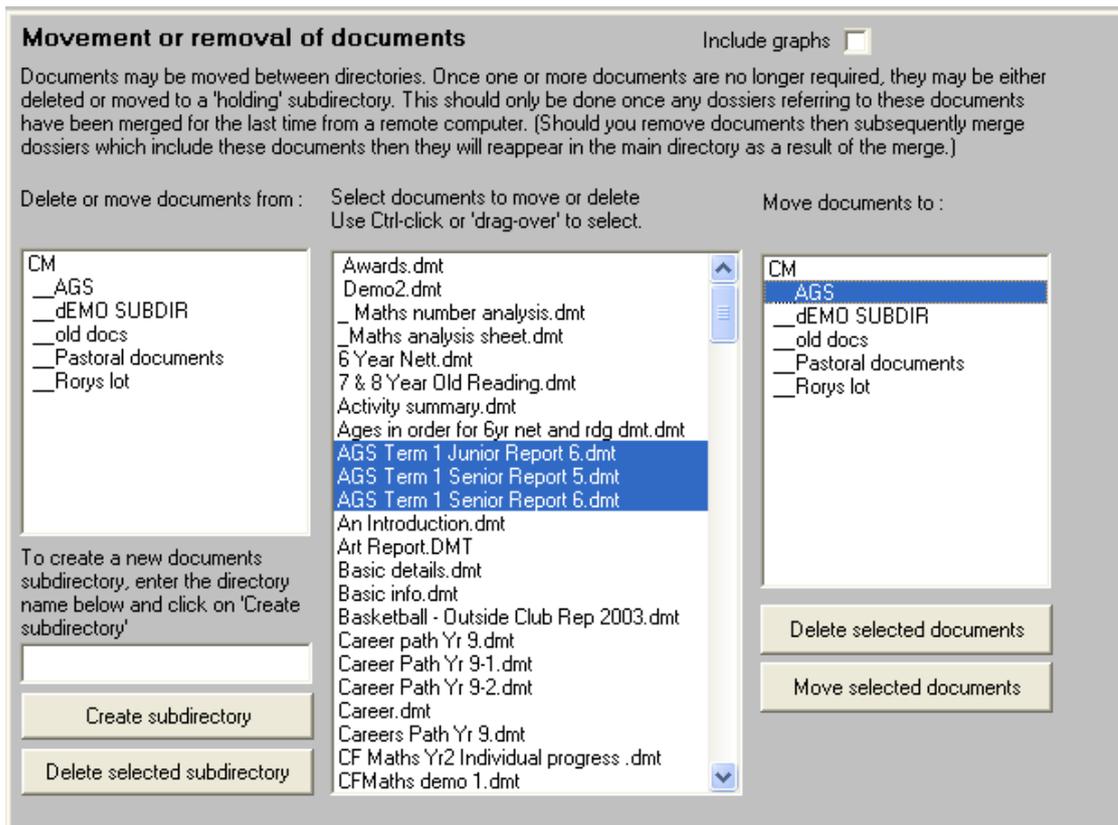
Figure 231: Move or Removal of documents

To use the process, first click on the directory in the left hand list FROM which you wish to move or delete documents. Any documents found in that directory will be listed in the centre portion of the screen. From that list select those which you wish to move or delete and, having done that, click on either the 'Delete selected documents' button or the 'Move selected documents' button. Now attach selected documents to selected dossiers.

18.2.3 Attaching documents (or graphs or pictures) to dossiers

This process is facilitated by the screen below.
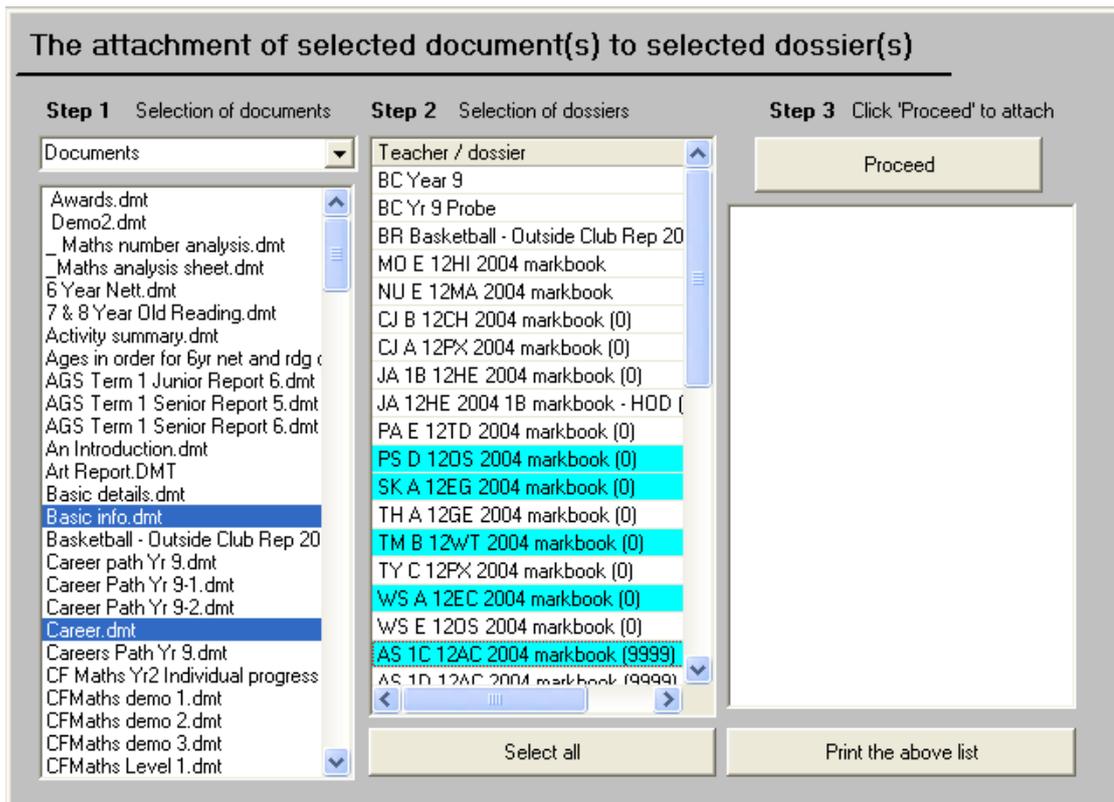
Figure 232: The attachment of documents to dossiers

First select which type of inclusion you wish to perform by selecting documents, graphs or pictures from the drop-down selector at the top of the first column. This will then display all of the type selected in the left column. Choose to attach documents.

Next, from the left list, select those documents to attach to some dossiers.

Next select the dossiers to which the selected documents need to attach then, via step 3, click on the 'Proceed' button. The results will be then displayed in the right list as shown below.
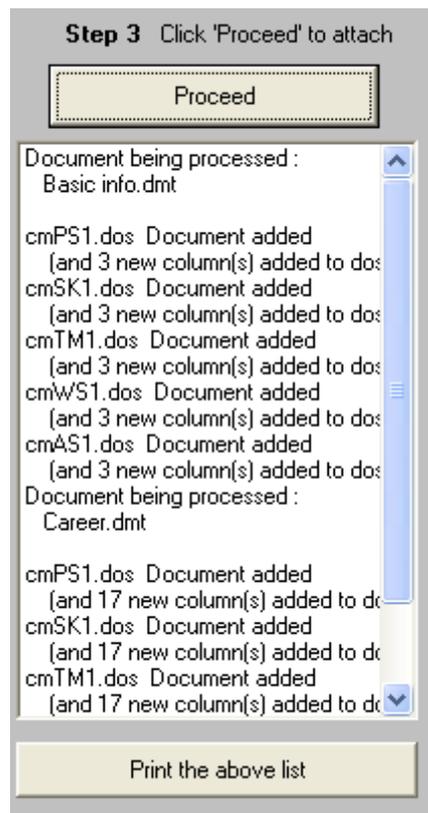
Figure 233: Details of the process

18.3 Global Teacher and Dossier Management

Click 'Global Teacher & Dossier Management'

18.3.1 Set group memberships

This button enables you to globally set group memberships for teachers.
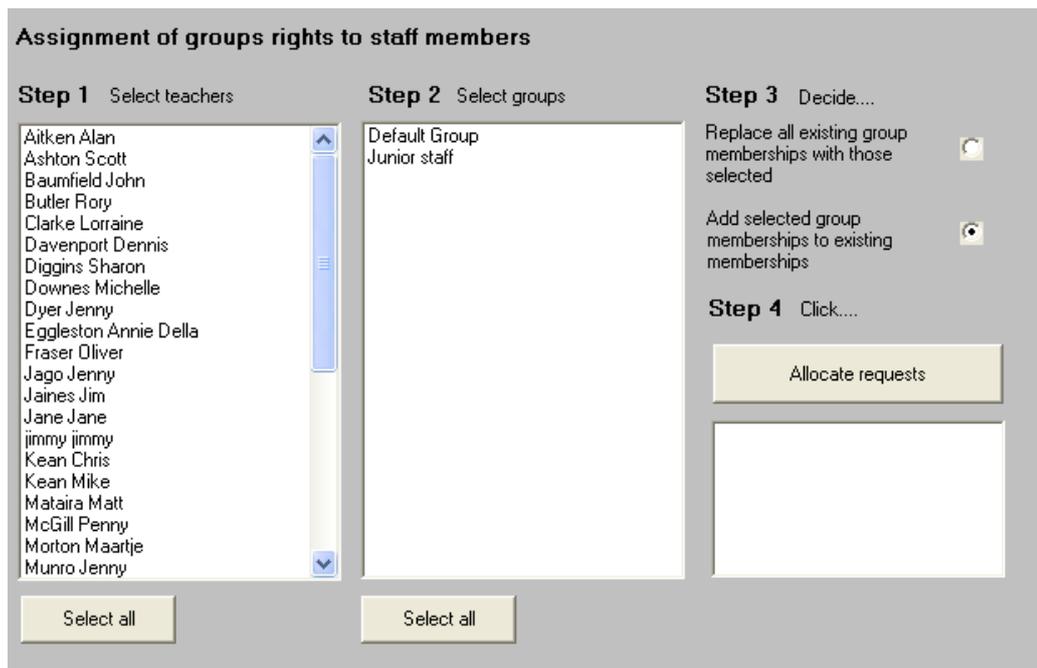
Figure 234: Global allocation of group memberships

The left hand list displays the staff members on file and the centre list displays the group for which you have designed membership rights.

If you click on a teacher from the left hand list then their group memberships are displayed at the bottom of the right hand column, as shown below.
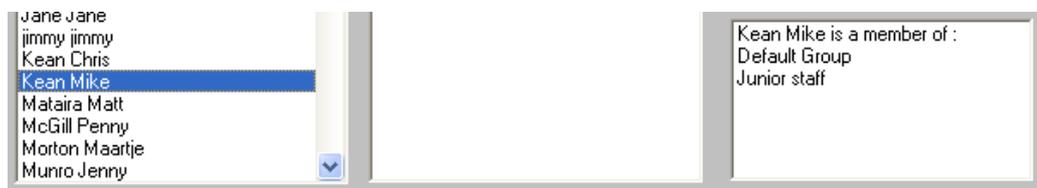
Figure 235: A single teacher's group memberships

To set group memberships for several teachers select them from the left hand display then select the groups of which you wish them to become members from the centre list.

At the top of the third column you have to decide whether you wish to replace their existing memberships with those just selected or you alternatively wish to ADD those group memberships just selected to their existing memberships.
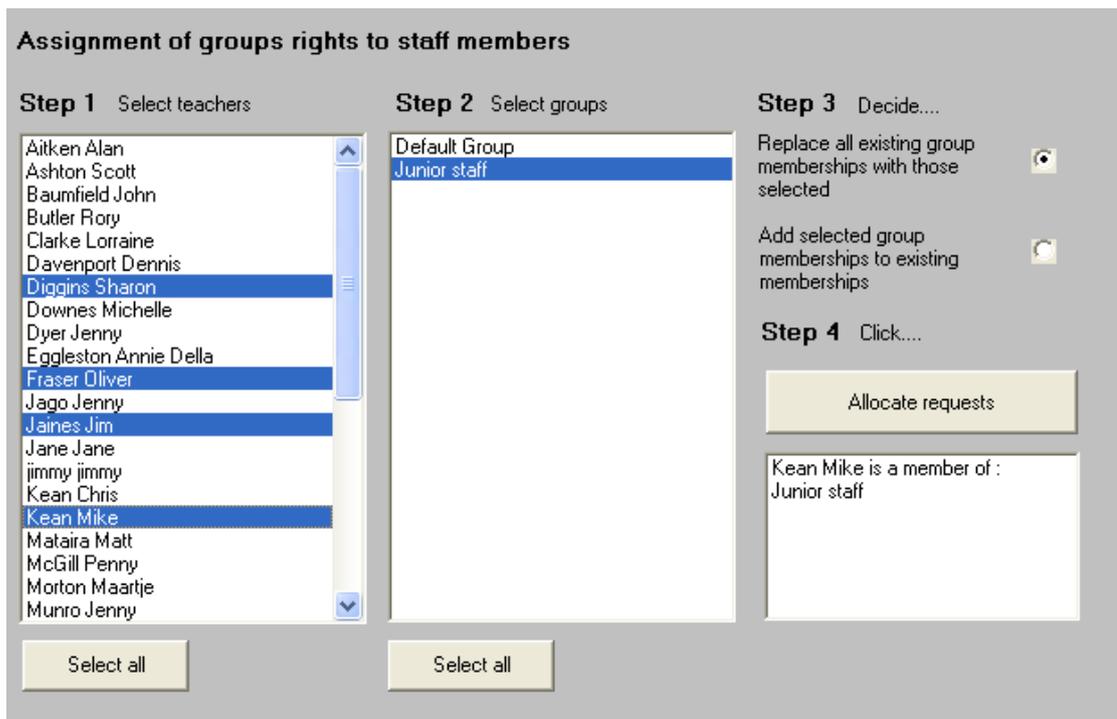
Figure 236: About to replace group memberships

The screen above shows that I am about to replace the group memberships for several teachers and, having clicked the 'Allocate requests' button in step four, the small list displays the number of dossiers for each teacher which have been updated to reflect the new memberships.

Figure 237: Some dossiers have been updated

18.3.2 Global attachment of comment banks
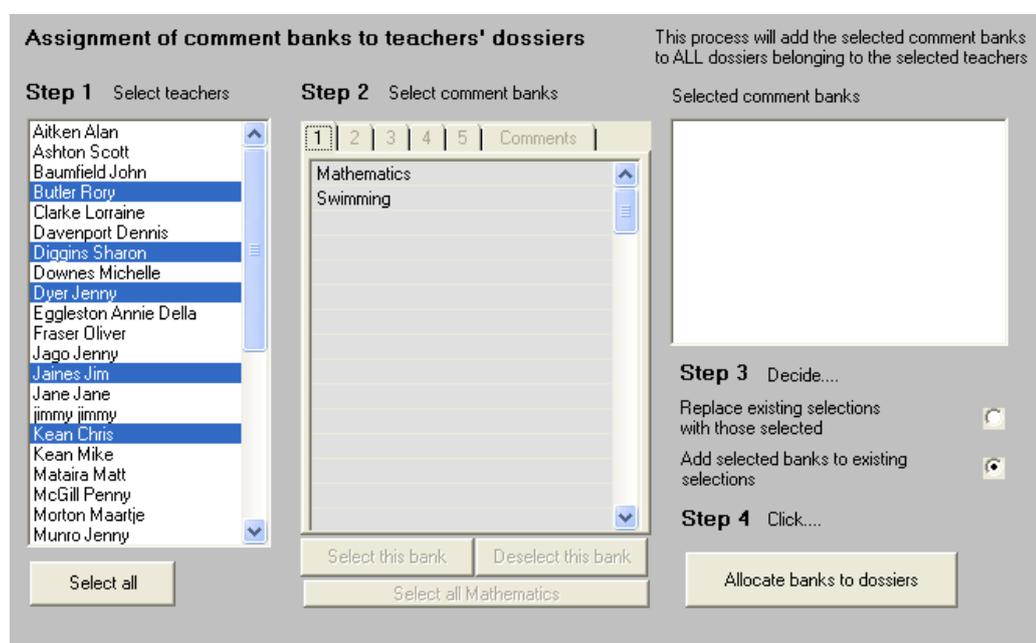
Figure 238: The global attachment of comment banks

In the illustration above, I've selected some teachers and am about to select comment banks, of which there are two. In the illustration below I've clicked on the Mathematics bank. If there had been several sub-categories then these would now be displayed, and I could select ALL mathematics banks by clicking on the large button at the bottom of the centre column.

However, as shown below, there are no sub-categories. Instead, the three maths comments which we designed earlier in this user guide are displayed. I can select this group by clicking on the button titled 'Select this bank' and, when I do so; the bank is added to the display of selected banks on the right hand side of the screen.

Next I have to decide (as I did with group memberships in the previous section) whether I wish to have my new selection replace their existing selections or simply add to them.

Once I've completed making my decisions I click 'Allocate banks to dossiers'.
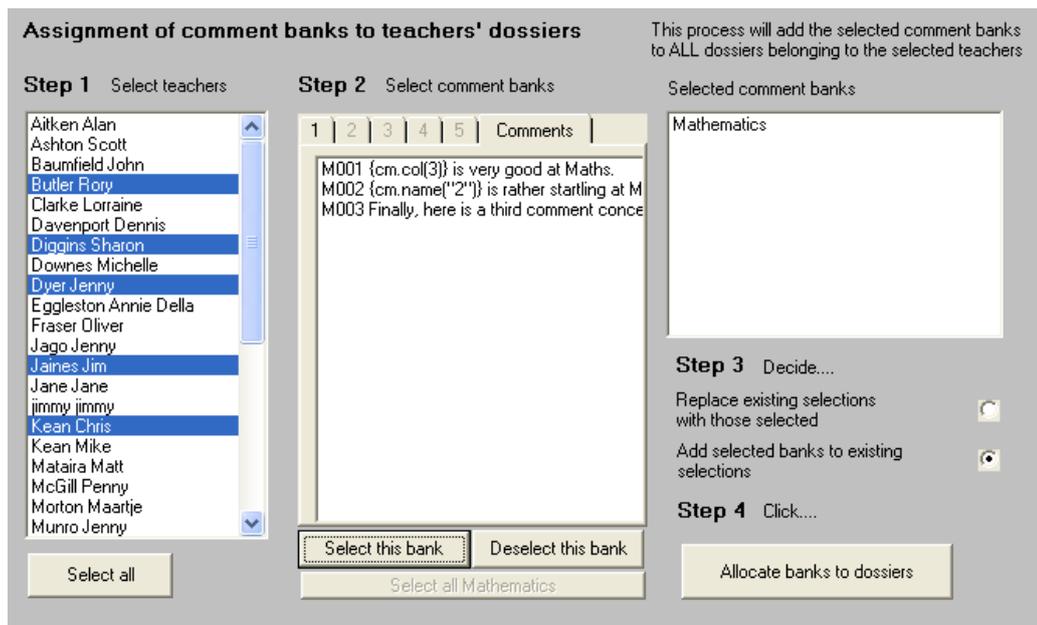
Figure 239: The selection of comment banks

18.3.3 The global deletion of dossiers

Click 'Globally Delete Dossiers'.

The main screen for this process is shown below.
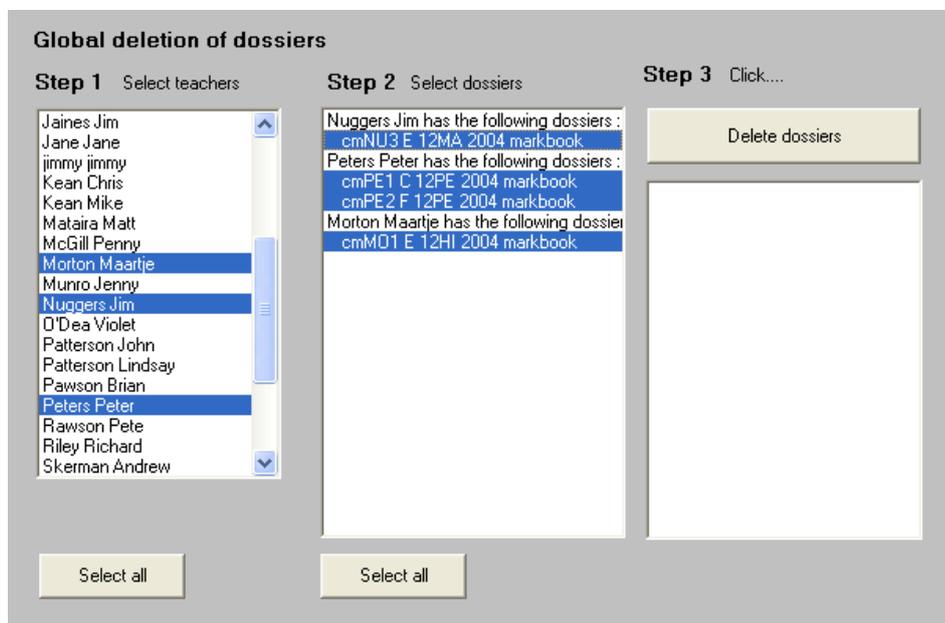
Figure 240: Global deletion of dossiers

As I select each teacher from the list on the left hand side their name and dossiers are displayed in the centre column. Once I've selected my teachers I then select the dossiers to be deleted from the centre column. Finally, when all is ready, I click the button labelled 'Delete dossiers' and the results are displayed in the right hand column, as illustrated below.
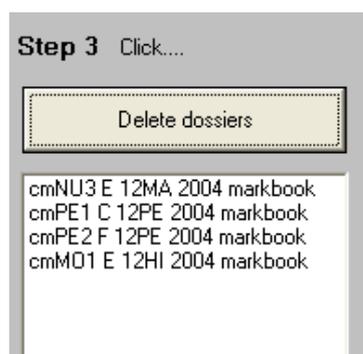
Figure 241: Dossiers that have been deleted

18.3.4 Global column/document connections

This final process has been added to allow the CMAdministrator to perform a couple of global processes to teachers' dossiers. These are:

The updating of column connections.

This is necessary because a teacher can (intentionally and with approval) change the columns displayed in a document (by altering its design). While this will automatically update any dossiers which include this document on the file server, it will not be able to do so if the change has been made on a remote machine. Consequently, this process allows you to quickly cross check the columns in a dossier, ensuring that any columns referred to in its documents are included in the column list for the dossier.

Alternatively, you can remove documents and graphs from dossiers. This is done when documents and/or graphs refer to a particular year and you are wanting to replace these with documents and/or graphs for a different year.

In either case, the screen shown below, enables you to do this.
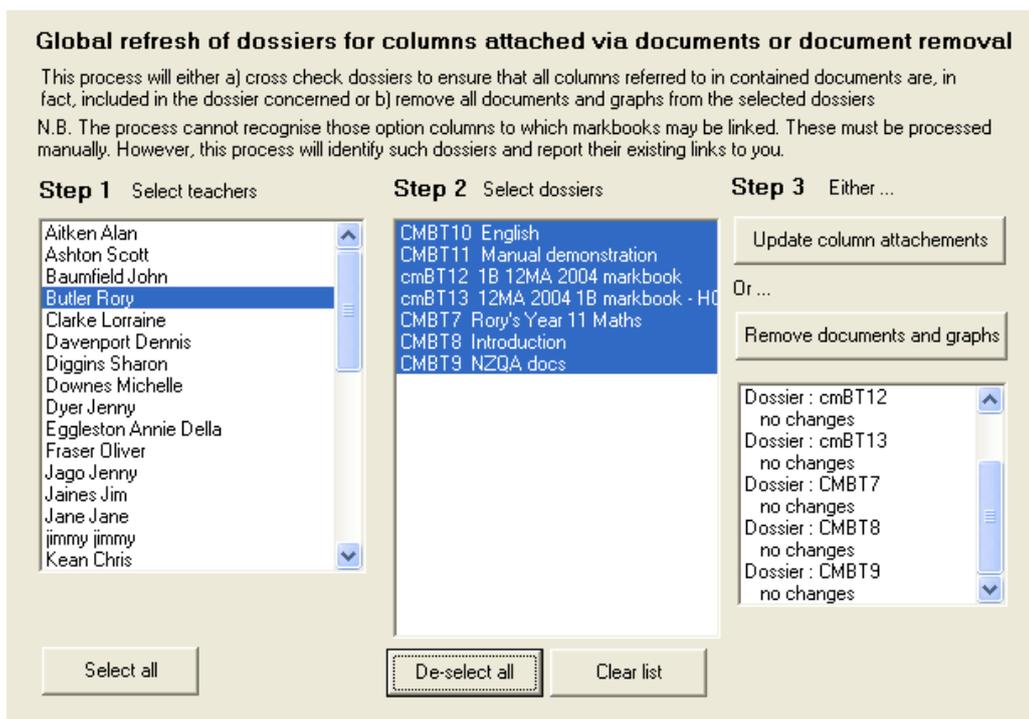
Figure 242: The refreshment of dossiers

Step 1: Select the teacher or teachers who own the dossiers in question.

Step 2: Select from their displayed dossiers those which you wish to process.

Step 3: Click on the relevant button at the top of the right hand column. The results of the process will be displayed, as shown above, at the bottom of the right hand column.

18.4 Global Photograph Connections

This button reveals three more:
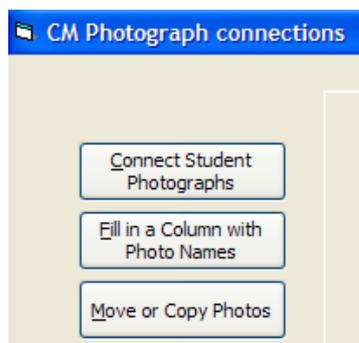
18.4.1 Connecting photos to students

Click 'Connect Student Photographs'. On each student's personal details screen in Student Manager and on any user-defined screen in CM where you wish to display a student's photograph the process of doing so can be a little tedious.

You have to first find the photograph in a subdirectory then size it and select a portion of it before saving the selected image under an automatically assigned name. eg. PC252900124.bmp where the number is the student's 'hidden' or identifying number within the database.

To simplify this process this utility has been developed to identify all of the photographs (which are assumed to have been already saved as the correct size) and match a particular photograph with the name of the student.

There are five steps to the process, the main screen of which is shown below.
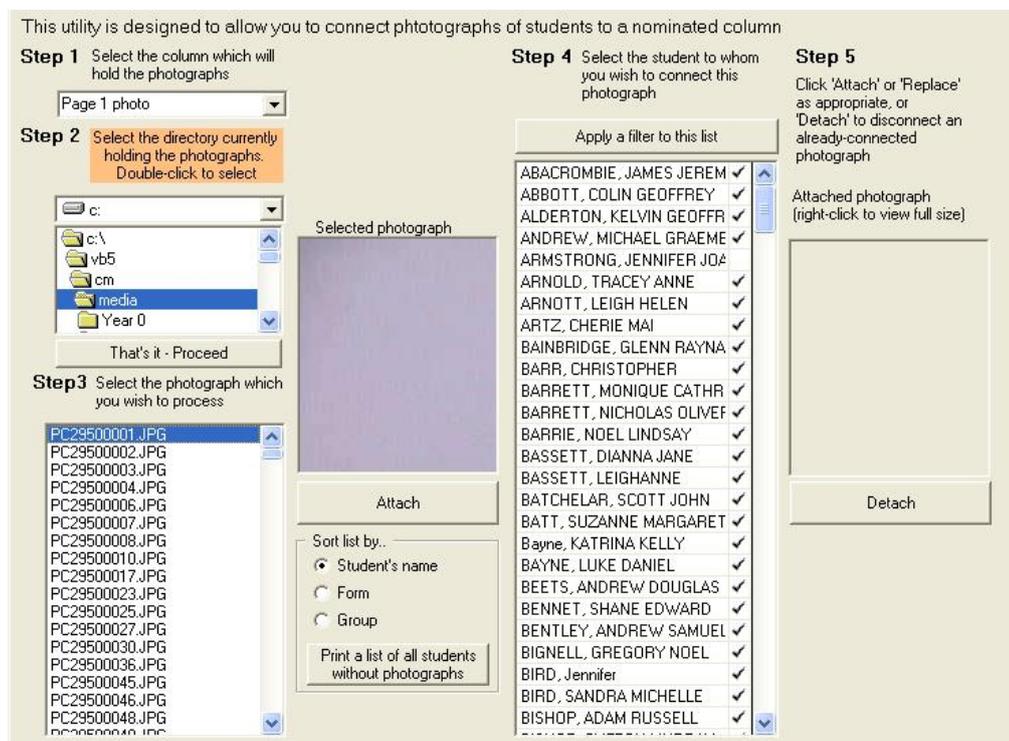
Figure 243: The attachment of photos to students

The first step is to identify the column where you wish to store the names of the photographs. (The names of the photographs are stored in an ordinary text column then, when they are required to be displayed in a photograph linked to that column, the computer seeks the image file of the stored name).
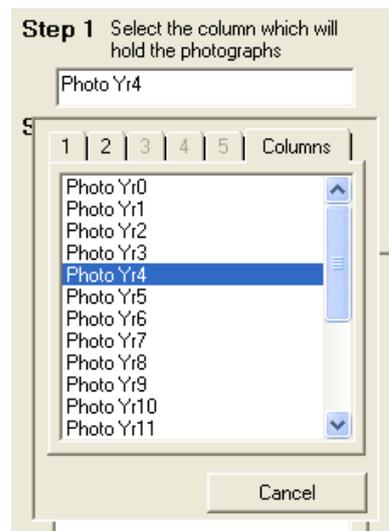
Figure 244: Selection of the photo column

In Student Manager each student has a column titled 'Page 1 photo' which is used to store the name of the photograph which is stored on their personal details page. Student Manager has a range of other columns categorised under 'Student data / Photographs', where a separate column is allocated for each of their years at school. This enables you to store a range of age-related photographs for each student and documents titled e.g. 'Photo Album Yr 0 to 6' are provided as part of the package.

Figure 245: Selection of the photo subdirectory

The current year's photographs are stored in the \cm\media subdirectory and, if you are connecting to their 'Page 1 photo' then this is the column you should point to in order to find the photographs.
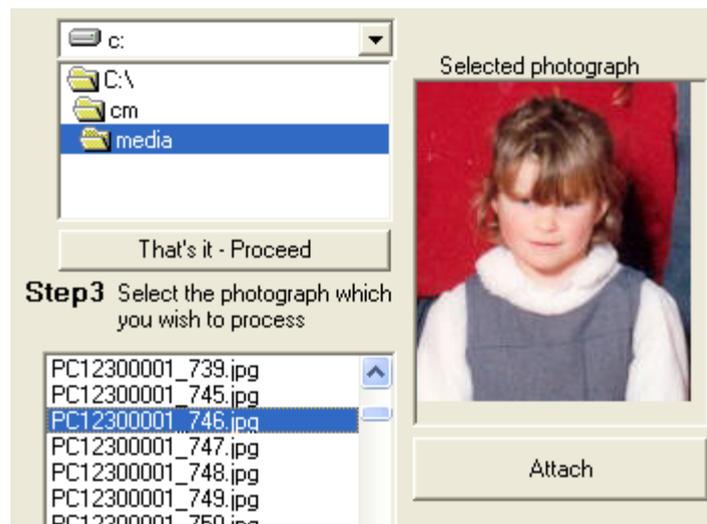
Figure 246: Selection of a photo

Once you have identified the directory, any image files in that directory will be listed. Click on a photograph name and its image will be displayed, as illustrated above.

Figure 247: Attachment of a photo to a student

The final step, also illustrated above, is to click on the name of the student of whom this is a photograph, then click on one of the two buttons shown. If you click on the left hand one, 'Attach' then the name of that photograph will be stored against that student and the result displayed on the right hand image.

If instead you have an image displayed on the right hand side already (if the selected student already has a photograph connected in this column then it will be displayed as soon as you click

on the name) then you can remove this connection by clicking on the right hand button: 'Detach'. The name of this photograph will be removed from the relevant column.

If you clicked on the left hand button to attach then the photo name will replace any photograph already attached to the selected student (and displayed on the right hand side).

You can also print a list of all students who do NOT have photographs attached in the selected column. This is done via the choices at the bottom of the screen. The relevant section of the screen is shown below.

Figure 248: Printing a list of students without photographs

Make your selection from the sorting options and click the button to generate the list.

18.4.2 Filling a column with photograph names

A number of New Zealand school photographers are aware of the requirements of Student Manager and supply the school with suitably sized image files of the school's students. These files are already named correctly – using each student's 'hidden' or identification number which the school has supplied to the photographer.

The school then needs to:
1   ensure that the photographs have been copied in to the \cm\media subdirectory.
2   fill the 'Page 1 photo' column with the names of the photo files stored in the media directory.

Click 'Fill in a Column with Photo Names from CM Photograph Connections.
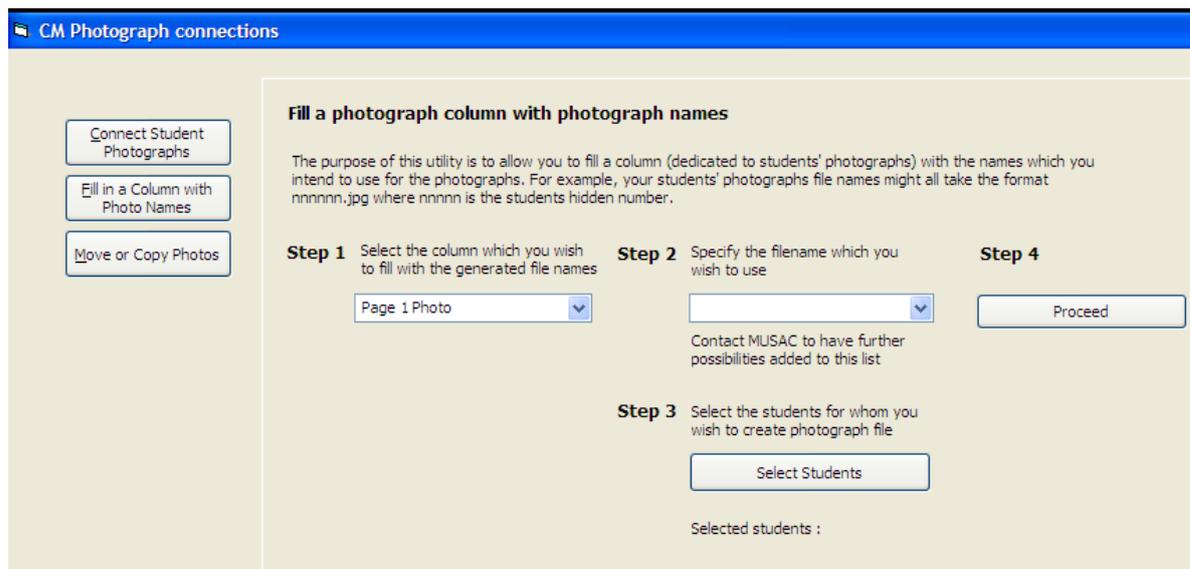
Figure 249: Filling a column with photo names

There are four steps shown above.

Select the column which you wish to fill with the names of the photograph files. In the example below I've selected 'Student details / Personal details / Page 1 photo'.
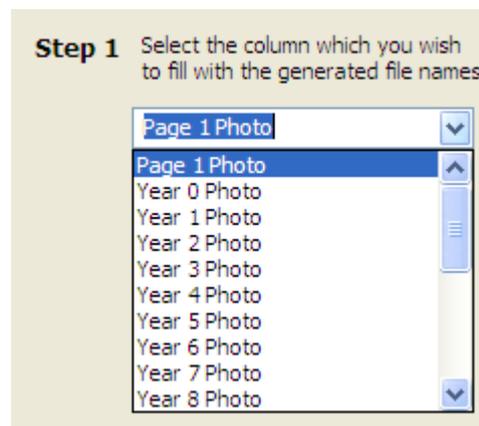
Figure 250: Selection of the photo column

Next you must specify the format of the file names which you have received from the photographer. All must begin with the students' numbers and may be of type .jpg, .bmp or .wmf.

Please note: We are unable to support .gif files as the corporation who are responsible for these asked us to charge each school approximately $700 for the right to do so and we graciously declined.
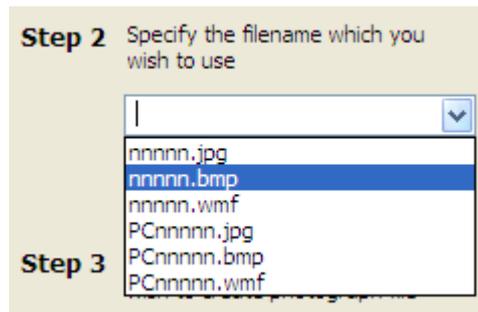
Figure 251: Selection of photo name format

Select the group of students for whom you wish to have file names recorded. In the example below I've selected the default filter – all full- and part-time students.
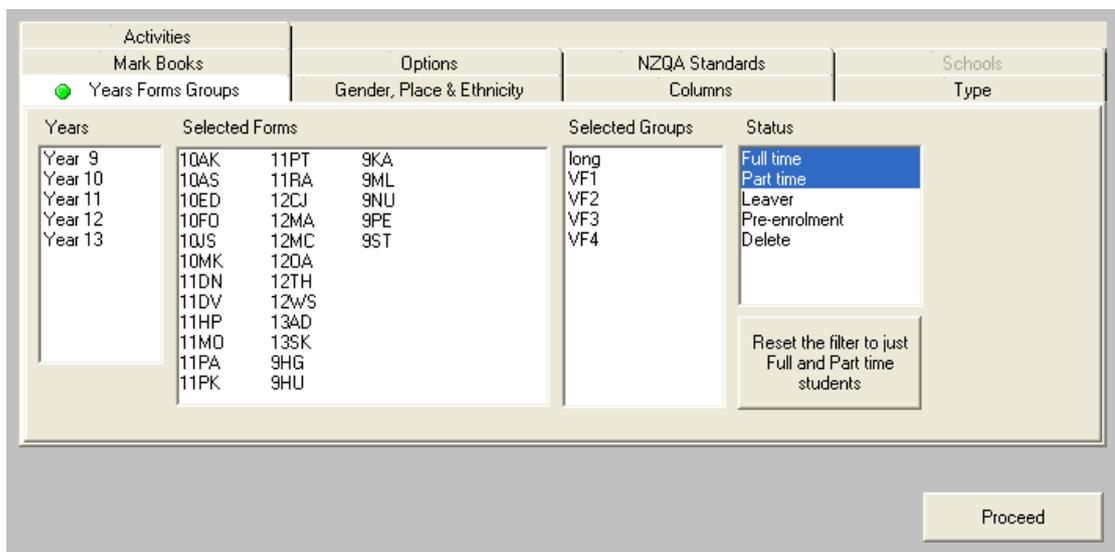
Figure 252: Selection of students

Finally, in step 4 you click the 'Proceed' button and the file names will be recorded in to the specified column.
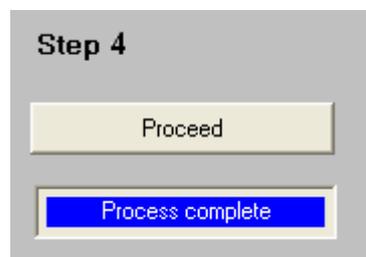
Figure 253: The final step

18.5 Moving and copying photographs

From CM Photograph connections click 'Move or Copy Photos'.

At the end of a year you might wish to move all of the students' photographs out of the 'Page 1 photo' column in to one of the year group columns. This is done via the steps on the screen below.
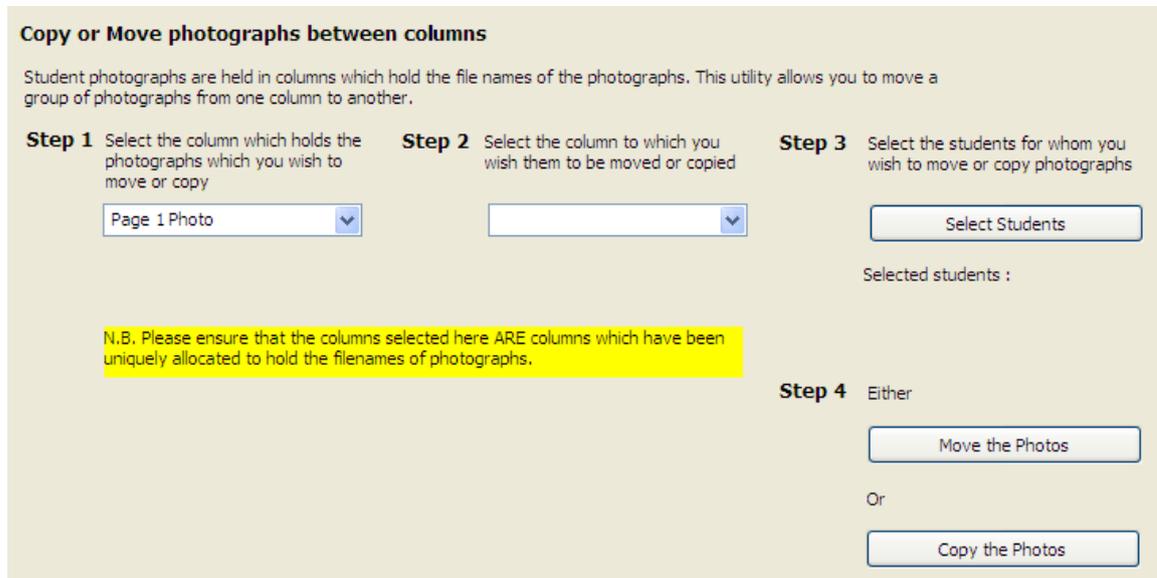
Figure 254: Copying or Moving photos

The first two steps are to select the 'From' and 'To' columns between which you wish to move or copy the photographs, as shown below.
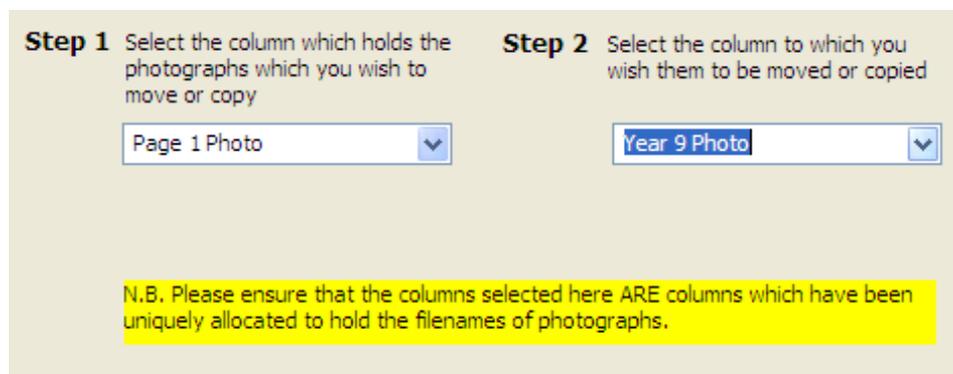
Figure 255: Step 1 and 2

Steps 3 and 4 are for selection of students whose photographs you wish to process (this is done using the student filter as in step three of the previous process); select students then click to Move, or Copy, for the process you wish to perform.

19 Tracking Students' Progress
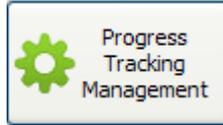
19.1 The Student Progress Tracking Process

Separately from the process which follows, there is also available from the MUSAC sidebar in OneScreen, an NCEA tab for secondary students providing a comprehensive overview of attainment towards NCEA.

Click 'Progress tracking management' and the main screen and steps involved for the process will be displayed.
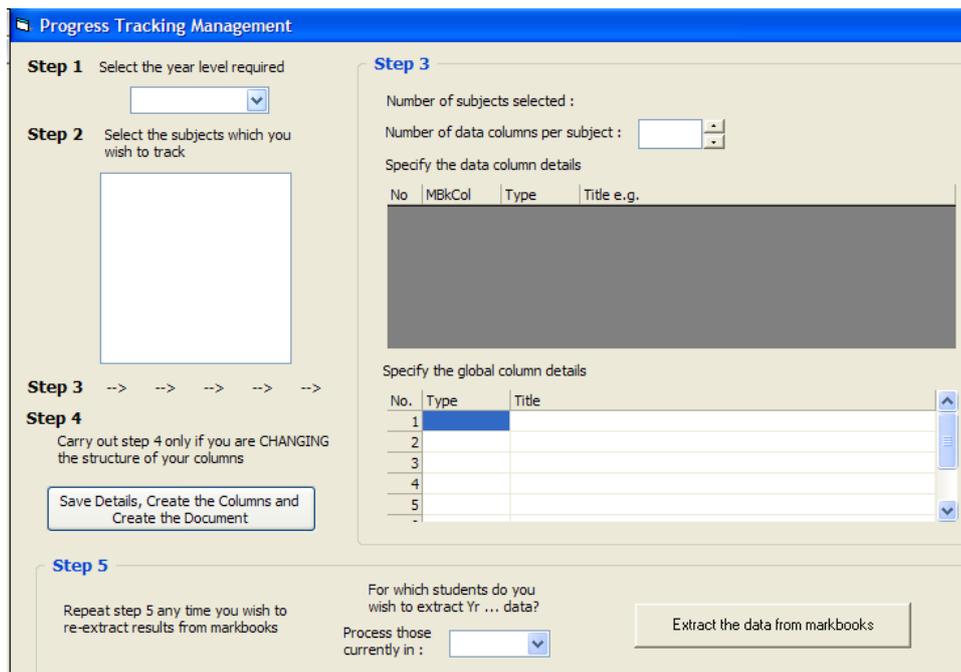
Figure 256: Progress tracking screen

Step 1 is to select the year for which you wish to design a tracking profile. This is done using the drop-down shown below. Selected is year 9.
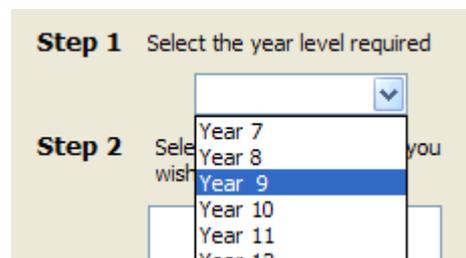
Figure 257: Selection of the year

In Step 2 select those subjects, both core and option' which you wish to include in the tracking process. In the example all core and several options are selected.
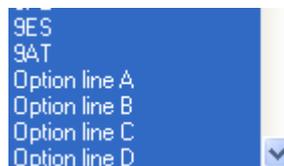
Figure 258: Selection of subjects

To reach step 3 follow the arrows to the right hand side of the screen where the large panel, shown below, allows you to detail the markbook components and global components which you wish to extract/create.
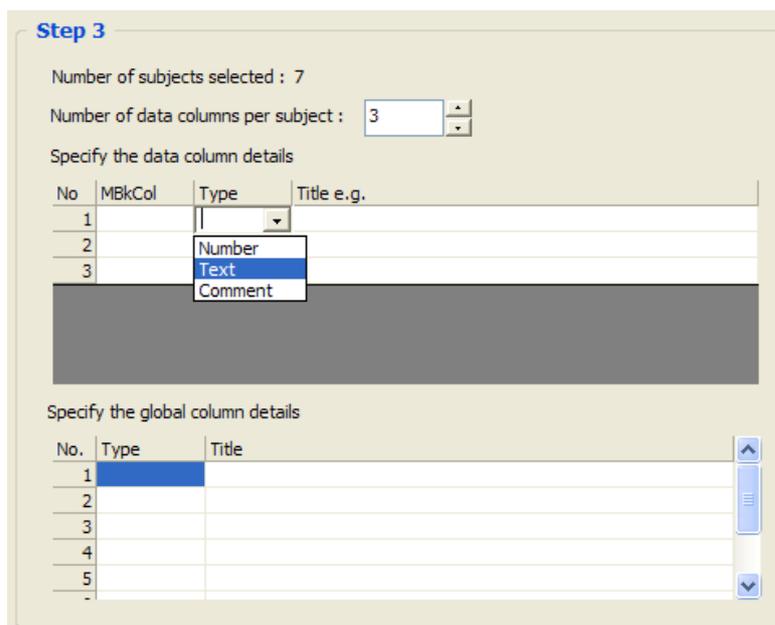
Figure 259: The extracted details

In the example above I have decoded to extract the contents of three columns (Numbers 10, 41 and 61) in to new columns under the heading of tracking. I've clicked on the small buttons at the top of step three to create the three entries on the grid, then I've begun filling in the details on the grid.

I've filled in the three column numbers and it is here, for example, that the need to use common columns across all spreadsheets, at least for data needing to be globally extracted, becomes evident. This enables powerful features in document design.

After I'd entered the title for the first column, 'Mid year mark', I received the following message and the text 'Yr9 subject' was inserted in front for me.
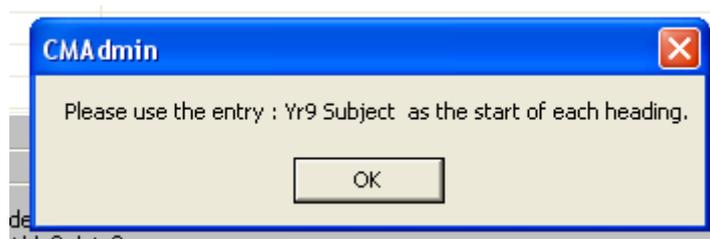
Figure 260: The title insertion message

Carrying on, I've completed the titles of the three markbook columns which I intend to have extracted for each of the core and option subjects.

Figure 261: The completed extract headings

Next I've decided that I wish to have two 'global' columns created, one to hold the dean's end of year comment and a similar one for the principal. These will NOT be per-subject but will be per-year.

The button in step 4 needs to be clicked only if the details in the previous three steps have been changed. It is this button, the clicking thereof, which causes the requested columns to be generated. At the same time a document is automatically prepared which displays the columns which form the profile designed above.

Figure 262: The button to create the columns and the document

Finally, in step 5, we select the year for which we wish to extract data...
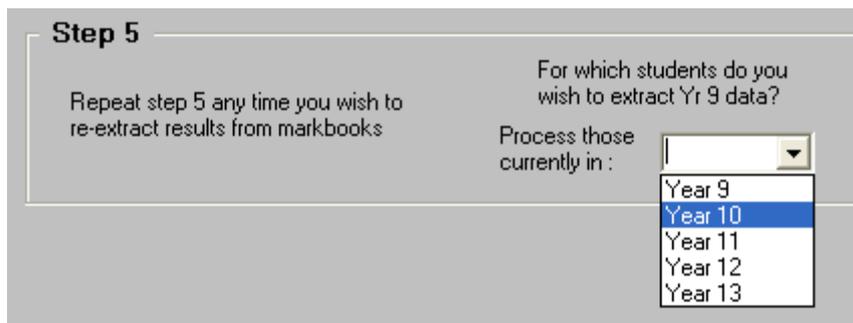
Figure 263: Selecting the year prior to data extraction

… and the final step is to click on the button to have the data extracted.
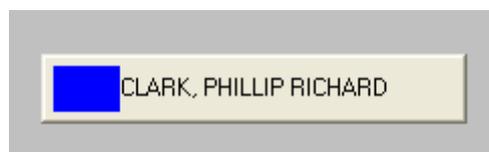
Figure 264: The data extraction button, part way through the extraction

Returning to the main CM screen you can click on 'Column Maintenance' to see the columns which have been created. They are categorised under 'Record of Achievement', 'Tracking', 'Tracking year 9' – as shown below.
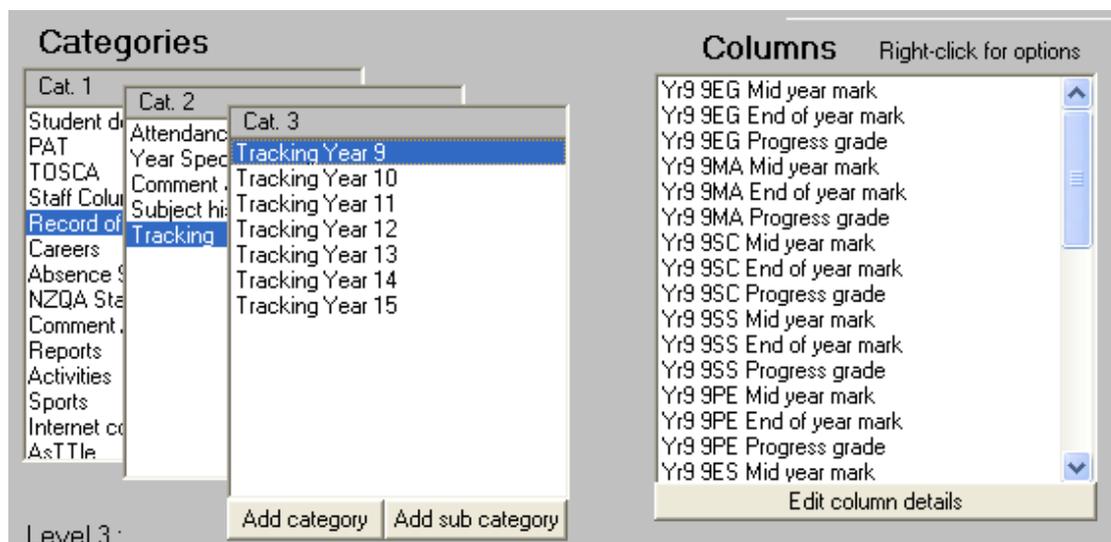
Figure 265: The tracking columns

You will notice in the illustration above that a set of three subject columns has been created for each of the core and option subjects.

20   Adapt Analysis

20.1 An Overview of Adapt Analysis

From the CM Administrator Utilities menu, Peter Tait's program, CMAdapt, which presents summary data is available within ClassRoom Manager. The purpose of the analysis is to extract the results held in a nominated column for those students matching a particular filter (eg. Maori Boys). These results are then displayed in a horizontal strip which is split into coloured bands according to their results and the design specified by the user. Several strips combine on the one page to generate a graphical picture for the selected column. Designs can be saved and reapplied at any time.

Secondary schools can use the analysis to display the results of Unit and Achievement standards.

20.2 Using The Adapt Program

Click 'Adapt Analysis' to display the main Adapt screen, shown below.
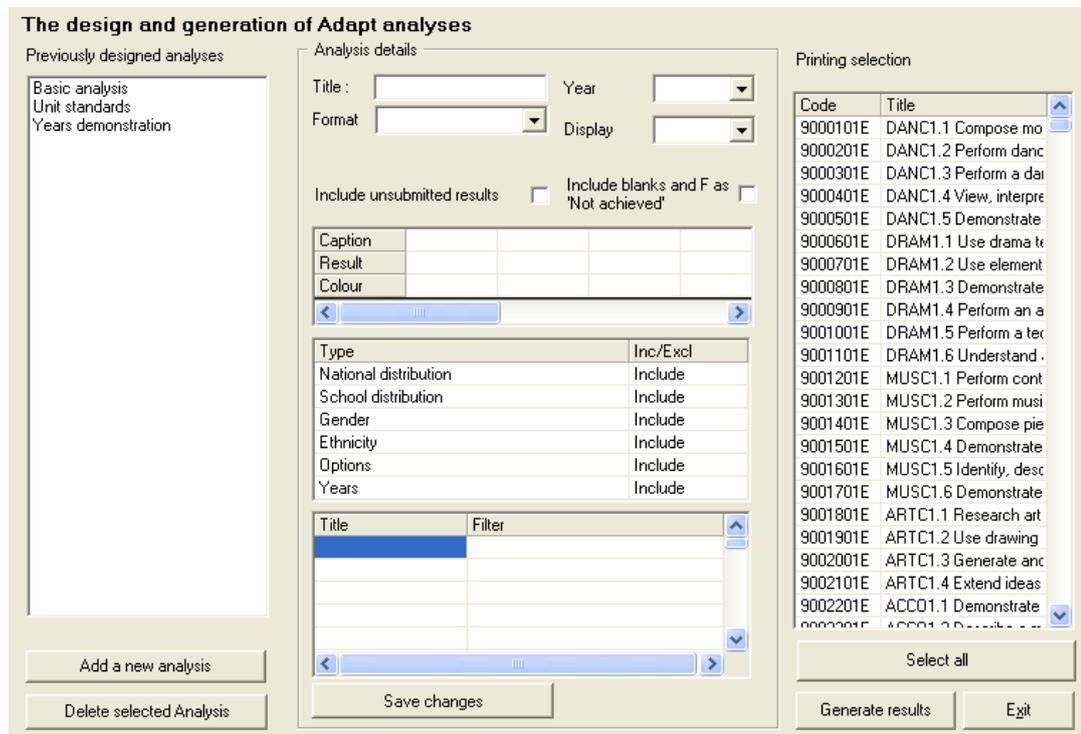
Figure 266: The Adapt design screen

As an example we will design an analysis of PAT Maths Year 9 Class Stanine – in two different presentations. The first will have a separate colour for each stanine and, for the second, we will split the nine possibilities into three steps.

On the left of the screen above is a list of existing designs. These include:

1   Basic analysis   Achievement standards (secondaries only)
2   Unit standards   Unit standards (secondaries only)
3   Years demonstration   Students' year (all schools)

The centre of the screen is devoted to the design process and the right hand side of the screen is where you make your selection of the column or the unit or achievement standards which you are wishing to analyse.

The first step to click 'Add a new analysis' at the bottom of the left column. This clears the various design areas ready for our new entries.

Begin the design by typing in the name: PAT Maths Class Percentile Year 9' into the title area. Select the format. There are four relating to achievement standards and four to unit standards. To analyse the contents of a column select the ninth entry 'Other columns' – as shown. This will also determine the appearance of the right side of the screen.
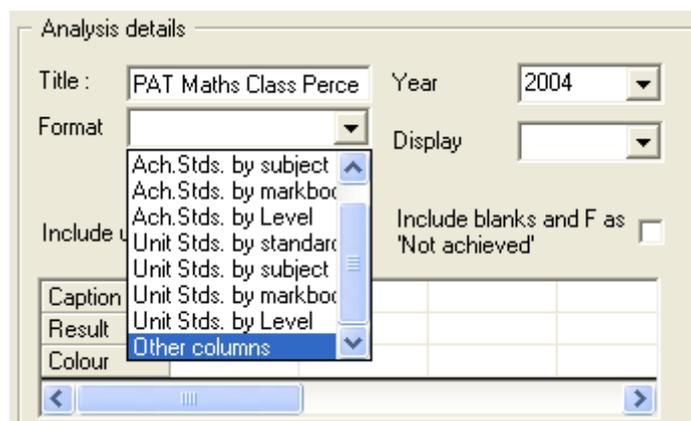
Figure 267: Selection of the format

Moving on we specify the year, 2004, and then select the way in which the result strips are presented. We have a choice of four:

Graphical - which displays just the coloured bands, where the width of each band is determined by the number of students whose results are included in each.

Table % - which gives all of the sections of the strip the same width with the percentage of students whose results are in each being reported in each.

Table Nos. – which is the same as the previous case except that instead of percentages the actual numbers of students in each result area are displayed.

Combined % - where the strip widths are proportional to the percentages, and the percentages themselves are also displayed.

In the example below the last option is being selected.
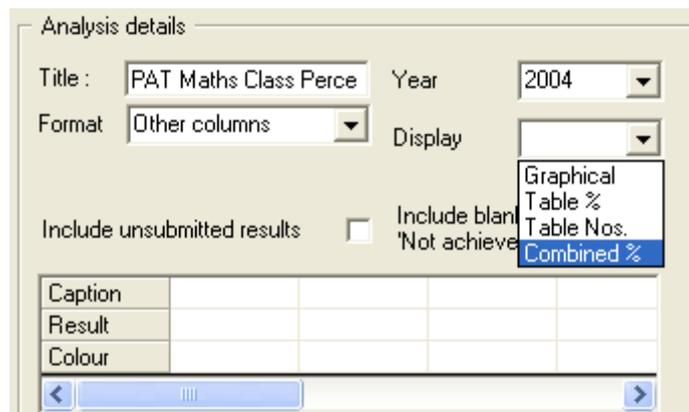
Figure 268: The year and the presentation method

The next step is to define the various possibilities which the students' result can occupy. We have to detail three properties for step possibility.

The first is the caption, as it will appear in the heading strip of the final chart.

The second is the result which the student actually has stored in the column. (In the case of our example these are the same as in the captions – but they will differ in our next example.) Finally we must specify the colour which is going to represent that caption/result on the strips of the chart. When you click in the colour cell the following colour selector will appear. Select the desired colour and click on the 'OK' button.
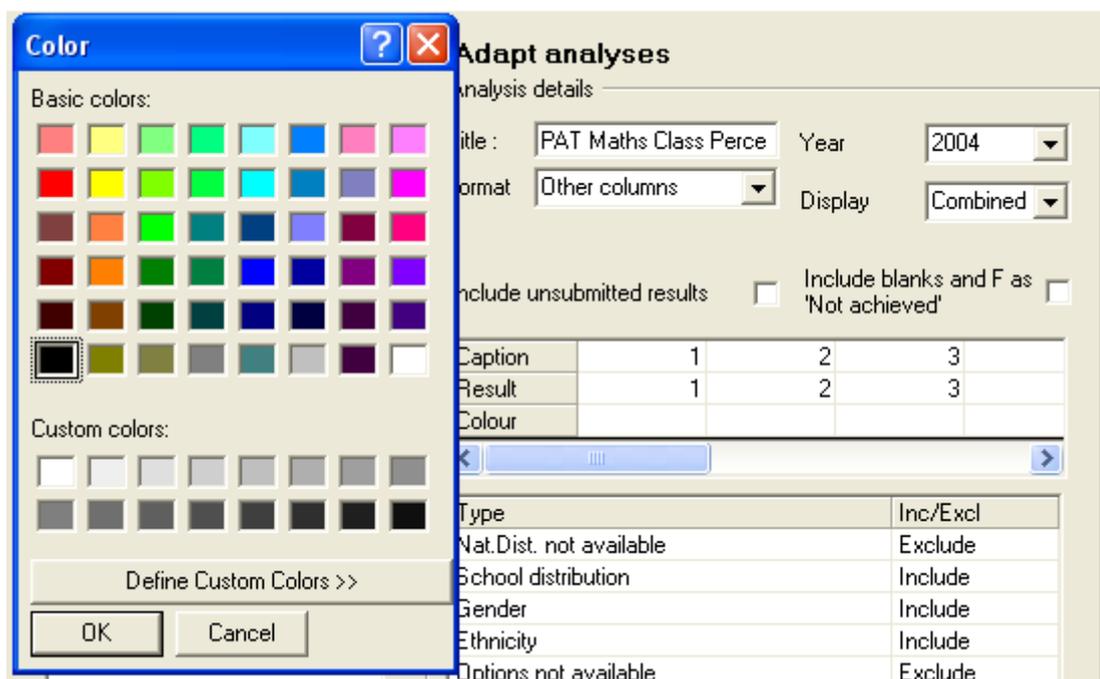
Figure 269: Selecting the colours

The completed specification might look like that shown below. Results can be entered as single values, as a range (e.g. 5-10 – extremes included), or as a list of possibilities (e.g. 1a, 1b, 2a, 2b, 2c)

Figure 270: The completed caption/result/colour specifications

Next we come to a range of possibilities some of which are not available for our particular demonstration. We do not have the national distribution of Class Percentiles (although we do know them as the PAT results are standardised). Similarly, the PAT results are not associated with options (markbooks) so this option is not available either.

Figure 271: The possible analysis options

We can, however, add our own filters. We shall add two - Maori Boys and Maori Girls. This is done via the small grid shown below.

Figure 272: Adding you own filters

Type in the name of the filter into the left hand column, then click in the 'Filter' column on the right hand side. The usual student filter tool will appear, as shown below.

For our example, click on the tab labelled 'Gender, Place and Ethnicity' then select 'Male' from the gender area and 'Maori' from the MOE Five group of ethnicities. Several years ago the Ministry of Education required that students ethnicities be returned as one of the five possibilities shown in the 'MOE five' list. Since then they have expanded their definitions to those on the right hand side of the tab, but schools frequently prefer to use the 'MOE five' when doing a high level analysis. For more detailed ethnic analysis you could use the right hand possibilities.
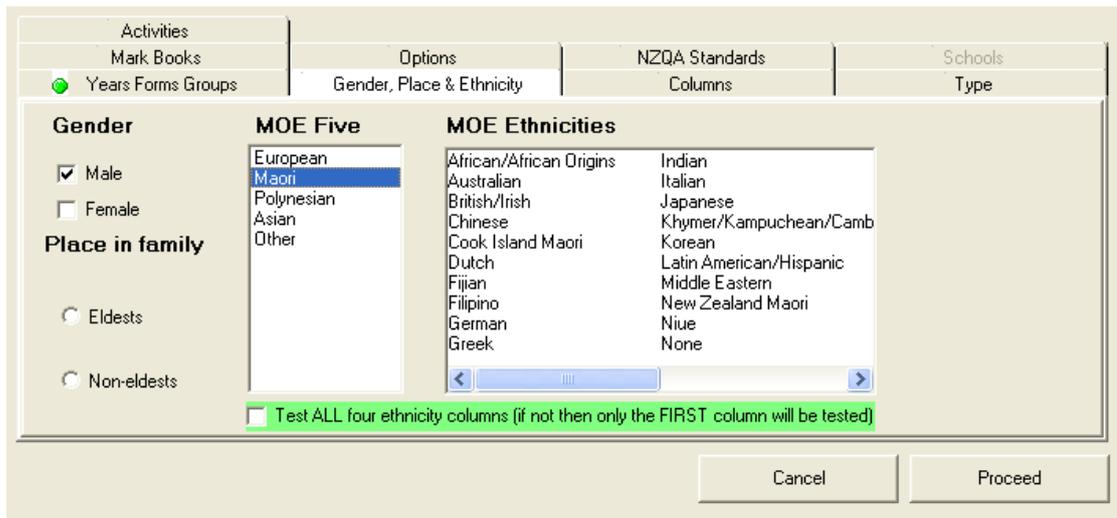
Figure 273: Selecting our 'Male Maori' students

Once you have done that, click on 'Proceed' and the filter column will display the results of your selection. Repeat the process for 'Maori Girls' and the table will appear as shown below.
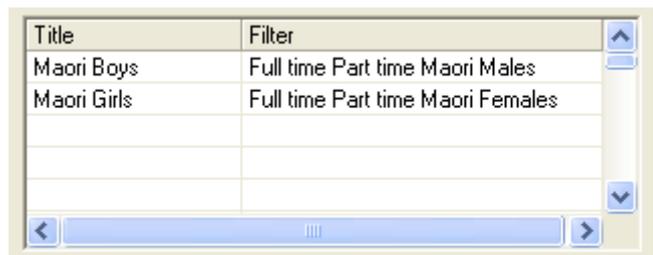
Figure 274: Our completed filters

The final step in the design process is to select the column from the column picker which will be visible on the right hand side of the screen.

The example below is a composite screen capture of the four stages of the selection of the required column. First, select 'PAT' and the various PAT tests are displayed. Then select 'Mathematics' and the various years are displayed. Select 'Year 9' and the columns are displayed. Finally, select Class Stanine Maths Yr9'.
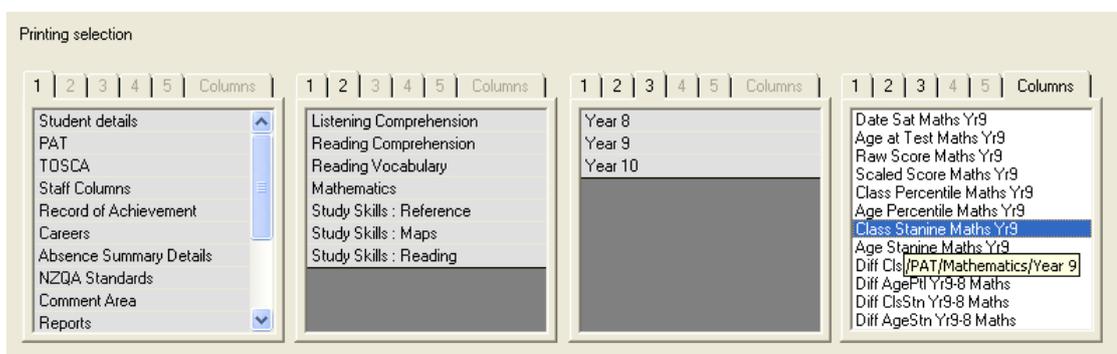
Figure 275: The steps to select the Class Stanine column

All is now complete so click on the 'Save' button at the bottom of the central design area. Having done that our new design will be included in the list of the available designs, as shown below.
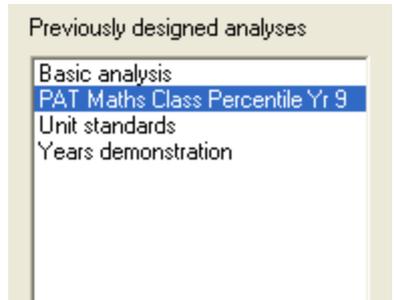
Figure 276: The new list of designs

Now we are ready to click on the 'Generate results' button at the bottom right hand side of the screen.

A progress message tells you which filter is being extracted as each is processed and, when all is done, the screen will be replaced by the chart itself, as shown below.

The second example was obtained by returning to the design and changing the display to the third option 'Table Nos'.
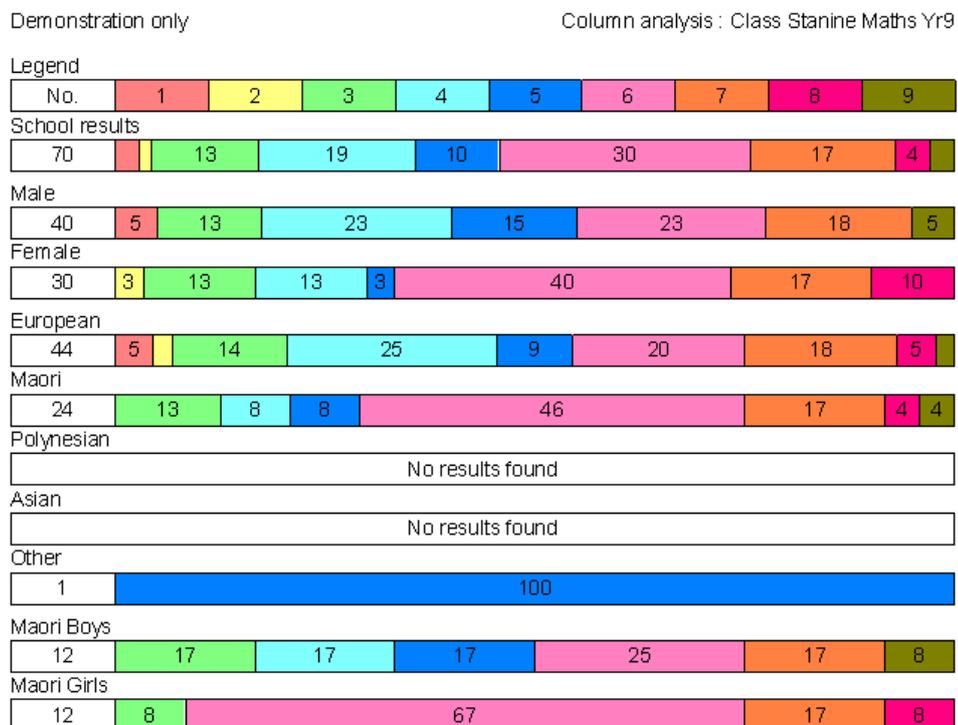
Figure 277: The nine-step 'Combined' chart

Demonstration only   Column analysis : Class Stanine Maths Yr9

Legend

No.	1	2	3	4	5	6	7	8	9

School results

70	2	1	9	13	7	21	12	3	2

Male

40	2		5	9	6	9	7		2

Female

30		1	4	4	1	12	5	3	

European

44	2	1	6	11	4	9	8	2	1

Maori

24			3	2	2	11	4	1	1

Polynesian

No results found

Asian

No results found

Other

1					1				

Maori Boys

12			2	2	2	3	2		1

Maori Girls

12			1			8	2	1	

Figure 278: The nine-step 'Table Nos' chart

For our second demonstration we click on the 'Return' button at the left hand bottom of the chart display and change the details to appear as shown below.

Caption	1 to 3	4 to 6	5 to 9	
Result	1-3	4-6	5-9	
Colour				

Figure 279: The nine-step 'Table Nos' chart

The nine steps have been reduced to three and the caption entries now differ from the result entries. The results of this are shown below.

Demonstration only | Column analysis : Class Stanine Maths Yr9

Legend			
No.	1 to 3	4 to 6	5 to 9

School results			
70	17	59	24

Male			
40	18	60	23

Female			
30	17	57	27

European			
44	20	55	25

Maori			
24	13	63	25

Polynesian	
	No results found

Asian	
	No results found

Other	
1	100

Maori Boys			
12	17	58	25

Maori Girls			
12	8	67	25

Figure 280: The three-step 'Combined' chart

As a final example we will look at an analysis of an achievement standard.

Returning to the main screen, click on the previously designed 'Basic Analysis'. The screen will appear as shown below.
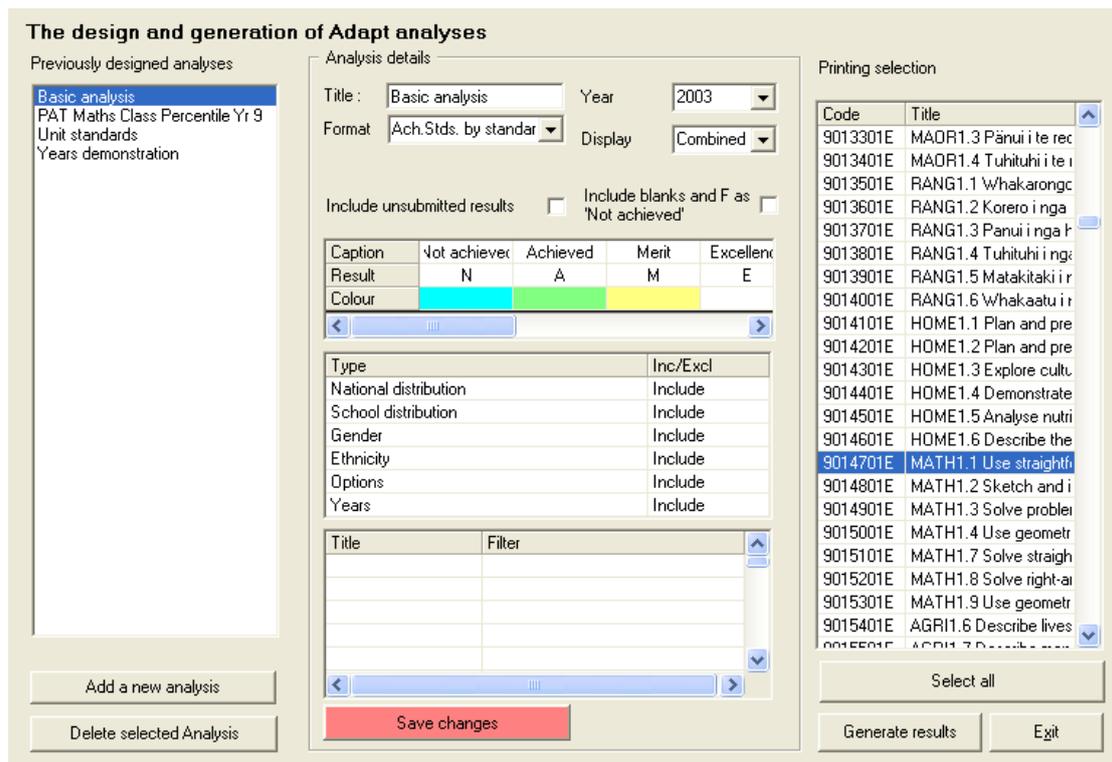
Figure 281: The 'Basic Analysis' design

This displays the analysis designed for achievement standards, which are, as a result, displayed on the right hand side of the screen. It is possible to multi-select these in order to generate several analyses at the same time.

For this demonstration select just Maths 1.1 – standard 90147 – and click on the 'Generate results' button.

The chart appears as displayed below. To reduce its size for this user guide I have removed some of the rows (via the screen capture process).

The chart appears in the standard printer object and the usual properties apply. You can resize, drag and print the chart from this screen.

9014701E

9014701E : MATH 1.1 Use straightforward algebraic methods and solve equations

Legend				
No.	Not achieved	Achieved	Merit	Excellence

National results

38178	36	30	29	5

School results

78	26	36	18	21

Male

51	31	25	22	22

Female

27	15	56	11	19

European

52	23	37	21	19

Maori

23	35	30	13	22

Option A : 11MABT

10	20	30	20	30

Option A : 11MAHP

8	13	38	38	13

Option A : 11MARA

10	30	30	20	20

Option C : 11MANU

11	18	64	9	9

Option E : 11MASM

11	45	27	18	9

Option F : 11MARA

11	36	27	18	18

Figure 282: An example of the analysis of an achievement standard

CM Teacher

21 CM Teacher: The Teacher's View

21.1 Overview

We will look at two dossiers, one containing a document and a graph and another containing an electronic markbook and a document.

The processes generally apply equally to primary, intermediate and secondary teachers, with the exception of some uses of the electronic markbook.

The examples in this document are based on a fictitious secondary school, full of fictitious students. Any resemblance to living students is accidental and no real results are presented anywhere in this document.

Figure 283: The primary school screen

Figure 284: The secondary school screen

21.2 Selecting a dossier

The illustration below displays the top left hand corner of the main screen. The second dossier (titled 'Manual demonstration' – this dossier was prepared during the writing of the CMAdministrator text above) has been selected and its contents displayed in the second panel.
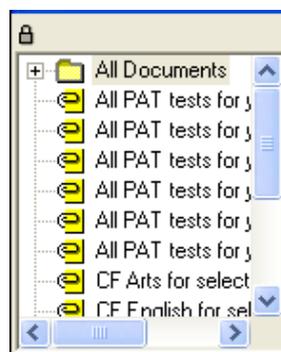
Figure 285: Selecting a dossier

Click on the second entry. This is a document (as can be seen from the small icon to the left of the name) titles 'PAT Maths Year 9.dmt' and it will be displayed in the main body of the screen. Ignoring the first entry (-> Dossier grid) refer later in this document.

Figure 286: The first document displayed – in 'Document mode'

21.3 Pre-Selection of dossiers, Documents and MUSAC Assessments and Profiles

National Standards and Aggregated reporting are available from the Documents selection. If the MUSAC Assessments and Profiles are installed and made available by the MUSAC Administrator in your school, these can be selected and used for entry and analysis. Where there are two versions available for data entry, they will both be listed if the columns have been correctly configured, eg. GloSS and GloSS 2nd Edition.

Teachers can pre-select their 'favourite' dossier – so that it loads automatically each time entering CMTeacher. In addition, for each of their dossiers, including their 'favourite' one, they can now select their 'favourite' document, so that it will load automatically each time the dossier in question is selected.

To do this click 'Options' at the top of the main screen.
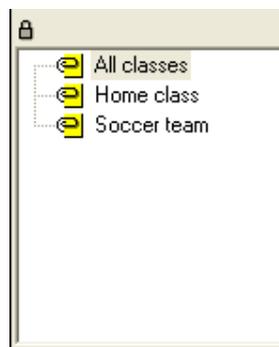
Figure 287: Dossier selection

The illustration above indicates that this teacher has three dossiers. Click 'Options', followed by 'Various options'. The resulting screen, a corner of which is shown below, takes you to the area where you can 'View/edit auto-open choices'.
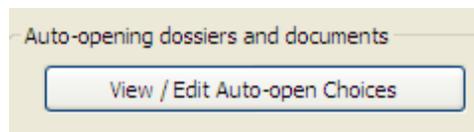
Figure 288: Auto opening selector

Clicking this button will cause the following screen to be displayed.
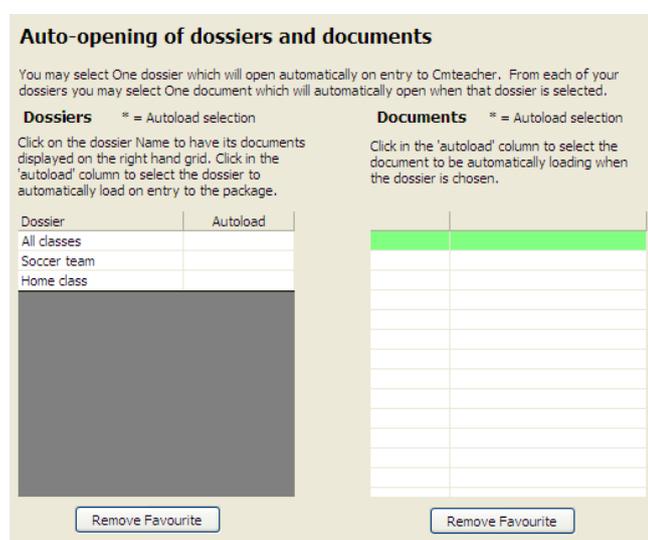
Figure 289: Auto-opening picker

Your three dossiers are displayed. The third, 'All students', may be their 'favourite' one to auto-open each time on entering CMTeacher. To indicate this, click in the Autoload column alongside the name of the dossier.
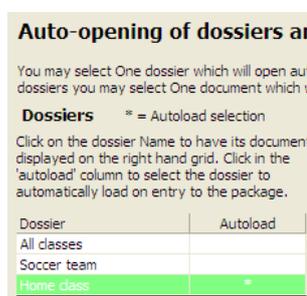
Figure 290: Auto dossier selector

An asterisk will appear alongside the selected dossier.

To select a document from this, on any of their dossiers, click on the dossier name itself, and its documents will be displayed on the right had list. Now select the 'favourite' document for this

dossier – the one which you wish to auto-open each time the dossier is selected. In the illustration below our new buttons document has been selected.
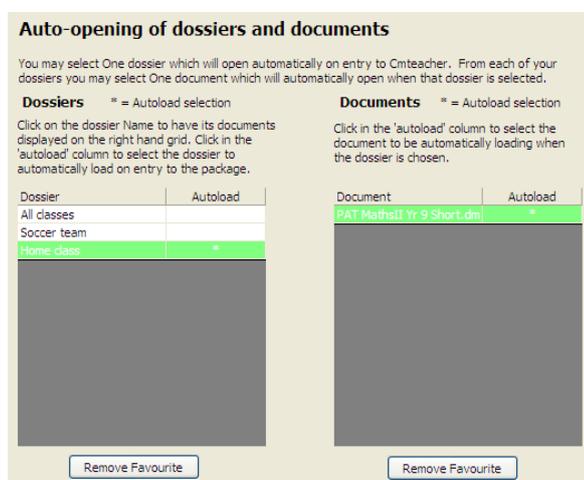
Figure 291: Auto dossier/document selector

You can use the buttons below each list to remove the 'auto-load' selection, should you so wish. Changes are saved automatically. The next time this teacher enters CMTeacher, their selected dossier and its selected document will auto-load, as shown.

21.4 Document mode

This is not a particularly gloriously designed document but it does serve to illustrate the processes we wish to cover. This document displays the results (previously entered) for Leigh Brown's PAT Maths at Year 9.

In the bottom left of the main screen, shown below, are :
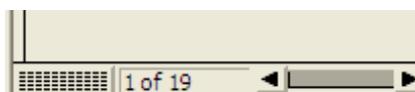
Figure 292: The movement buttons

- dotted rectangle - which leads to grid mode (see below)
- the number of the student displayed – out of - the number of students in the current filter. (refer filters later).
- 'Next' and 'Back' button – which moves you to the previous or next student respectively. You can also move to another student by pressing Alt-S – ie. hold down the 'Alt' key and press the 'S' key. This will cause the following window to appear.
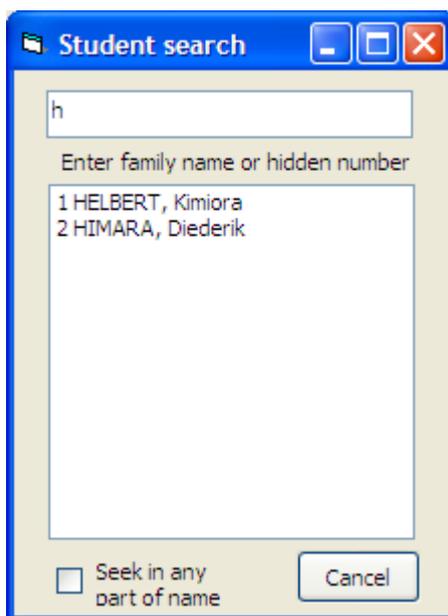
Figure 293: The student search.

Once this window is visible, begin typing the family name of the student whom you wish to view next. In the example the letter (h) has been entered and all of the students whose family name matches the letters typed will be displayed. The first nine matches will be numbered from 1 to 9 and you can jump to the selected student by typing the number required. Alternatively you can click on the name of the student you wish to view. In either case, the selected student's document will be displayed. In the example below the number '1' has been pressed and Kimiora Helbert's document is displayed.

Figure 294: Moving to a selected student

21.5 Grid mode

Return to the bottom on the displayed document and click on the dotted rectangle, the display changes to 'Grid mode' (as opposed to 'Document mode' which we have been in).

Grid mode, shown below, allows you to see all of the students in your filter and all of the columns referred to in the selected document. The students' names are down the left side of the screen and the columns connected to the document are displayed across the top. Students' data held in these columns is displayed in the cells of the grid.

Figure 295: Grid mode

Initially, all of the cells are blank as no data has yet been entered. (Yes, the examples of documents displayed above were captured AFTER the entry of data).

In the case of PAT entries (and a number of others (PRETOS, STAR etc), as you type in the first entry in the 'Raw score' column, the message window below appears.
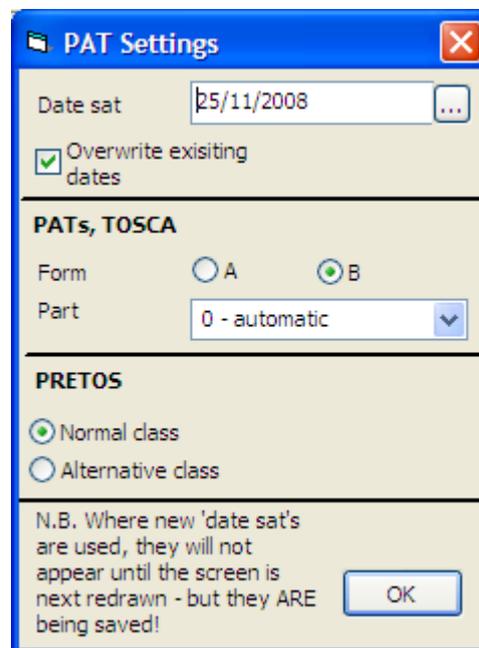
Figure 296: The details of PAT data entry

The program recognises that you are entering raw scores for a PAT result and the window asks you to provide the various details. In general only the date is required as the others are usually correct. Once you have entered the date and clicked 'OK' all of the entries in the other columns are automatically completed for you. Enter a raw score, press the down arrow, enter the next

raw score … and so on until you have completed the last student. Now your grid will appear like the illustration below.

	Raw Score Maths Yr9	Date Sat Maths Yr9	Age at Test Maths Yr9	Scaled Score Maths Yr9	Class Percentile Maths Yr9	Age Percentile Maths Yr9	Class Stanine Maths Yr9	Age Stanine Maths Yr9
Configure Filter								
ADWARDS, Shaunee	14	25/11/2008	15.04	14	19		3	
BILLOCK, Tyrone	13		15.04	13	15		3	
CORNOR, Regan	16		15.01	16	27		4	
DIDIU, Mitchell	8		15.02	8	3		1	
DILI, Zane	10		15.01	10	7		2	
ELLEN, Ryan	12		15.06	12	12		3	
ESHWORTH, Danyon	13		15.05	13	15		3	
FORWARD, Timothy	14		15.02	14	19		3	
FURSMAN-AKI, Kereru	12		15.00	12	12		3	
HAMARA, Tyrone	11		14.08	11	9	11	2	3
HISIDA, Taylor	11		14.11	11	9	11	2	3
HUNARU, Alisha	9		14.05	9	5	8	2	2
HUVIND, Jess	13		15.05	13	15		3	
JERDAN, Richard	17		15.03	17	31		4	
KATU, Kataraina	12		15.03	12	12		3	
KITONIVERE, Tehuinga	12		15.04	12	12		3	
KUURI-PUTON, Nathan	9		14.08	9	5	6	2	2
LOI, Samantha	18		14.06	18	35	39	4	4
MAREIKURA, Shauni-Lee	17		15.01	17	31		4	
MELINEUX, Kendrex	12		14.09	12	12	14	3	3
MOANA, Jordan	12		14.11	12	12	14	3	3
MUKE, Danielle	13		15.04	13	15		3	
PORCIVAL, Israel	14		15.04	14	19		3	
ROUNDS, Zane	15		15.06	15	23		4	
SEYRING, Dallas	10		15.07	10	7		2	
SHOW-PIDWELL, Shilisa	14		14.10	14	19	21	3	3
SMATH, Beamish	18		15.05	18	35		4	
TIPINE, Jesse	17		15.04	17	31		4	
VUKURUIVULU, Michael	16		14.07	16	27	30	4	4
WELKER, Tori-Shae	16		15.02	16	27		4	
YETES, Jacob								

Figure 297: The completed entry of PAT data

To return to document mode you can either click on the small 'single student' button in the bottom left of the screen (where the 'grid mode' button used to be) or you can double-click on the name of a student. Either will return you to 'Document mode'.

21.6 CM graphs

Let's now turn our attention to the other listing in this dossier. This is a graph which presents the results of the students in their Year 9 PAT Maths Class Percentiles. In the list it has a small green graph as an icon. This graph lists the students' names against their results which have been grouped for the display.

This is only one of a large range of graphs which you can design and use to present data in ClassRoom Manager. Now click on 'Exit' in the bottom right hand corner of the screen and you will be returned to 'Document mode'.
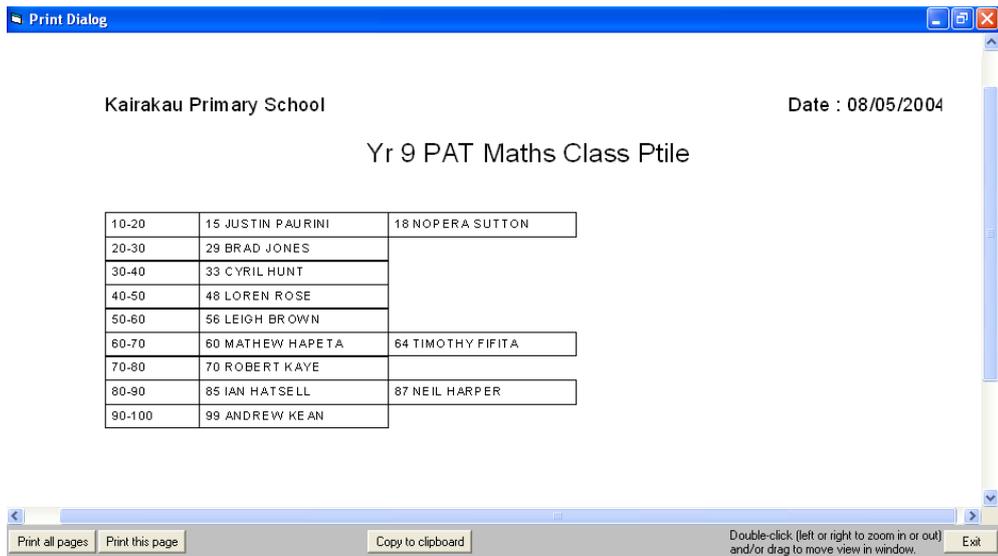
Figure 298: The Class Percentiles 'Names' graph

Moving to the second dossier which is listed in the top left hand corner panel as shown below.

Figure 299: Selection of the second dossier

In the illustration above it can be seen that the dossier includes a markbook (which has a red and blue icon) and a document. Select the document and it will be displayed as expected as shown below.
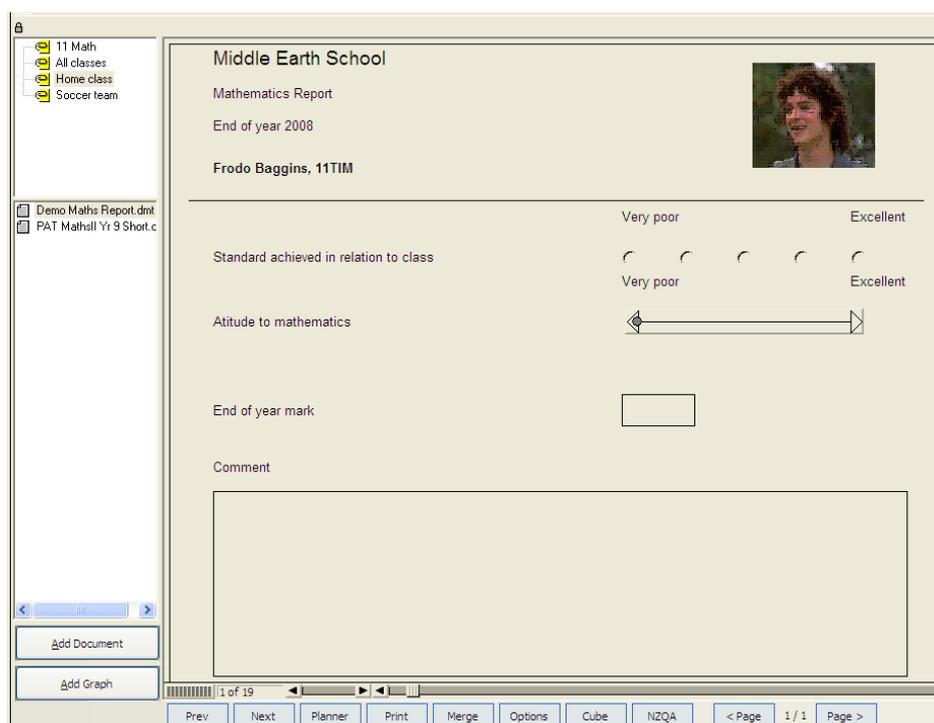
Figure 300: The 'Demo Maths Report' document

As with the earlier document, this document is not exactly a state of the art example of a Mathematics report. (There are some elegant examples in the relevant appendix)

This document does however display four methods of data entry:

1   Option buttons
2   Number line
3   Text entry
4   Comment entry

Initially Frodo's report has no information relating to him. Let's give him some results. The first three of these are shown below.

For the first, he's one step above 'Very poor' in his 'Standard achieved in relation to class', and this result was entered by clicking in the second option dot.

Next, he's a little above average in his 'Attitude to Maths' and this was entered by clicking on the number line at the point where he fits. It is not necessary to click on one of the marks – any intermediate position will do – and this will be stored to four decimal places in his data.

Finally, he has a mark of '65' for his 'Mid year exam'. This was done by typing in the '65' into the space provided.
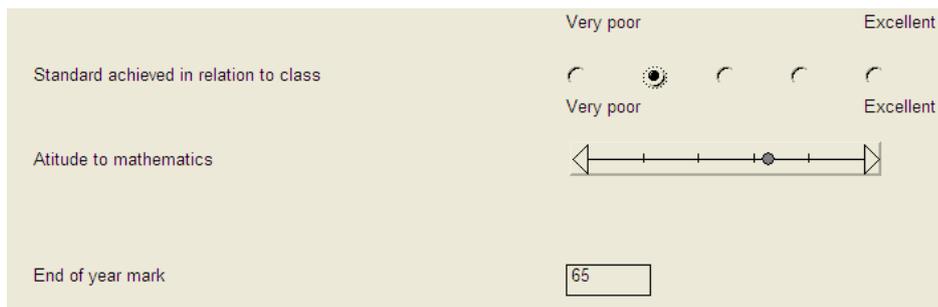
Figure 301: Frodo's first three results

21.7 The word processor

The last piece of information to be entered is a report comment. To do this, click in the open area where the comment is to appear. The first time you do this the following question will be asked.
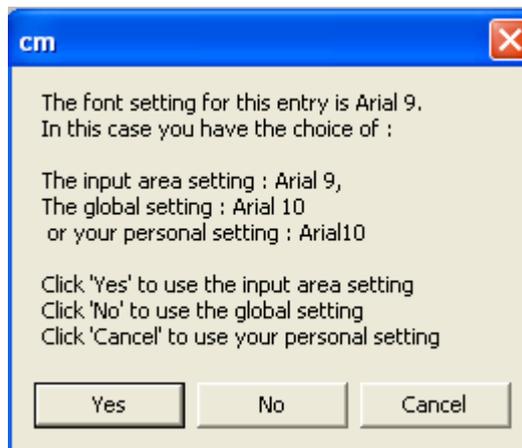
Figure 302: Selection of font

In using the word processor you can select from three settings :
1   The basic setting for the word processor
2   The global setting for the word processor – set up by your administrator
3   Your personal setting – set up within the word processor by you – at a previous time.

Click 'Yes' to use the basic setting of the word processor. Once you have done this the word processor itself will appear, as shown below.
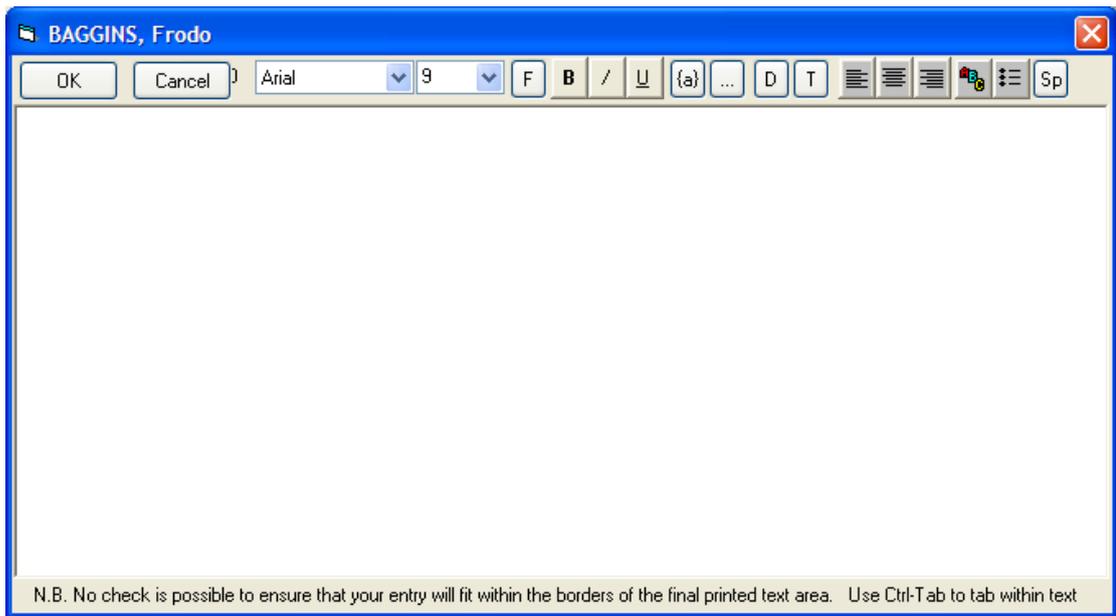
Figure 303: The word processor

In this case type in a comment, shown below.
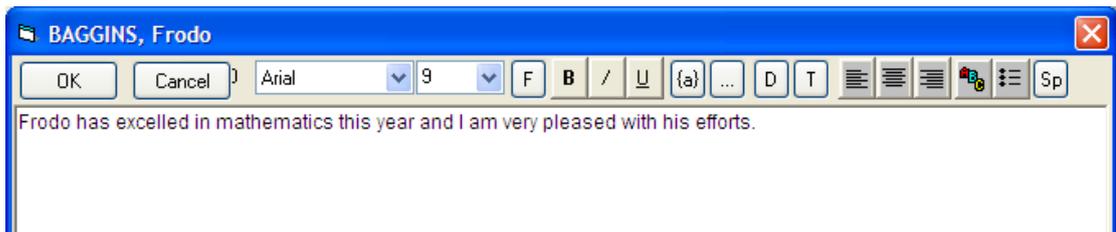
Figure 304: The entry of the comment

Once complete, click 'OK' and the word processor will disappear and you will be returned to the document, this time with your comment appearing in the comment area.

Now in grid mode, click on the grid mode button in the bottom left corner of the main panel…
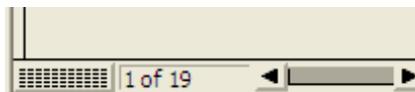
Figure 305: The grid mode button

… and you will change to grid mode as shown below.

Not surprisingly there are four columns displayed, one for each of the data items which entered above. In fact, the entries we made are displayed against Andrew, the first student of the twenty three in my dossier.

The comment is, of course, too large to appear in a column and, instead, the symbol '(…)' is used to indicate that a comment has been entered against this student.

Figure 306: Grid mode

It doesn't take long to run down the three columns entering the results for all nineteen students.

Figure 307: The completed results

We can also enter the comments from grid mode. Click in an empty cell in the comment column and the word processor will appear, as shown below.
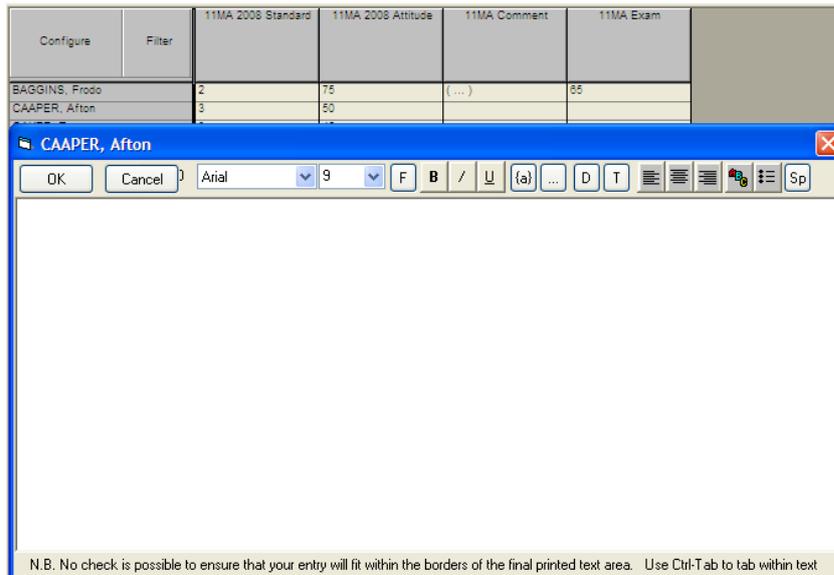
Figure 308: The word processor appears

For this example we will not simply type in a comment. When this dossier was created it included a Mathematics comment bank and we shall select a comment from the bank. If we knew the 'Link' code of the comment we wished to use we could hold down the 'Ctrl' key and type the comment link (e.g. M102) - and the comment would appear in the word processor.
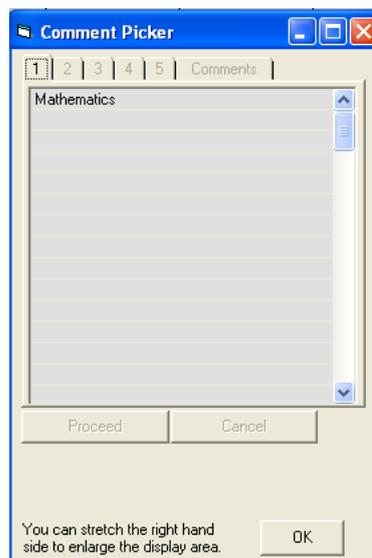
Figure 309: The comment selector

However, not knowing the comment links click on the 'three dots' button (labelled '...') shown above, and the comment selector will appear, displaying the name of any available comment banks. Click on 'Mathematics' and the relevant bank of comments will appear. The small message at the bottom of the comment selector's first screen and, using the mouse, is a reminder to drag the right edge of the window to widen it.
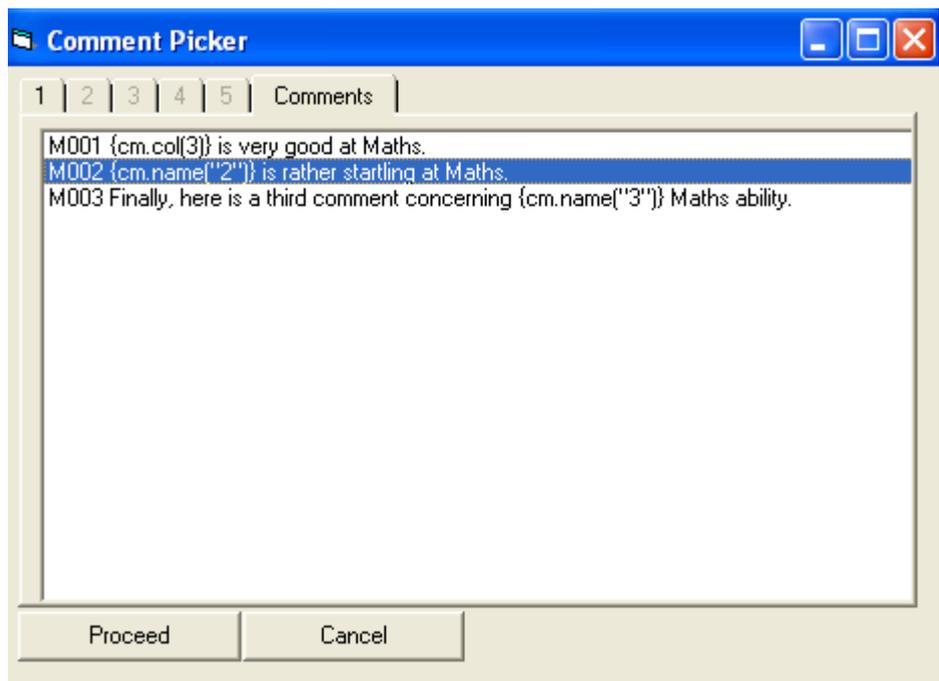
Figure 310: Selection of one or more comments.

In the example above just one comment is selected, click 'Proceed' and the selected comment is added to the word processor, shown below.

Figure 311: An comment added using the Comment Bank

Please note: This school has elected to enter students' surnames in upper case. This can look a bit unsightly. Student Manager includes a facility to change the case of students' names and other selected details

Clicking 'OK" to approve my comment, I am returned to grid mode with a new (…).

ndard	11MA 2008 Attitude	11MA Comment	11MA Exam
	75	(...)	65
	50	(...)	
	45		
	55		

Figure 312: A new comment has been entered

If you now double-click on Afton's name in the left-most column of grid mode, or click on the 'single student' button at the bottom of the screen, you will be returned to document mode with Adam's report displayed.

Figure 313: Afton's completed report

21.8 Printing a document

To print this report see the bottom of the screen 'Print'.

Figure 314: The print button

Click on this button and the print dialogue will appear, shown below.
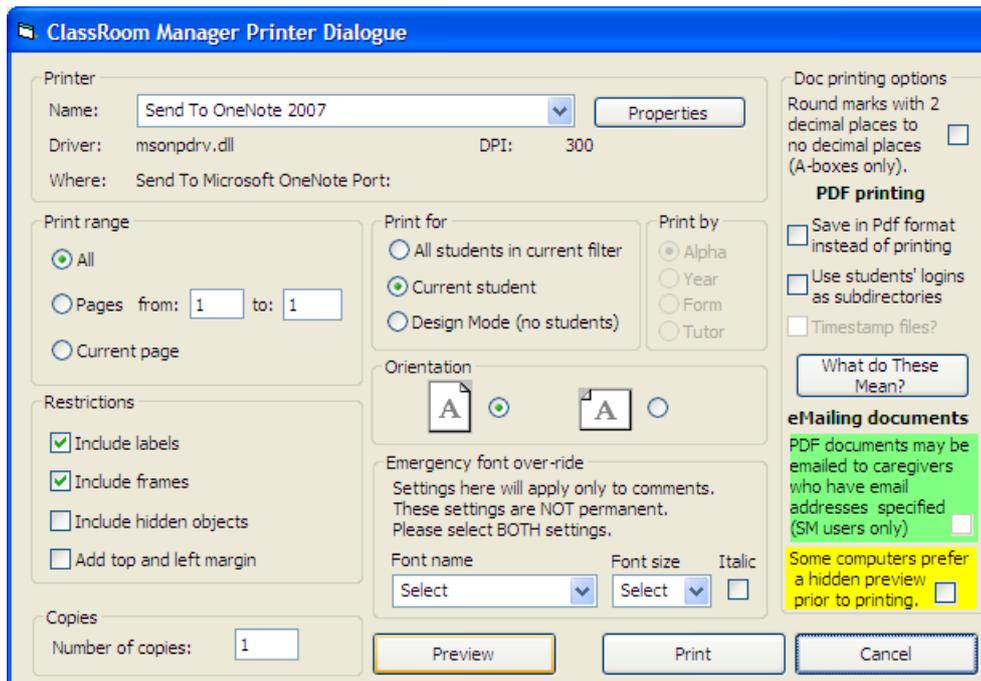
Figure 315: The print dialogue

Note that in the middle of the screen you can elect to print for all students, just the current student (selected by default), or a design version of the document.

21.9 Electronic Markbooks

In the meantime, when this document was designed the four results were linked to selected columns from the Year 11MA electronic markbook. To enter this markbook, click on its name in the list of items in this dossier on the left side of the screen. The markbook will appear, shown below.

Figure 316: The electronic markbook for 11MA

In the design of the dossier the request was made to only include the students in BT's class and, as a result, the twenty three students are displayed.

This markbook has a number of columns and, in the screen above you can see that the 'Mid-year exam' marks have been entered. This happened when we entered them in to grid mode a couple of pages ago. Normally, the marks would have been entered directly into the markbook (or as a result of applying a markbook formula to one or more columns in the markbook). We shall deal with markbooks in full detail in a later chapter. As a result of being entered in to the markbook the results would automatically appear on the report as it was designed to link to this markbook column.

Three other areas were also linked to markbook columns and, by sliding across to columns 13 and 14, you can see the results that were entered via the document in grid mode.

Figure 317: The other two columns

We also entered a couple of report comments.

Select the first student, Andrew, by clicking on his name in the top of the left-most column of the markbook, as shown below.

Figure 318: A selected student

Now click 'Individual's details' at the bottom of the markbook screen. The screen will change to display the eight report comments held in the markbook on the current student to see the comment displayed in the first comment area – the one which is linked to the comment area in the document.
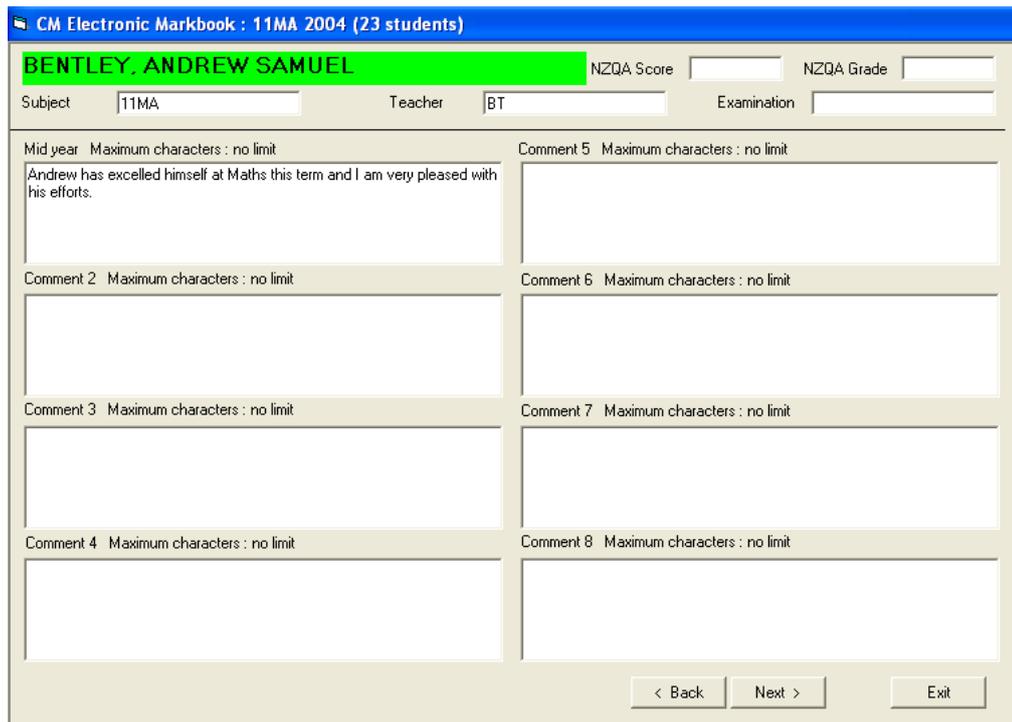
Figure 319: Andrew's comments

If you wish to edit this comment click on it and the word processor will appear.
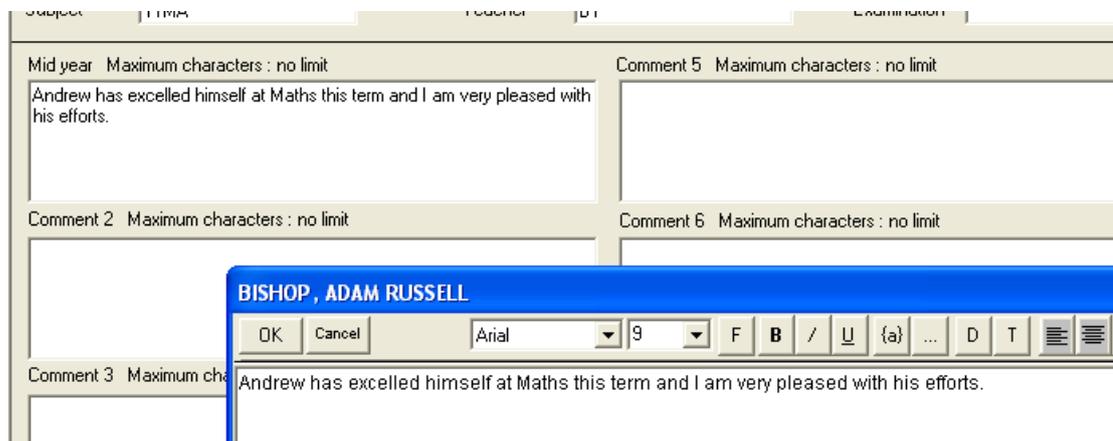
Figure 320: The word processor appears in the markbook

Click 'OK' when you are satisfied, and when finished with the markbook, click on 'Exit' in the bottom left corner of its screen.

In CMTeacher we've experienced a couple of dossiers which included, between them, two documents, a graph and a markbook.

We've seen 'Document mode', 'Grid mode', the word processor and an electronic markbook.

All that remains is to exit politely. It is most important to exit politely. If you simply turn your computer off then you run the very definite risk of damaging the database. Please ALWAYS exit

politely. The last button in the bottom row of the CMTeacher screen is Exit. Please exit by clicking on this button. This will ensure that the database is closed correctly and tidily.

21.10   The 'All data' option

If a particular user has 'All documents' rights, then they will see, listed at the top of their documents, the 'All data' image.
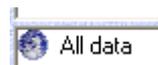
Figure 321: The "All data' image

This 'button' provides access to a display of ALL of the data held on a particular student – going right back through all of their years for which data has been entered. Data appears under four headings :

21.10.1   All data

This displays the contents of all of the columns. You can hide or display the column categories, and you can hide or display the empty columns i.e. columns for which no data is held on the current student. An example of this screen is shown below (with identifying information blocked out….)

Figure 322: The 'All data' screen

21.10.2   Selected data

Where you can use the category selection tool to select a specific set of columns. Using the column selection tool (described in full detail in an appendix) you can navigate to, and view the data held, in any of the columns in the database – from any year.
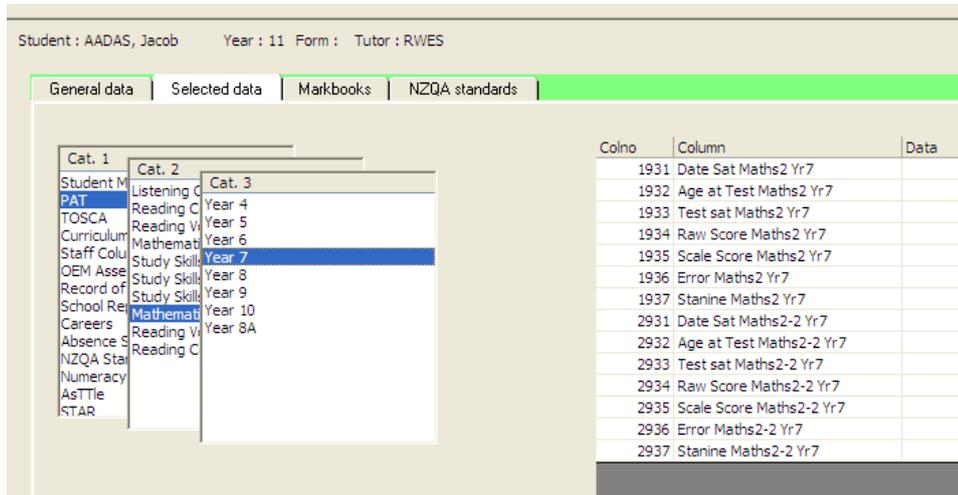
Figure 323: Navigating to particular columns

21.10.3   Markbooks

Where all of the markbooks of which the student is a member are listed and, by clicking on a markbook, you can view the student's results from that markbook.
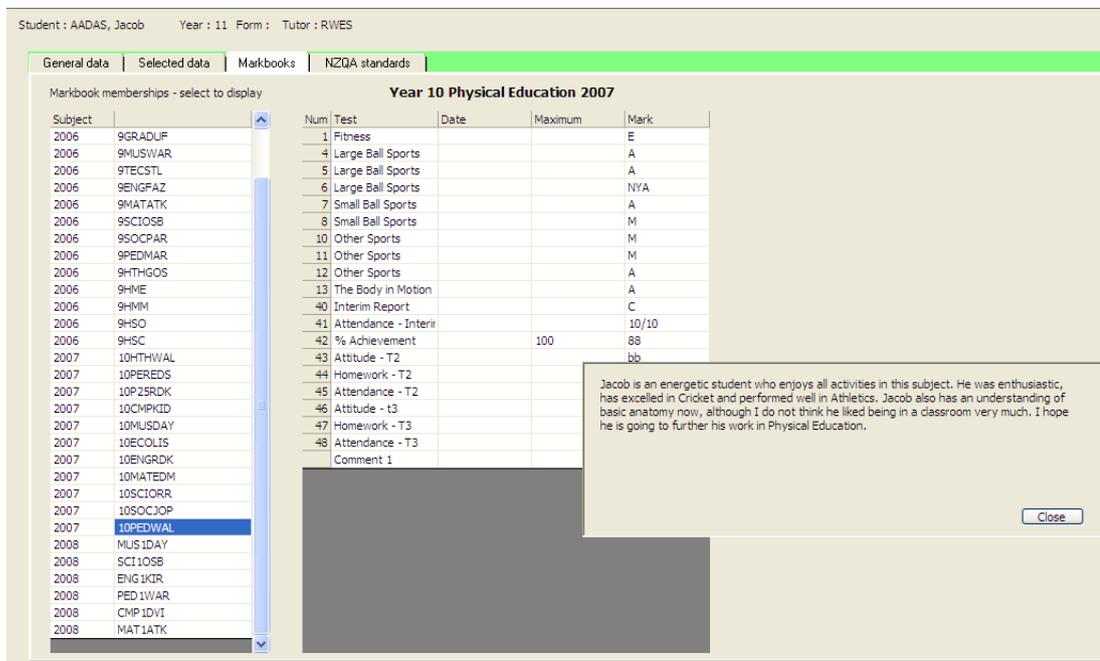
Figure 324: Electronic markbooks

In the example above, all of the markbooks of which the student was ever a member are displayed. By selecting a particular markbook the relevant data is displayed on the right hand side of the screen. An entry (...) indicate a comment and, in the illustration below, a comment

has been selected – causing it to be displayed in full. This is a comment from a markbook which the student was in in 2007.

21.10.4   NZQA Standards

Which displays all of the standards (not withdrawn) which are held on the current student. At the bottom of the screen illustrated below, is a count of the total credits gained at each level of study.

Student : AADAS, Jacob   Year : 11 Form :   Tutor : RWES

Year	Standard	Version	Lang.	Level	Creds	Result	Date	Detail
2008	12822	01	E	1	2			Explain rudimentary principles of sound and electronics in relation to performing arts technology
2008	18743	02	E	1	2			Produce a spreadsheet from instructions
2008	18758	02	E	1	2			Demonstrate navigation skills using a browser
2008	18971	01	E	1	2			Demonstrate knowledge of cells, reproduction, and inheritance
2008	18973	02	E	1	2			Demonstrate knowledge of matter
2008	18974	01	E	1	2			Demonstrate knowledge of chemical change
2008	18977	01	E	1	2			Demonstrate knowledge of the generation and use of electricity
2008	18988	01	E	1	2			Interpret information from a range of sources
2008	18989	01	E	1	2			Demonstrate knowledge of Earth and space
2008	20659	01	E	1	2			Demonstrate basic algebra skills
2008	5223	03	E	1	2			Use formulae and equations to solve problems
2008	5229	03	E	1	2			Use geometry to describe situations and solve problems
2008	8489	03	E	1	2			Solve problems which require calculation with whole numbers
2008	8490	03	E	1	2			Solve problems using calculations with numbers expressed in different forms
2008	8491	03	E	1	2			Read and interpret information presented in tables and graphs
2008	8808	03	E	1	3			Read an inclusive range of written texts and record the reading experience
2008	8810	04	E	1	2			Read an inclusive range of visual texts and record the reading experience
2008	8812	04	E	1	4			Produce transactional written text in simple forms
2008	90012	03	E	1	6	A	20/08/2008	MUSC1.1 - Perform contrasting music as a featured soloist
2008	90013	03	E	1	3	M	20/08/2008	MUSC1.2 - Perform music as a member of a group
2008	90014	03	E	1	6	A	20/08/2008	MUSC1.3 - Compose music to meet specified requirements
2008	90015	03	E	1	3			MUSC1.4 - Aurally identify, describe and transcribe music elements from simple music
2008	90016	02	E	1	2			MUSC1.5 - Identify and describe fundamental materials of music
2008	90017	02	E	1	4			MUSC1.6 - Demonstrate knowledge of music works
2008	90052	03	E	1	3	A	20/08/2008	ENGL1.1 - Produce creative writing
2008	90053	03	E	1	3			ENGL1.2 - Produce formal writing
2008	90054	03	E	1	2			ENGL1.3 - Read, study and show understanding of extended written text(s)
2008	90055	03	E	1	2			ENGL1.4 - Read, study and show understanding of short written texts
2008	90056	03	E	1	2			ENGL1.5 - View/listen to, study and show understanding of visual or oral text(s)
2008	90057	03	E	1	3			ENGL1.6 - Read and show understanding of unfamiliar texts

Credits gained : Level 1 : 21 of 161   Level 2 : 0 of 0   Level 3+ : 0 of 0

Figure 325: NZQA entries and results

22   The Main Screen

What's in this chapter?
1   Overview
2   The top row buttons
3   The selection panels and design buttons

22.1 Overview

In this chapter we shall look in more detail at the main CMTeacher screen and its various
features. These will include :

- The buttons in the bottom row – what they do or access? We shall not go into full
  details on most of these buttons here as they are covered either in chapters of their own
  or within later chapters.
- The selection of dossiers and documents from the two left-hand panels and the buttons
  to access the design of documents and graphs.
- The way in which the display in the main panel is manipulated using the slides.
- The selection of the current student.

You will recall from the previous chapter that there are two versions of the main screen. One
applies to primary and intermediate schools and the other to secondary schools. The only
difference is the substitution on the primary/intermediate screen of the 'Adapt' button for an
'NZQA Lists' button.

The main screen (primary/intermediate version) is shown below.
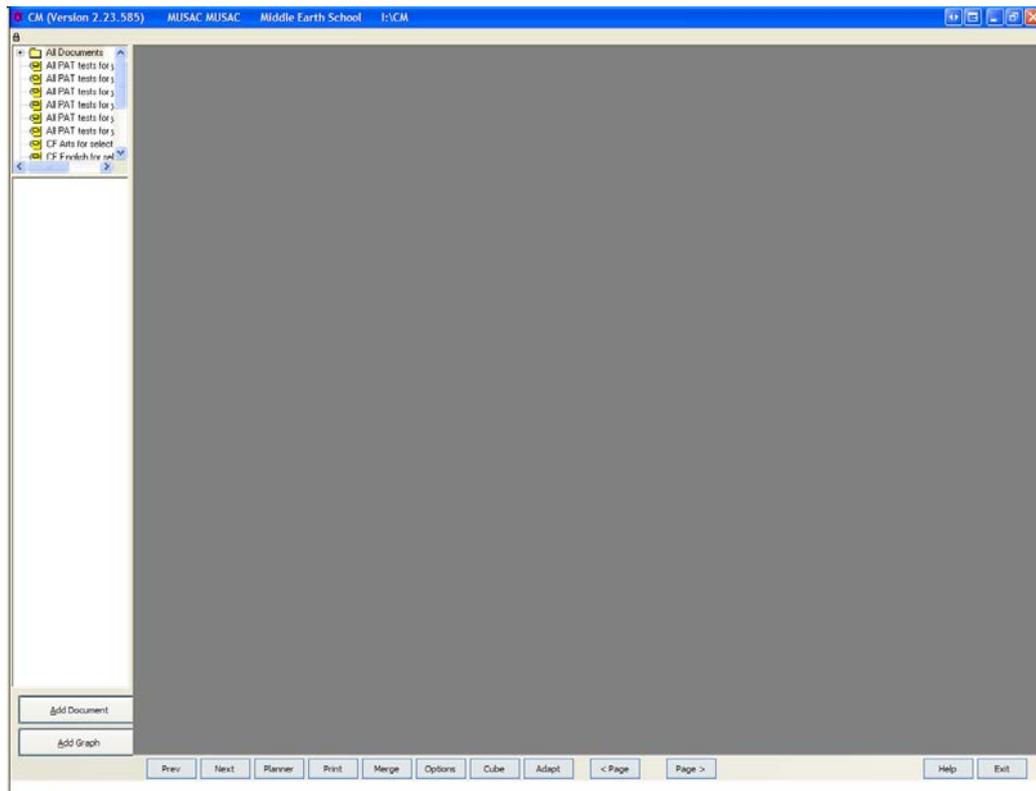
Figure 326: The main screen

The top of the screen consists of a row of buttons. The left hand side had two panels, one for dossiers and one for the contents of the selected dossier. Below these are the two design buttons.

The main screen shown above has no document loaded and, as a consequence, the various slides and other controls which relate to document mode and grid mode are not displayed.

22.2 The bottom row buttons

These buttons provide access to a range of processes
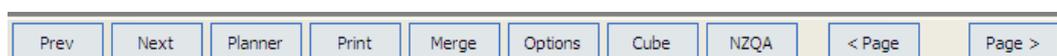
Figure 327: The top row of buttons

The illustration above is the secondary school version.

The first two buttons allow you to move forward and back between students.

The third button accesses CMPlanner, the ClassRoom Manager planning module. This module allows teachers to design units of work which incorporate aims and specific learning outcomes. These are then used in the automatic creation of documents which may be accessed for use with the teaching of the unit within CMTeacher. Units can also be placed on timelines and have resources allocated to them.

This fourth button accesses the various printing functions which are an important part of CMTeacher. Depending on the state of the program at the time of clicking this button, different options are presented.

If you have no documents loaded then you enter the 'Booklet' printing area, wherein you can select several documents and have them all printed for selected students.
If you have a document loaded and you are in 'Document mode' then you will be able to print the current document for all or just the current student.

If you have a document loaded and you are in 'Grid mode' then you will be able to print the contents of selected columns from the document in table format.

This fifth button accesses the merge utility. This is dealt with in a separate chapter of its own. It is via this button that a teacher working at home can import or export the contents of one or more of their dossiers. It can also be used back at school to import work done at home or to export one or more dossiers in order to take them home.

The options button provides access to a number of processes which we will deal with here. Clicking the button accesses a screen with a number of buttons down the left hand side. These are shown below, rearranged into two columns to suit the format of this page.
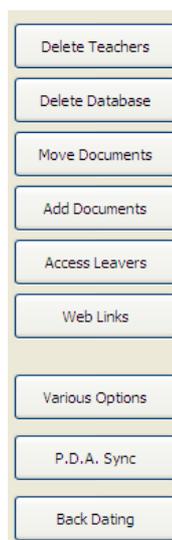
Figure 328: The options buttons

22.2.1 Deleting teachers

Why might you need to delete a teacher from your computer? The answer is provided on the screen which appears when you visit this area.
If you are on the school network then the following version of the screen will appear. (The school network is identified by finding CMAdmin.exe in the \cm directory). The process will be unavailable to you in this circumstance.
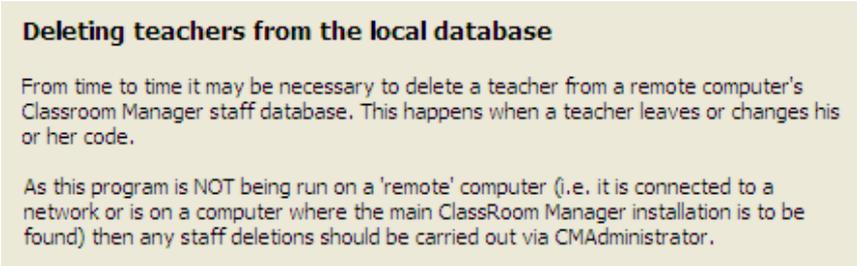
Figure 329: You cannot delete if on the school network.

If, instead, you are on a remote machine, then the removal of a teacher who has left or changed their teacher code becomes a necessity. The following window provides the facility to do this.
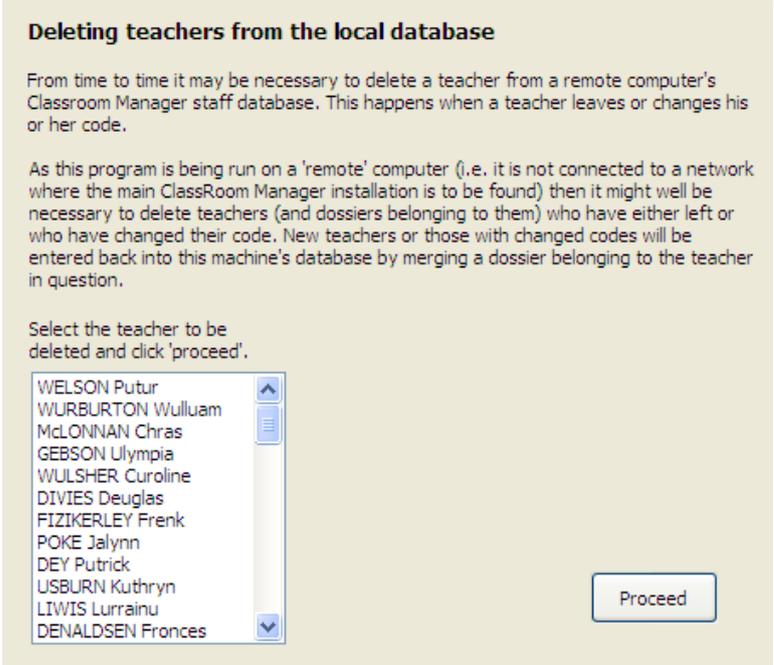
Figure 330: Selecting a teacher for deletion from the database

In the example above Deuglas Divies has left the school so we need to delete him, and his dossiers, from the computer. Having selected him, click 'Proceed' and you will be asked to confirm your intention.
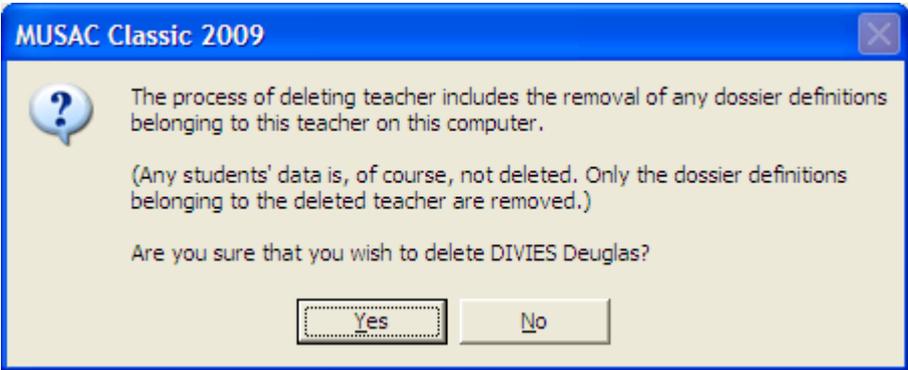
Figure 331: Approving the deletion of a teacher

22.2.2 Move documents

This facility is also available in CMAdmin.

From time to time you may wish to move documents between directories or even delete them altogether. The following screen enables you to do this. In the bottom left corner is a facility to create new subdirectories and, as an example, I am going to create a subdirectory called \AGS' and to move some documents to that subdirectory.
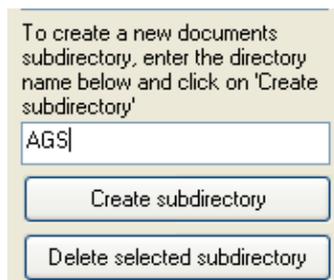
Figure 332: The creation of a new document subdirectory

I've typed in the name of the new subdirectory and clicked 'Create subdirectory'. Now the new directory is listed, along with the previously existing ones on the main screen below.

This process also allows you to either remove existing documents or move them to a subdirectory. The screen for this is shown below.
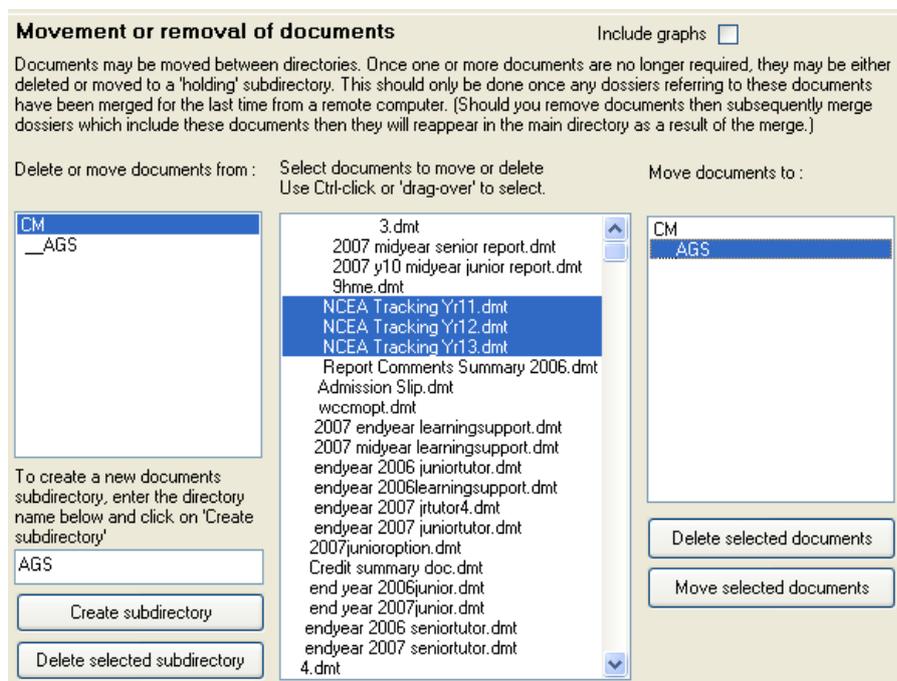
Figure 333: Move or Removal of documents

To use the process, first click on the directory in the left hand list FROM which you wish to move or delete documents. Any documents found in that directory will be listed in the centre portion of the screen. From that list select those which you wish to move or delete and, having done that, click on either the 'Delete selected documents' button or the 'Move selected documents' button.

22.2.3 Add documents

This process allows you to globally add one or more documents to selected dossiers. This is a valuable process if you have, for example, designed a new document which you then wish to make available to fifteen different teachers through their dossiers. The manual process of editing each dossier individually to achieve this would take quite some time. The screen for this process is shown below, and I have selected two documents which I wish to add to several dossiers, which I've also selected.
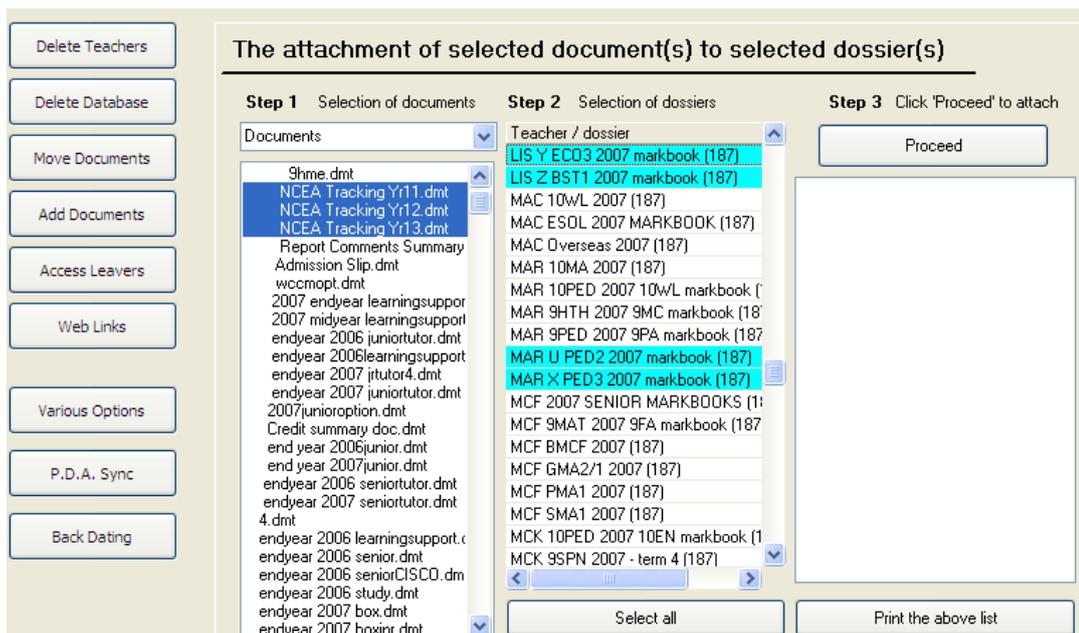
Figure 334: The attachment of documents to dossiers

First select which type of inclusion you wish to perform by selecting documents, graphs or pictures from the pulldown selector at the top of the first column. This will then display all of the type selected in the left hand column. I've chosen, in the example above, to attach documents.

Next, from the left hand list, I've selected those documents which I wish to attach to some dossiers.

Having done that I've then selected the dossiers to which I wish to attach the selected documents then, via step 3, I'll click on the 'Proceed' button. The results of my endeavours will be then displayed in the right hand list as shown below.
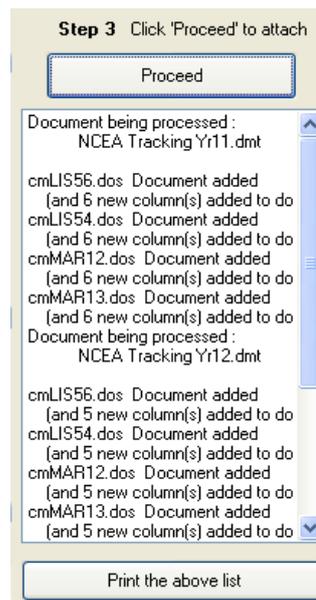
Figure 335: Details of the process

22.2.4 Access leavers

From time to time you may wish to access information relating to students who have been transferred to a leavers file. This is achieved via the screen shown below.
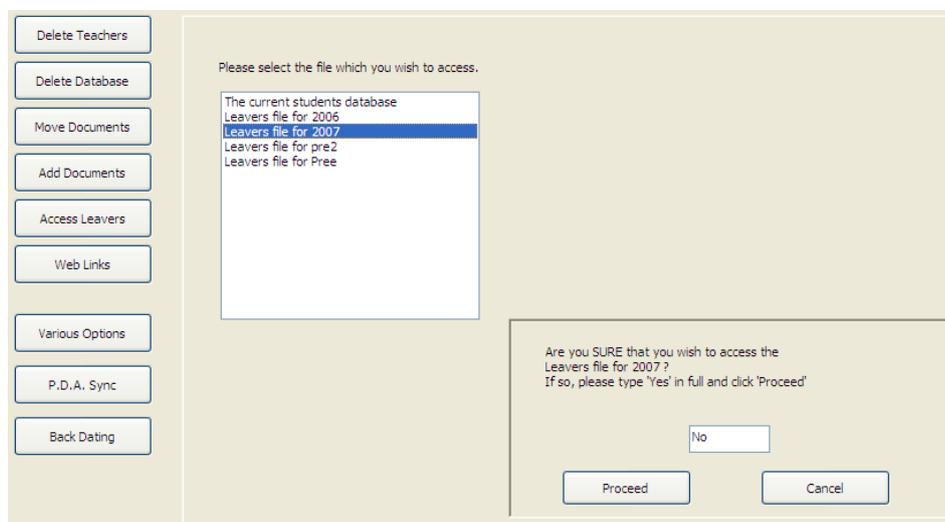
Figure 336: Changing to a different database

The list displays both the main database ('The current students database') and any databases of leavers to which your school has transferred students over the years. Select the database to which you wish to switch and the dialogue shown above will appear, asking you to confirm your intention by typing the word 'yes' in full. Once you have done this, and clicked 'Proceed', the database requested will be checked to ensure that any structural changes required have been made to it.

You will then be returned to the main screen and any documents viewed will display the names and details of the members of the selected database.

22.2.5 Web links

This screen, shown below, allows you to quickly access one of the listed web-sites.

Figure 337: The web links screen

22.2.6 Various options

This screen displays five areas, each of which offers a particular option.
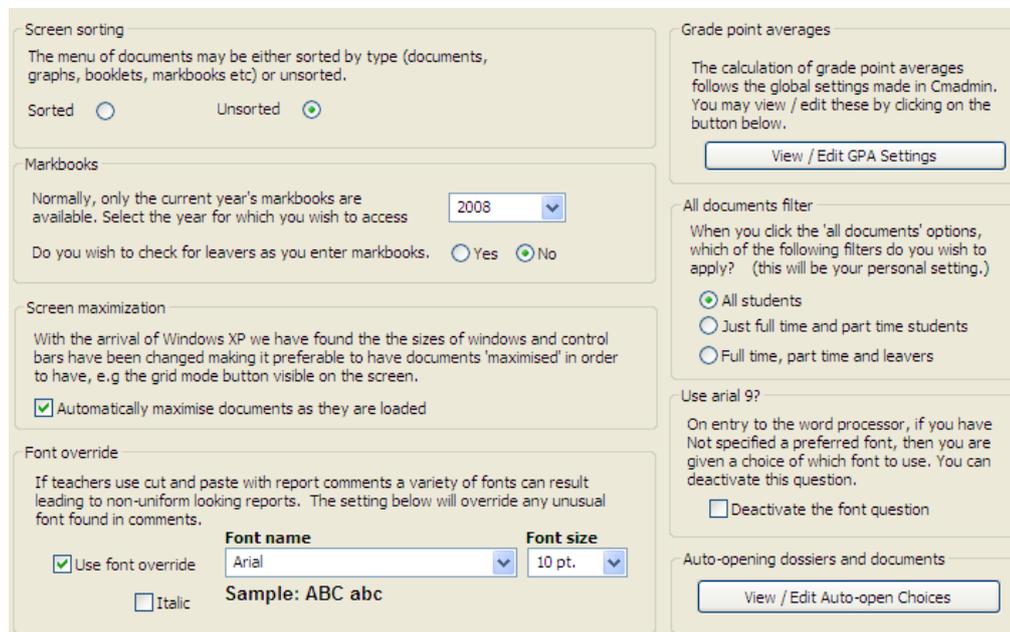
Figure 338: Various options

Screen sorting

If you click on the 'Sorted' option then, when more than one item is listed in the second display panel, they will be sorted alphabetically within their type. The illustration below displays three different types of objects :

1. Markbooks
2. Spreadsheets
3. Activities

Each is sorted within its type.

Figure 339: A sorted menu

Some schools prefer this and some prefer to have their menu unsorted – although this option means that all entries will be sorted alphabetically regardless of their type.

Markbooks

Normally, only the current year's markbooks will be displayed. If you wish to view a markbook from a previous year then visit this area and select the required year from the pulldown list in the second area.

Screen maximisation

This option was made necessary by the arrival of Windows XP, which has a slightly deeper tool panel at the bottom of the screen. As a result, the navigation tools at the bottom of a document were not visible in either document mode or grid mode.

You can maximise the screen without visiting this option area by clicking on the 'Maximise' button at the top right hand corner of the document, but you will have to do this for each document unless you do visit this area and tick the relevant box. This will be then memorised i.e. stored in your options area of the staff database' and remembered for your future use of the package.

Font override

Some teachers prefer to write their report comments in a different word processor and to then cut and paste these into ClassRoom Manager. This can lead to a variety of fonts – both name and size – in a student's report comments. The font override utility allows you to specify a font which will replace all others when reports (or any documents) are printed. The process only applies to the word processor so will not affect other objects on a document.

Grade point average

The full details of this process are provided in the NZQA user guide. The 'Grade point average' applies to the calculation of a single, overall number (c.f. a percentage) which applies to a student's results within the standards he or she has taken within a particular markbook. This option allows you to include or exclude withdrawn standards from the calculation of a student's grade point average.

This brings us to the end of 'Various options'.

22.2.7 Backdating

It is now March and you realise that you forgot to enter some results for students at the end of last year. Unfortunately, they are now all in different classes and rooms and a different year. If you switch on backdating then any filter you apply to identify your students will apply itself as at the date you specify on the screen below.

Backdating

Normally, a student's year, class, and room will be retrieved as their current values from the database. If you wish to have these retrieved from an earlier date then enter that date below. These will then be used in the generation of documents, tables and graphs. 'current age' will also be evaluated as at the specified date.

Back date : 12/11/2007   Proceed

Turn Backdating Off

Figure 340: Backdating

The filter works by, instead of identifying each student's class or room or year, going to the 'Register' part of the database which records each time one of these pieces of information is changed. It searches through the register for the required student and identifies their class, room or year as at the date requested.

This seventh button at the bottom of the screen accesses the datacube. The datacube is a means of analysing student data by generating a two dimensional table between any two columns in the database – e.g. Gender by Class-size, Ethnicity by PAT results etc.
This topic has a chapter of its own later in this user guide.

'Adapt' is another means of analysing data and also has a chapter of its own later in this user guide. The chapter is also in the CMAdmin section. This option only appears in the primary/intermediate version of the package. Adapt is available to secondary schools via the following button which, in their case, replaces the 'Adapt' button.

The eighth button accesses the various printing options relating to NZQA data. The chapter which provides full details of these options is contained in the MUSAC NZQA user guide. The main screen of the process contains the options displayed below.
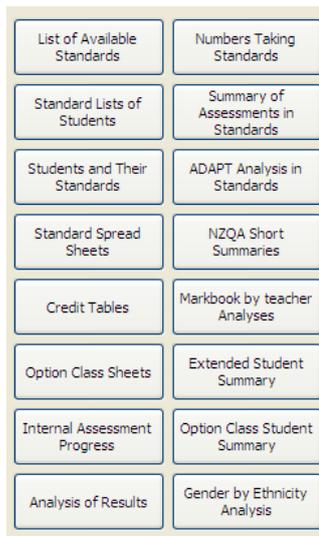
Figure 341: The NZQA lists

This Help button accesses the on-line help screens, which comprise the various chapters of this.

If you have loaded a multi-page document then these two buttons allow you to move between the various pages. I.e. they act as 'Page up' and 'Page down' buttons respectively. The number of the current page will be displayed in the gap between them e.g. '2 of 5'

The last button is the Exit button which we strongly prefer you to use as a means of exiting from the CMTeacher program.

22.3 The selection panels and design buttons

On the left side of the main screen are the two selection panels. The top panel lists any dossiers belonging to the teacher and the contents of a dossier are displayed in the second panel, as shown below.

Figure 342: The contents of a selected dossier

If you sign on to CMTeacher with the right to see all documents then, in addition to any dossiers, there will also be an 'All documents' icon displayed, as shown below.

Figure 343: The 'All documents' icon

If you click on the icon itself then all documents, graphs, markbook etc in the \cm directory will be displayed. The composite screen capture below illustrates selections from a number of items.
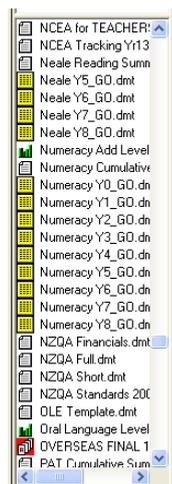
Figure 344: A mixture of documents, graphs and booklets

This display includes the following types of objects:

- Documents
- Grid-only documents
- Graphs
- Markbooks
- Booklets – dealt with in Chapter 10 Printing
- Spreadsheets (which are now obsolete)
- Activities – dealt with in Chapter 11.

We have already met documents, graphs, and markbooks in the previous chapter and we shall meet them again, and the others, in later chapters.

The ability to widen the left hand menu by sliding its right hand edge further out into the main screen area has recently been added. An example of the widened menu is shown below.
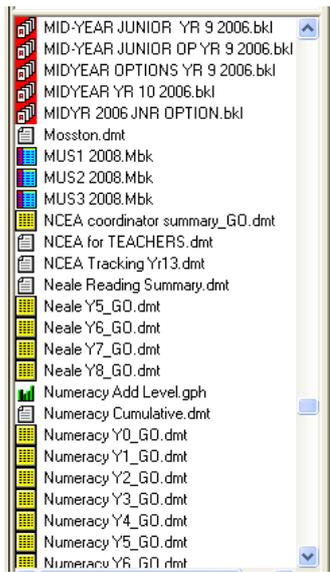
Figure 345: The widened menu list

To display a document (or any of the other objects) simply click on it in the list.

If you RIGHT-click on a document then the following popup menu will be displayed.
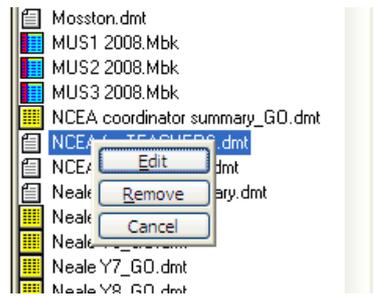
Figure 346: Edit or delete a document

This menu allows you to either edit or delete the selected document – provided that you have been given the right to do so.

If, instead of clicking on the icon itself, you click on the small '+' sign to its left then any document subdirectories will be displayed, as shown below.
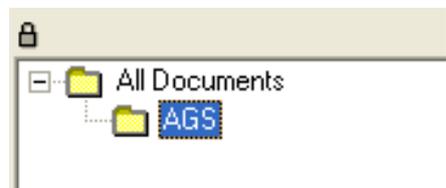
Figure 347: The document subdirectories

Each of these subdirectories can also hold documents, grid-only documents, and graphs. To display the contents of a subdirectory click on its icon, as shown below.
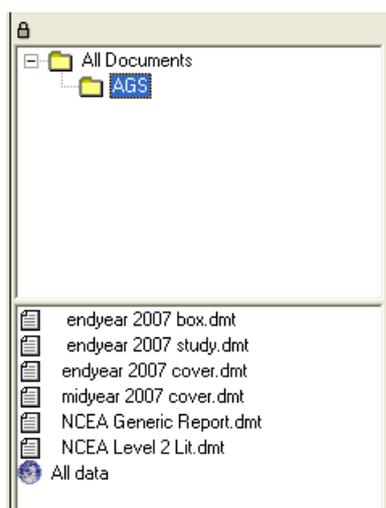
Figure 348: The contents of a subdirectory

A subdirectory cannot hold markbooks or activities as these are not separate text files (as are e.g. documents) but are stored as definitions within the database.

A technical note concerning the subdirectories :
The subdirectories are those found, by the software, off the \cm\documents subdirectory. This subdirectory (\documents) must NOT, itself, contain anything other than the subdirectories. It must NOT contain, for example, any documents – just subdirectories.

22.3.1 Filters

When selecting 'All documents' some schools have indicated that they also wish to see 'All students' at the same time, while others have requested just 'Full-time, Part-time and Leavers'. You now have a choice, specified under the 'Options' button, then under 'Various options', as shown below.
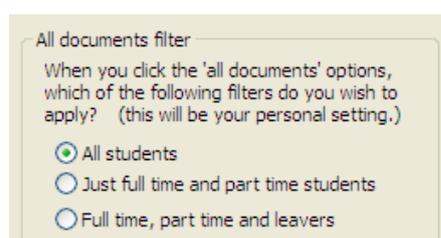
Figure 349: The 'All documents' filter options

22.3.2 Creating a document

Finally, in this section, we come to the two buttons at the bottom of the left hand side of the screen. Provided that you have been given the right to do so then the first of these allows you to create new documents. The initial screen of this process is shown below, and we shall deal with this process in full in a later chapter.
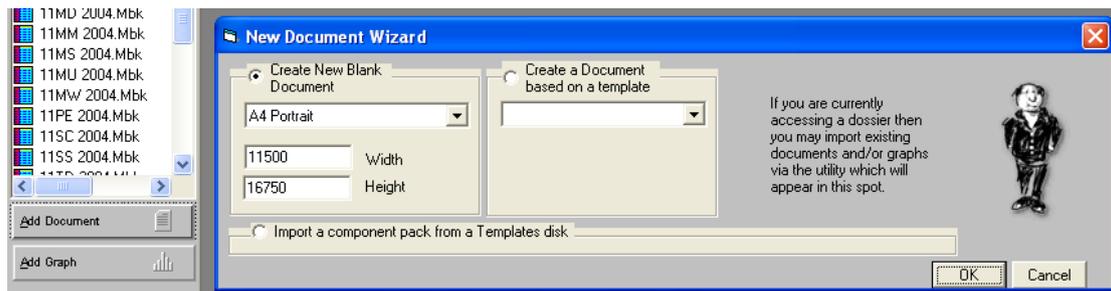
Figure 350: The Document wizard

22.3.3 Creating a graph

The final button leads you to the first step in the process of defining a new graph. The screen for this is shown below, and we shall deal with this topic fully in a later chapter.
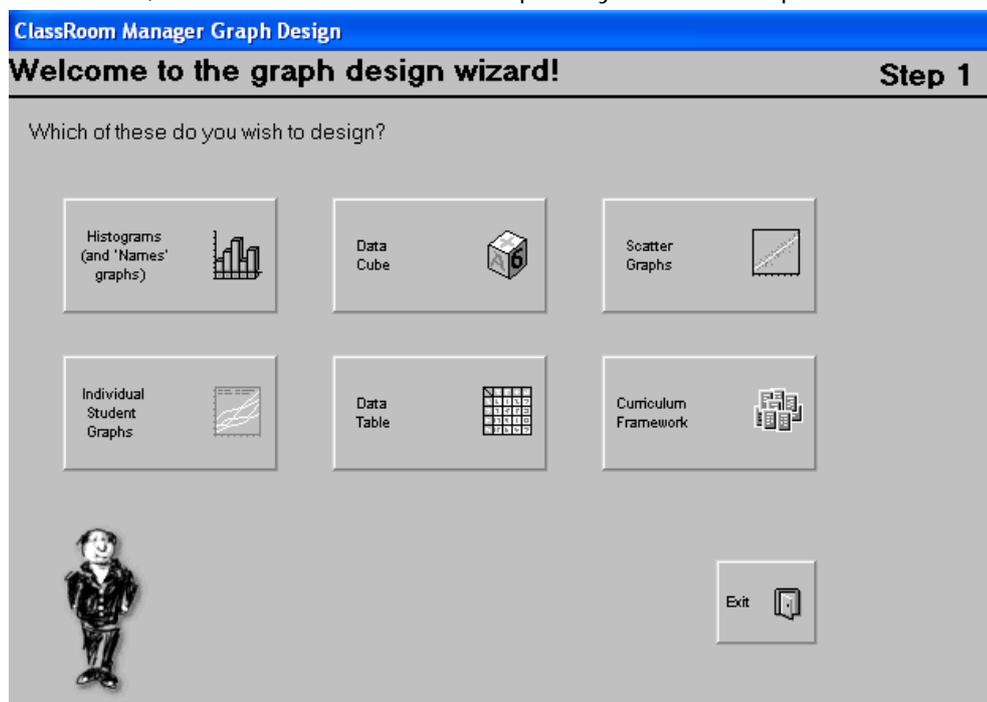
Figure 351: The Graph designer

22.3.4 Sending messages

While you are in a document it is possible to send and receive messages from other users. The process is accessed by clicking Ctrl-M while you have a document open. The following screen will appear.
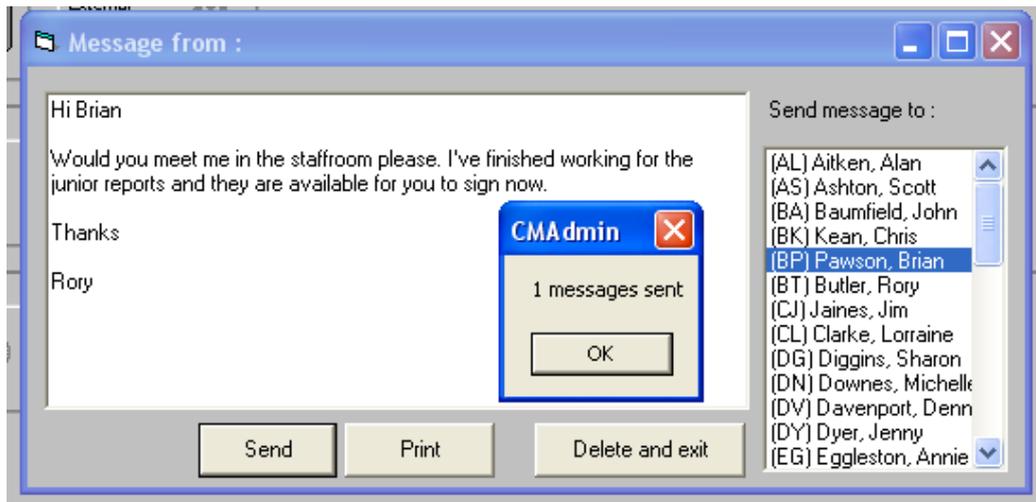
Figure 352: A message sent

On this screen I have prepared a message to Brian, then I've selected him from the list of staff members on the right hand side. You can select more than one recipient by holding down Ctrl while you select. Finally, I clicked 'Send' and the small message '1 messages sent' appears.

Over on Brian's machine he is busy working away and the following window will appear on his screen.
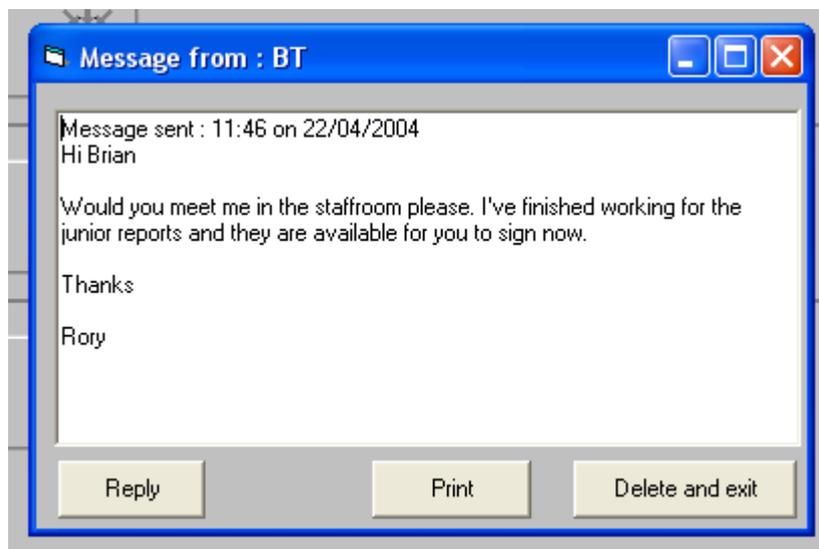
Figure 353: A message received

He can immediately reply, he can print the message and he can delete it.

23   National Standards

Data input documents are now supplied for all "compulsory" primary assessments (compulsory being those defined by the Ministry of Education specifications).

National Standards forms in ClassRoom Manager include:
- **All the required National Standard columns** (enabling schools and agents to design their own reports or add National Standard fields to their existing ones). This can most easily be done using the Data Assistant when editing the design of a report. This includes: English Language Learners and Non-English Language Learners
New Students (based on their 'New Student Expiry Date' - when adding a new student, the expiry date is defaulted to date started here + 1 year)
- **Ready to use report templates** covering all year levels and fields
- **National Standards Board Reports**

From the CMAdmin main menu, for the quickest way of installing the latest columns - click 'Assessment Tool Selector'.
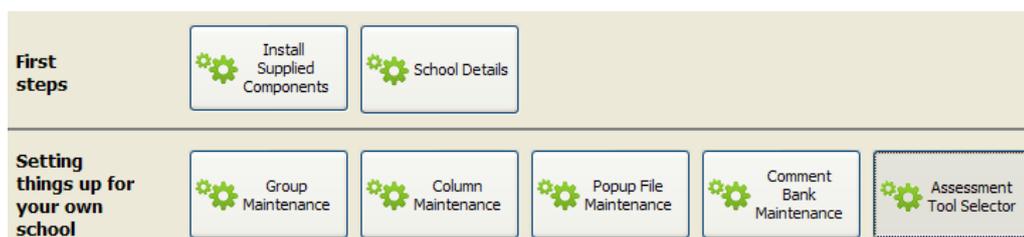
Figure 354: National Standards configuration

23.1.1 Configure Reporting Forms and Best Fit model

Where your school is using the 'Best Fit' option for entering OTJ data, this is configured by making a selection in the Assessment Tool Selector.
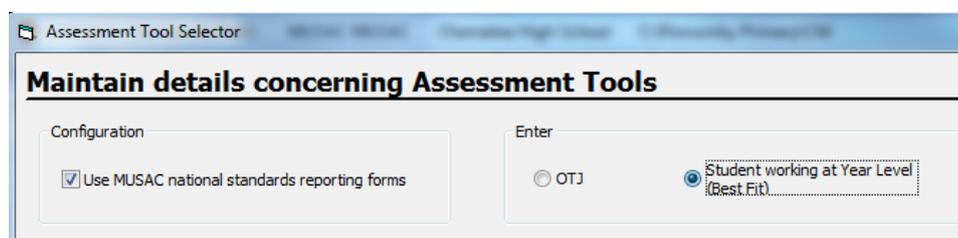
Alternatively the Ministry's 4-points of 'Well Below, Below, At, and Above' are used to make the overall teacher judgment for National Standards in each relevant subject area.

Click to save changes.

23.2 National Standard Templates

There are five different report templates with eight year levels per template. The reports are installed into a `NationalStandards` folder within the `CM\Documents` folder and can be added to new or existing dossiers using the Dossier Maintenance wizard (CMAdmin> Teachers and their dossiers). The folder can also be accessed by users with the 'All Documents' right by clicking the + symbol to the left of 'All documents' in CMTeacher. All of the document names begin with 'NS' followed by a template number, whether it's an OTJ or Interim report, then the year level it is designed for.

Templates 1 to 3 are for OTJ's and their related comments with template 1 being a single page report. Templates 2 and 3 are multipage. Templates 4 and 5 are for interim reports with 4 being single page and 5 multi page.

Copies of the OTJ reports are also available with the OTJ field removed.

All of these templates can be used as is or edited to suit your school's needs, including adding your own school logo. If you do edit a report's design it MUST be saved with a different name as the next Classic update will reinstall the original report template.

Data can be entered directly into these reports either in single student or grid mode - but care must be taken to attach the correct report to the correct dossier, ie. that the year level of the report matches the student's year level. To make this data entry process more seamless two entry forms have been added to ClassRoom Manager.

All 'OTJ' reports have an 'Assessment results' field where the assessment types used to arrive at the OTJ can be listed.

23.2.1 List of yr 1-3 students' anniversaries

The anniversaries list in Student Manager>Printing>Special Lists, is designed to give schools an easy way to list the 'Schooling Years' anniversaries for those students in years 1 to 3. It has a selectable date range and can be sorted by anniversary year or surname.

23.3 Entering OTJ's, Learning Goals, and related comments
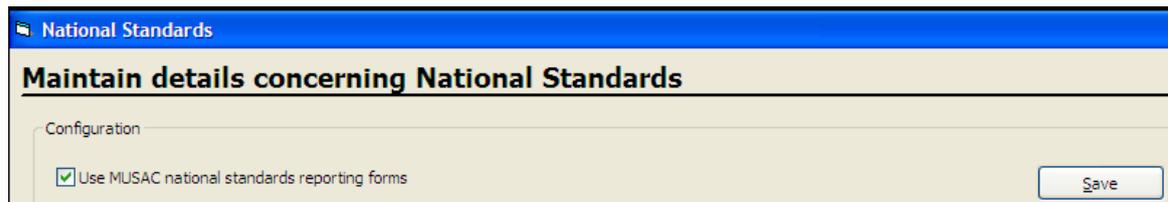
Completing the tick box here will install the MUSAC templates found in CMTeacher.
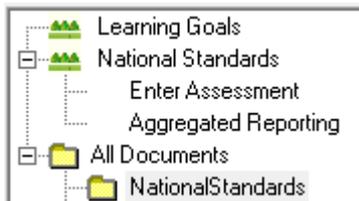
For teachers entering OTJ's, Interim report, Learning Goals and related comment entry, there are forms accessed by clicking the relevant heading in the first of two sub-sections in the left navigation panel - 'Enter Assessment' in ClassRoom Manager's main screen. 'Enter Assessment' allows OTJ data to be entered (if the 'Best Fit' model has been configured this will be available), and the results will appear on the relevant students' year level report. ie. on the supplied report templates or the school's own reports linked to the National Standard columns.
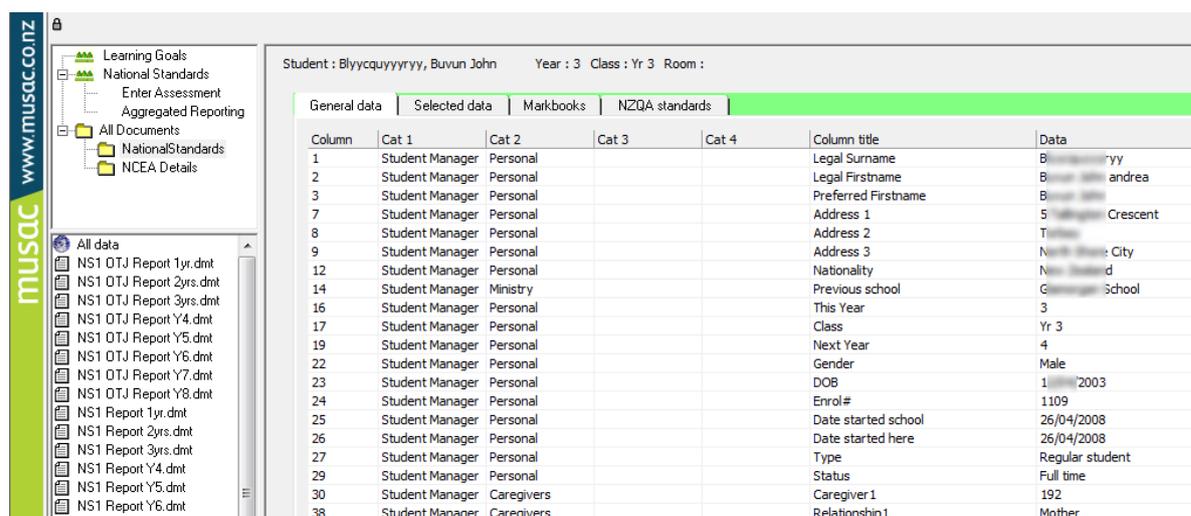
Figure 355: National Standards

Once opened these forms will auto filter to the teacher's own class – based on their login and a relevant room entry in the teachers 'Class' field in 'Teachers and their dossiers' (CMAdmin) or

'Staff and their dossiers' (Student Manager) ie. the entry in this field matches the 'Room' data on their students, eg. R1, Rm01 (case and space sensitive).

If the person logging in has the 'All Documents' rights they will have access to all rooms and students. OTJ year levels less than 4 are called anniversary.
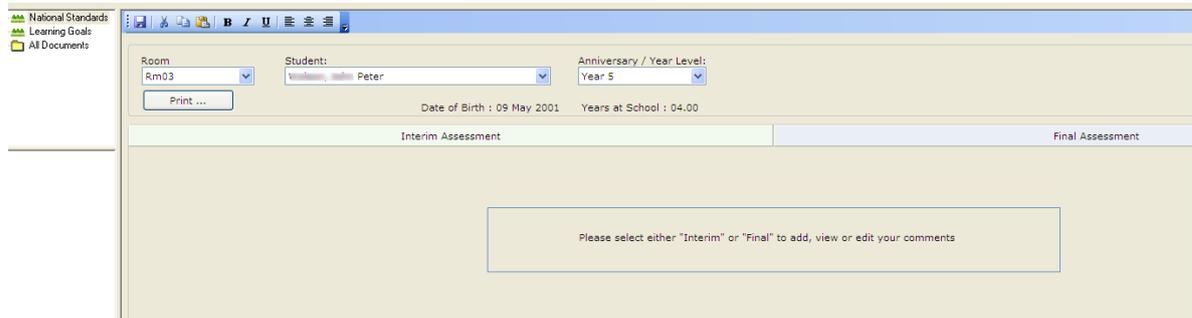
Figure 356: Teacher forms to enter an OTJ comment

Within the National Standards form the teacher can select which student to enter a comment on, and choose interim or final report for the data – the software calculates which year the comment relates to. Once selected there are separate tabs for entering Reading, Writing and Maths comments and with the 'Final' form there is a drop down to choose the relevant OTJ.

23.3.1 Learning Goals

The Learning Goals form is similar to the National Standards form, but has comment fields for: Learning Goal, Progress Towards, Next Learning Steps, Home assist and School Support.

When moving between students in National Standards and Learning Outcomes you will be prompted to save data first.

23.3.2 Note to Self

It is possible for teachers to create (edit and save) a 'Note to self' comment which is stored separately, and cannot go into a normal user-designed document or report. The Note to self option only appears on the final tab of the OTJ form (and not the Interim tab).
There are separate notes to self for Reading, Writing and Maths for each year level of each student. After the OTJ has been approved, other fields excluding Note to self are unable to be altered. Note to self is NOT confidential to the staff member, but can be viewed and edited by more than one staff member (provided they have the permissions to select the appropriate room).

23.3.3 Moderation

On the final tab of the OTJ form an approved tick box is visible. Unless the currently logged in user has all documents or super user rights, the approved tick box is disabled.

A final comment must be entered and an OTJ level selected for the 'approved' tick box to be checked.

Once approved all the other fields are locked down, except note to self - so that classroom teacher enters an OTJ and then a moderator approves the OTJ.

23.3.4 Printing

It is possible to print blank OTJ forms for one or more students.   The OTJ form is invoked from the National Standards form which contains basic details about the student, and which Year Level or Anniversary is being assessed. The form contains places to write for each Learning Area. If some assessment data has already been entered, then this shows up:
- Date assessed
- Objective judgement
- Approved tick
- Interim and final comment
- Note to self

It is possible to print all students in one room as one batch (ordered by student surname), with one assessment per page. The form cannot be closed while generating results.

> **Note**:   If a student in year level 4 also has a 3rd anniversary in the current (calendar) year, then two copies of their OTJ form are printed (one for the 3rd anniversary and one for Year Level 4).

23.4 Aggregated Reporting – Progress and Achievement Tables

Click 'Aggregated Reporting' from the left navigation panel for selection criteria used to generate Progress and Achievement tables. These tables deliver Longitudinal Reporting based on aggregated data as required by the MoE.

Click to identify which student group to report on:

> Full School (including Leavers)
>
> Class (the same class selection as is available when entering the OTJs)
>
> Year Level

- Separate reporting can be generated on Gender, Ethnicity, English Language Learners and students who are new to the school by checking the tick boxes for each required report. This data will then be included in the table but on a separate line.
  - o Ethnicity displays all of the Level 1 (MoE5) Ethnicities.
  - o 'English Language Learners' and 'Non- English Language Learners' are displayed.
  - o 'New Students' and 'Not New Students' are separated out. A student is considered new based on their "New Student Expiry Date" found on the Ministry Details 2 document. The expiry date defaults to one year after they started at this school, except where this school is the first one they ever attended and they are then not considered new.
  - o New students and English Language Learners are identified as new on the 'Enter assessment' screen.

Click 'Generate' to compile the tables, displayed on three tabs (Reading, Writing and Maths). The table contains data relating to the current and previous year (where this exists).

Click into a cell on the coloured portion of the table to provide a popup which lists the students who are included in the data for that cell.

23.5 National Standards Board Reports (Nag2A requirements)

- Nag 2A (c) requires that schools with Learners in years 1-8, enrolled on 1 November, report National Standards data broken down by year level and by gender, and reporting on Māori and Pasifika separately.
- This data is to be submitted to the MoE in the prescribed format by 1 March the following year, at the same time as the annual charter update. Data is submitted in full, with no exclusions for privacy reasons.
- The same data is to be reported in the school's Annual Report. As a public document, schools must take privacy considerations into account in the Annual Report. Data can be removed once exported to the MoE's Excel template.

Process

From CMAdmin > Other Utilities > National Standards Board Report, the first screen provides the step-by-step process summary. Clicking one of the buttons at the bottom of the screen displays the relevant reporting year details.

- Between **1 April and 31 October**, you are only able to check the data for the current year, as the files must not be created until 1 November
- Between **1 November and the date that you rollover** to the new year, you can check your data and then move on to report on the current year

- Between **rollover date and 31 March**, you can check your data and report on the previous year, but only check the data for the current year

- The files are **due** at the MoE **by 1 March** of **the following year**, but the software allows access until the end of March.

Click **Report on 2014** to start the process.

At this point data is loaded for use at each step in the process. If changes are made to the data, you **must** return to the first screen to re-load the data.

Follow the steps as they are set out across the screen. The process can be completed in parts if necessary, using the back button (bottom right) to exit. On returning, you may continue where you left off, or repeat any of the steps again. It's important to note that Step 3 can only be performed when Step 2 has been completed.

> Step 1 >**Data Check**
> This step gives the opportunity to check for any missing data or incorrect data. A report is displayed on screen, and can be printed, showing:
> - students who will be excluded from the report/export file
> - students who will be included but have missing data; and
> - a complete list of the included students and their OTJs.

NOTE: Students are grouped by their school year level for this report. The **MoE stipulates which OTJ is to be included for students**, based on their
1   current year level,
2   funding year level, and
3   date that they first started at any school.

This is shown in the "OTJ for Year" column and is not necessarily the same as their school year level. Refer to the tables which follow Step 6 in this document.

Step 2 > **Enter Reasons for Missing OTJs**
If any students are missing the OTJ required for the report, they will be listed in the grid on the screen.   (Remember that this is the OTJ for the year stipulated by the MoE.) Then close the process; enter the missing OTJs and then return. This will load the updated data.

Once the list contains only those students for whom it is impossible to form an OTJ, the reason for this must be entered for each student. You may exit and return without losing the reason that you have already entered for a student, as long as the student has an NSN.   Only once all reasons have been entered, will you be permitted to perform Step 3.

Step 3 > **Create the MoE Upload Files**
Once all reasons for missing OTJs have been entered, a matching set of MoE files can be created. The first is a .csv file, containing the data. The second is a .pdf report based on the data held in the .csv file. The set is saved in the \CM\BOTReportingExports\yyyy\MoE Files folder. A screen preview of the .pdf report will be displayed and can be printed to the printer. This set of files is to be uploaded to the MoE's Leadspace Portal in Step 4.

As it is possible to perform Step 3 multiple times, the file will be overwritten each time, however the previous set of files will be transferred and available in the \CM\BOTReportingExports\yyyy\Archive folder.

Step 4 > **MoE Leadspace Portal**
A message will be displayed, indicating which files are available for upload to the MoE, and the time when the data was loaded for the files with the location where they can be found. Click >OK to open the Leadspace Portal login page in your browser. Login and upload the file set.

The Leadspace portal is: https://web.minedu.govt.nz/eadmin/

**This completes the process required for compliance.
Steps 5 and 6 are optional and may be useful for BoT Reporting.**

OPTIONAL

Step 5 > **View the Aggregated Data**

This step will help you make sense of the data that will appear in the Excel spreadsheet file created in Step 6. The aggregated data that can be viewed on screen has a separate column for students with missing OTJs. This column is not found in the spreadsheets.

NOTE: Students are grouped by the year level for which their OTJ is required.

Step 6 > **Create Spreadsheets**

The Spreadsheet file cannot be created until all reasons for missing OTJs have been entered. It will be saved in the \CM\BOTReportingExports\yyyy\BoT Spreadsheets folder, and will then be opened in Excel. DO NOT upload this file to the MoE. The \Archive folder will contain a copy of the file. Its name includes a date and time. There is a matching 'tempChecklist' file listing all the students who were included in the export file with their OTJ data. This file is available should you wish to refer back to the raw data in the future.

NOTE: Students are grouped by the year level for which their OTJ is required.

As it is possible to perform Step 6 multiple times, the file will be overwritten each time, but the time stamped copies will accumulate in the \Archive folder.

23.5.1 Which students and which of their OTJs are included in the report?

The Simplified Rules

The student must have been enrolled on 1 November of the reporting year. All Deletes and Pre-enrol students are therefore excluded immediately.

- students who left before 1 November of the reporting year are excluded
- students who left after 1 November are included

Students who **first started at any school on or after 1 March** of the reporting year (ie. in their first year of schooling) are excluded from the data. They will appear in the first section of the Check Data report and only their count is shown in the .pdf report uploaded to the MoE and in the header of the relevant Year 1 spreadsheets. (These students have a current year level of 1 or 0.)

For students in Current Year Levels **4 to 8**, the OTJ required for each student is the 'end of year' OTJ for their current year level in the reporting year.
For Students in Current Year Levels **1 to 3** who progress as expected, the required OTJ is dependent on their current year level and on the time in the year that they first started school.

Exceptions when a student has been promoted or held back - refer to the tables below.

Required OTJ for Reporting Purposes - Students **progressing as normal**

	OTJ Required		
School Year Level	Started < 1 Mar	Started >= 1 Mar and < = 1 Jul	Started > 1 Jul
0	_____	_____	_____
1	1	_____	1
2	2	1	2
3	3	2	3
4	4*	4*	4*
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8

*Your school may no longer choose to report on the 'After 3 Years' anniversary date.

For students in **Current Year Levels 1 to 3** who are **promoted or held back**, the required OTJ is dependent on their current year level, their funding year level and when they first started school. The required OTJ is shown in the table below.

Required OTJ for Reporting Purposes- **Held Back** Students

		OTJ Required
School Year Level	Funding Year Level	Started >= 1 Mar and < = 1 Jul
1	1	_____
1	2	1
2	3	2
3	4	3
4	5	4
5	6	5
6	7	6
7	8	7
8	9	8

Required OTJ for Reporting Purposes - **Promoted** Students

OTJ Required		
School Year Level	Funding Year Level	Started > 1 Jul
1	0	_____
2	1	1
3	2	2
4	3	3
5	4	5
6	5	6
7	6	7
8	7	8

24　　Document Mode and Grid Mode

24.1 Overview

In this chapter look at the main display panel and the manipulation of documents in both 'Document mode' and 'Grid mode'.

In document mode, where a document is displayed for a particular student, there are a number of options available to you via the right-click menu.

In grid mode there are more options accessed via the 'Configure' button and filtering which enables you to select a particular group of students from your dossier.

Finally, there are several column functions which include sorting, applying formulae and locking columns.

24.2 The display panel – document mode

On first entry to the program the display panel will be blank. If you select a document from the list on the left then it will be presented in the display, along with various tools to control e.g. movement.

Figure 357: A document displayed

The scrolls comprise those at the bottom of the screen and those down the right side.

Figure 358: The bottom of the screen

At the bottom of the display are the controls which we met briefly in the previous chapter. The dotted button on the left hand end transfers you to 'Grid mode'.

The next display indicates which student you are displaying 'of' the total number of students in the current filter. (There's that word 'filter' again. We shall deal with the filter process in detail shortly)

The next two buttons are the 'Back' and 'Next' buttons which move you from student to student. You can, alternatively, use the key combinations Alt-B and Alt-N to move backwards and forwards respectively though the list of students.

The final part or the display, which takes up the rest of the width of the screen, is the horizontal slide, which allows you to move the document horizontally.

Perhaps a more-used version of this is the vertical slide, shown below, which occupies the entire right of the display.

Figure 359: The vertical slide

The screen cannot display an entire A4 page at once and the vertical slide can be used to move the display up and down. Alternatively, you can drag the page about the screen. Hold down the left-mouse button and drag the document. When you release the button the document will move to the new position.

If you have a multi-page document loaded then the two buttons at the bottom of the display allow you to 'Page up' and 'Page down'. Alternatively you can use the two large left and right buttons in the top row to do the same, as detailed in the previous chapter.

24.3 The document popup menu

An example of this menu is shown below. It is accessed by right-clicking on the document. Occasionally you may experience that the menu is reluctant to appear. This can be rectified by right-clicking on the document in a space which is not devoted to an object placed on the document, eg. from the edge of the document right-click to pop up the menu.
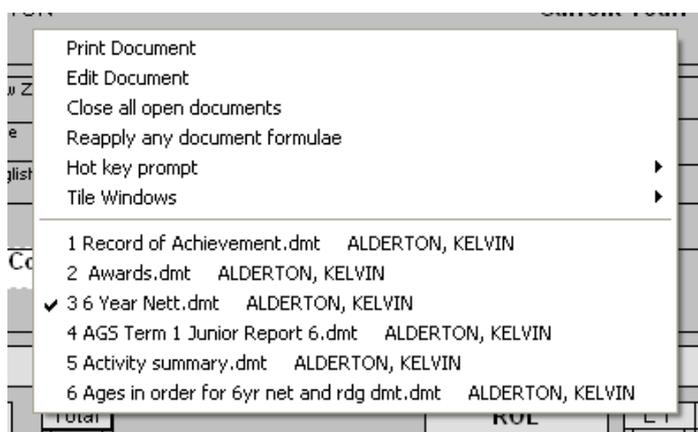
Figure 360: The document popup menu

This menu is split into two sections. The top half provides several functions and the bottom half lists all of the currently loaded documents.

Print document

If you wish to print the current document then you can select the first menu item. This will have the same effect as clicking on the large 'Print' button at the top of the screen. We shall deal with document printing in a later chapter.

Edit document

If you wish to edit the current document then select the second option. This is the same as right-clicking on the document name in the left hand panel and selecting the 'Edit' option – as detailed in the previous chapter. We shall deal with editing and designing documents in a later chapter.

Close all open documents

If you wish to close all of the currently loaded documents then select the third option. A number of other functions, e.g. the 'Options' button and the 'data cube' button at the top of the screen require that no documents be open when you access those utilities. The fastest way to close all open documents is via this poup menu.

You can also close an open document by clicking on the X button in the top right hand corner of the display panel. Be careful not to click the X button in the top right hand corner of the screen by mistake, as this will cause CMTeacher to close.
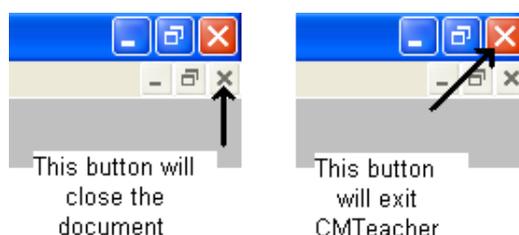
Figure 361: The document popup menu

Reapply any document formulae

As you will discover later in this chapter, it is possible to have one or more formulae connected to the columns in a document. Selection of this menu item will cause all of the formulae associated with the current document to be re-applied.

Hot-key prompt

There are several 'hot' keys available for use when working with a document. You've already met two of them, Alt-B and Alt-N, which are used to move to the previous student and the next student respectively.

The others are :
- Alt-D   which will insert the current date into the text in a currently open word processor box.
- Alt-H   which move the document to its 'Home' position in the top left hand corner of the display panel.
- Alt-R   which refreshes the currently displayed document. Sometimes, when you have used e.g. a popup menu or another function which causes a popup window to appear on the screen then, after its removal, the screen is left 'unpainted' - i.e. a grey empty box where the popup had appeared. This can be rectified by pressing Alt-R to refresh the screen.
- Alt-P or Ctrl-P both cause the print dialogue to appear
- Alt-S   is used to call up the search window which enables you to quickly move to another student. This was detailed in an earlier chapter and is repeated below.
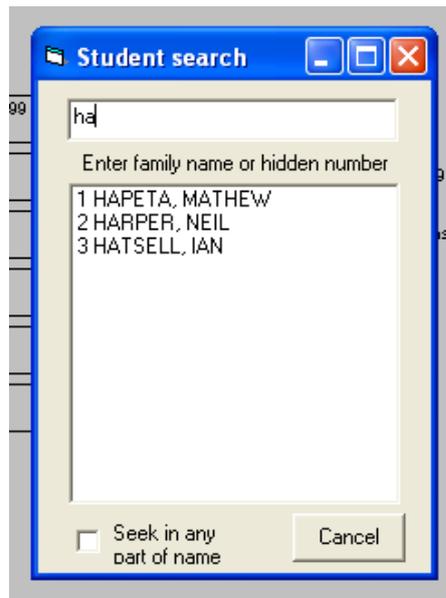
Figure 362: The student search.

Once this window is visible, begin typing the family name of the student whom you wish to view next. In the example above two letters (ha) have been entered and all of the students whose family name matches the letters typed will be displayed. The first nine matches will be numbered from 1 to 9 and you can jump to the selected student by typing the number required. Alternatively you can click on the name of the student you wish to view. In either case, the selected student's document will be displayed.

Alt-O can be used to toggle the font-override feature, detailed earlier, to be switched either on or off.
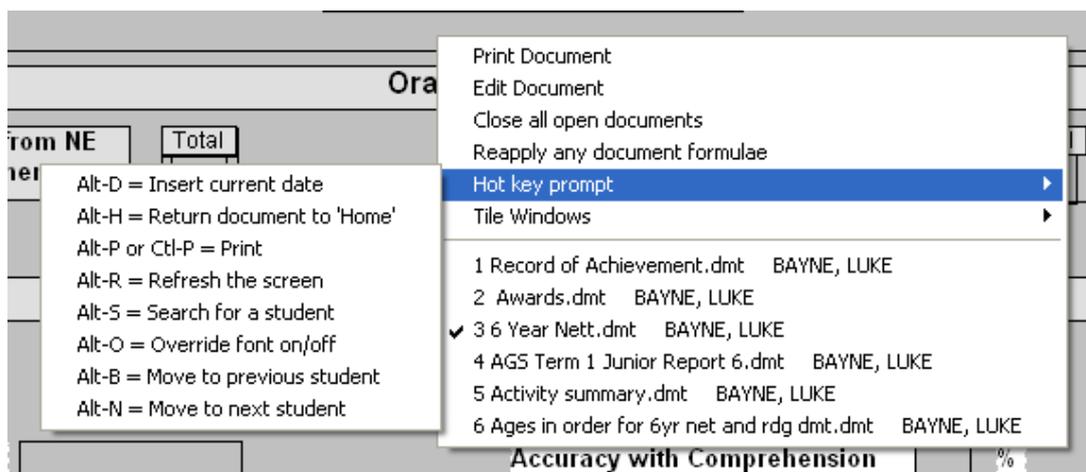
Figure 363: The hot-key popup reminder

Tile windows

I suspect that this feature was added – because we could! It causes all currently open documents to occupy smaller portions of the screen so that they can all be seen at once! How useful!
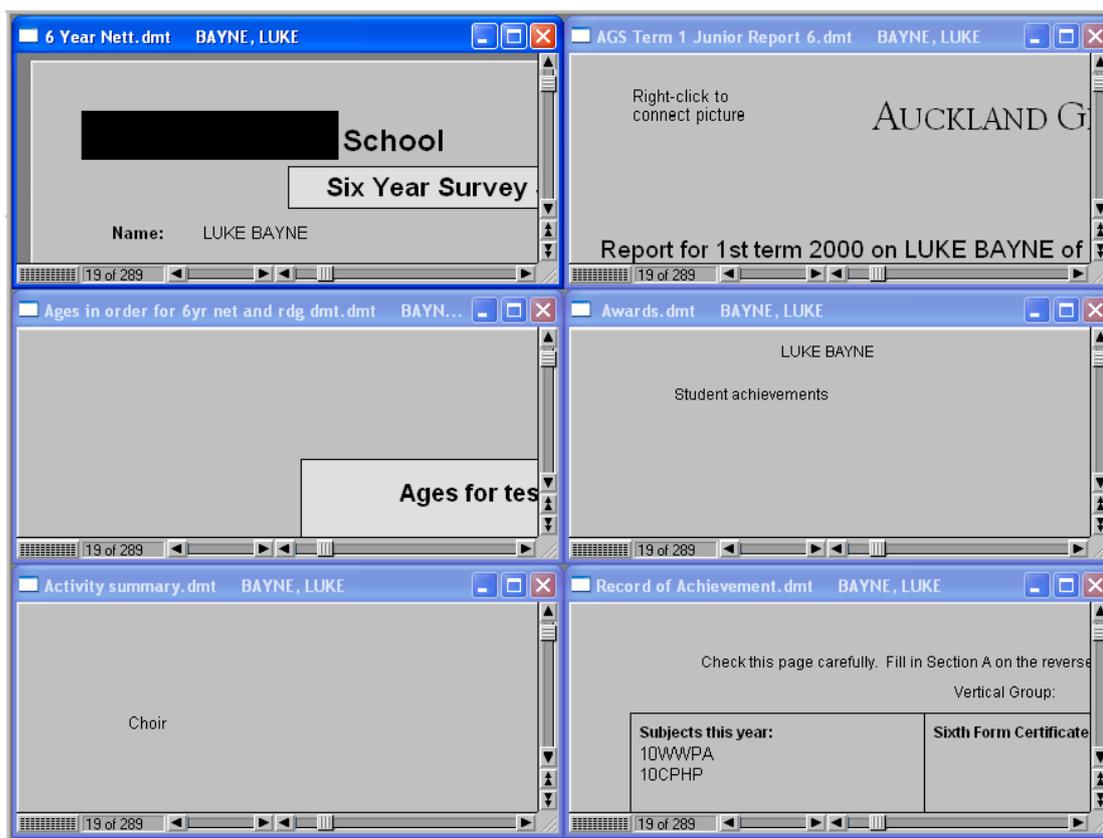
Figure 364: Tiled windows

The remainder (or second half) of the document popup window displays the names of the currently open documents. It should be mentioned, of course, that you can indeed have several documents loaded at once. However, when you move from student to student, ALL of the loaded documents must be redrawn, extracting from the database that information which they require for the current student. The more documents you have open the slower this process will be.

You can make any of the loaded documents the 'top most' or current document by selecting it from this list.

24.4 The display panel – grid mode

We turn our attention now to the other main use of the display panel – grid mode. This is where you can view all of the students in your current filter and all of the columns which are connected to your document.

Grid mode is accessed by clicking on the dashes button in the bottom left hand corner of the panel when in document mode. The main screen for grid mode is shown below, and the current document is our 'Demonstration Maths report' document.
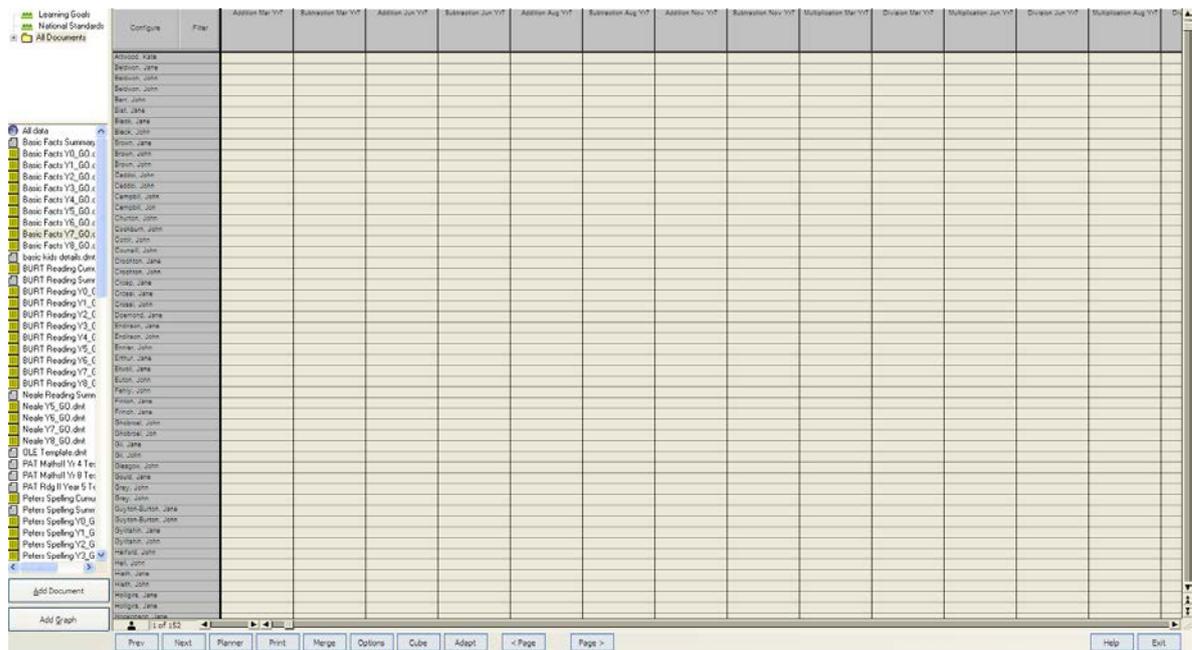
Figure 365: The grid mode panel

Down the left panels display unchanged from document mode.

Across the bottom are the same controls as for document mode with a few changes to their functions. At the left hand end is a 'single student' button which will toggle you back to document mode. The left and right arrows still move you from student to student but these are really irrelevant in grid mode. The horizontal and vertical slides serve to change the rows and columns displayed in the grid by sliding the grid horizontally and vertically respectively in response to movements of the slides.

Down the left hand side of the grid are listed all of the students in your current filter which are, in all probability, the same as those in your dossier. We are getting closer and closer to filtering!

Across the top of the panel are two buttons followed by the columns from the current document.

Figure 366: The top row of the grid

24.5 The Configure button

Click on the configure button and the following window will appear.
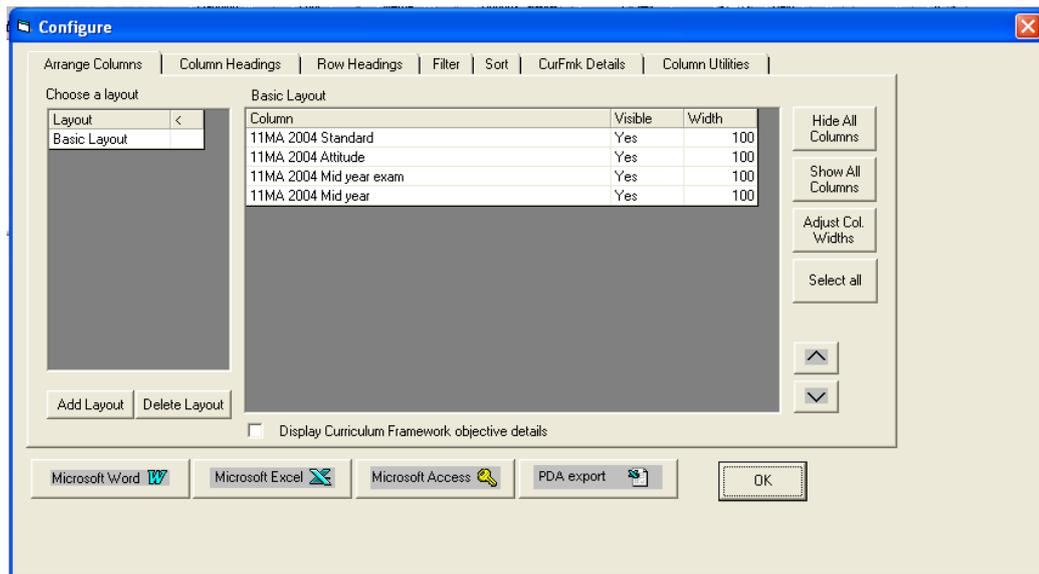
Figure 367: The configuration tabs

Across the top of the screen are seven tabs, each offering a different set of options to do with grid mode and the data therein. Let's take these one by one.

24.5.1 Arrange columns

The first tab allows you to create one or more alternative 'layouts' for each document. Each layout is a different appearance on the grid mode panel. For each layout you can change the width and the order of the columns, even hiding columns if you wish. To create a new layout click on the 'Add layout' button and you will be asked to give your new layout a name….
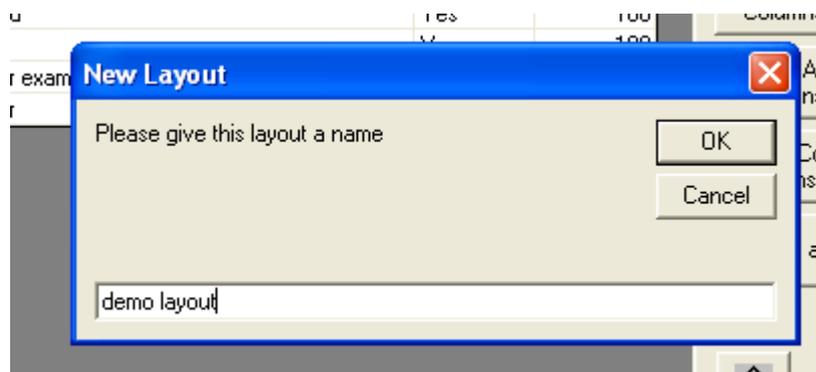
Figure 368: Giving your new layout a name.

… following which you will be asked if you wish to save the changes.
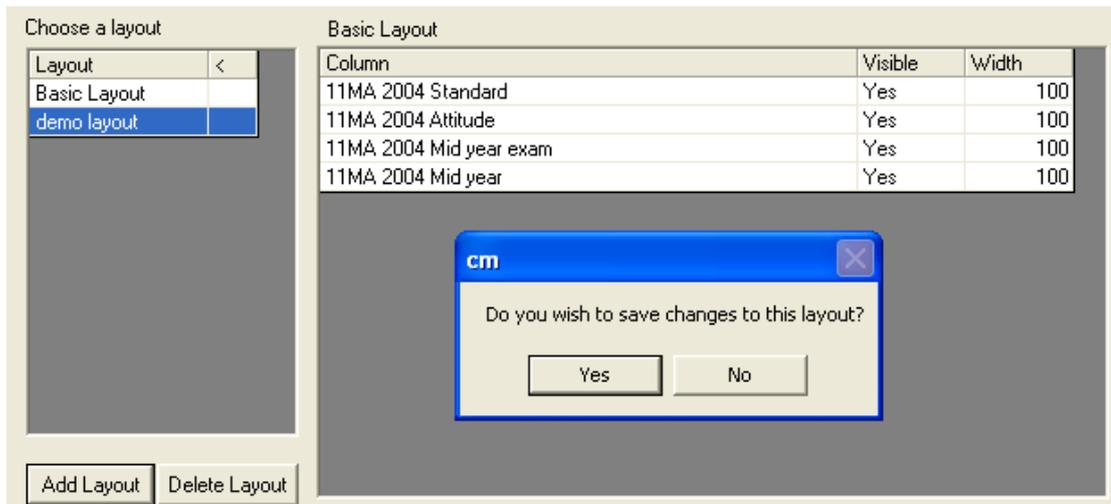
Figure 369: Save a layout's changes?

As an example, we'll hide two of the columns by changing the 'Yes' to 'No' in the visible column – by clicking in each cell with a 'Yes'. We'll also change the width of the second column to 60 pixels. (A pixel is the smallest addressable piece of the screen. Screens range in resolution from 640 x 480 pixels upwards) We'll then move the second column to the top of the list by selecting it and clicking on the 'Up' arrow at the bottom right of the 'Arrange columns' screen.
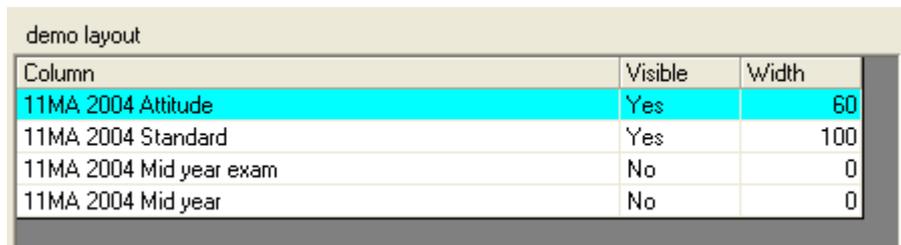
Figure 370: An altered layout

When we return to our document in grid mode (by clicking the 'OK' button on the tab, its appearance will be as shown below.
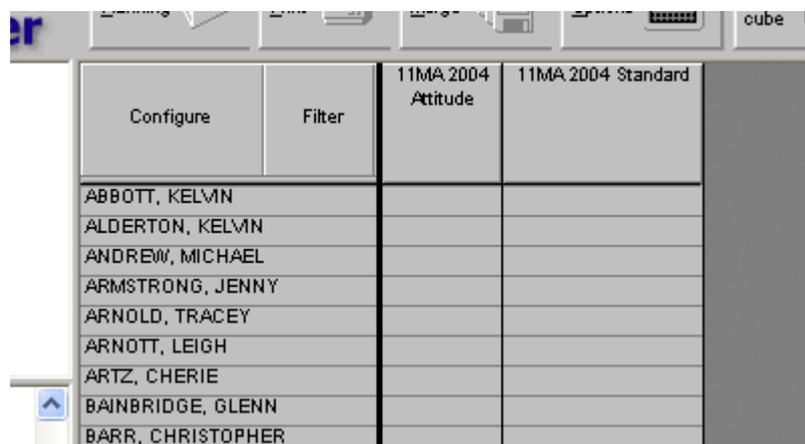
Figure 371: The effect of the layout

As you exit from the document you will again be asked if you wish to save the changes.
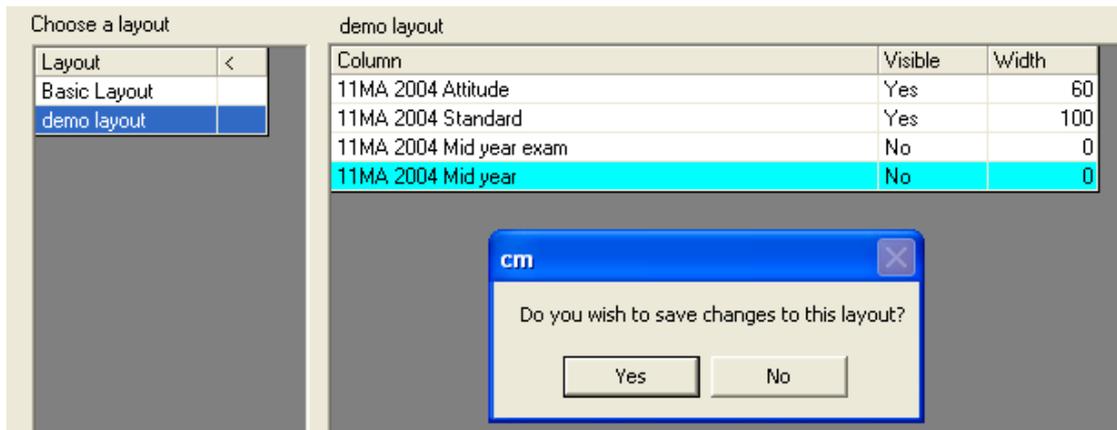
Figure 372: Save changes….

In the illustration above you can see that we now have two layouts : the 'Basic layout' and our 'demo layout'. If we click in the column to the right of 'Basic layout' this will signal to the program that we wish this to be the default one – i.e. the one which will will be active each time we visit the document in grid mode. Any layout can be made the default layout by clicking against it in the second column.
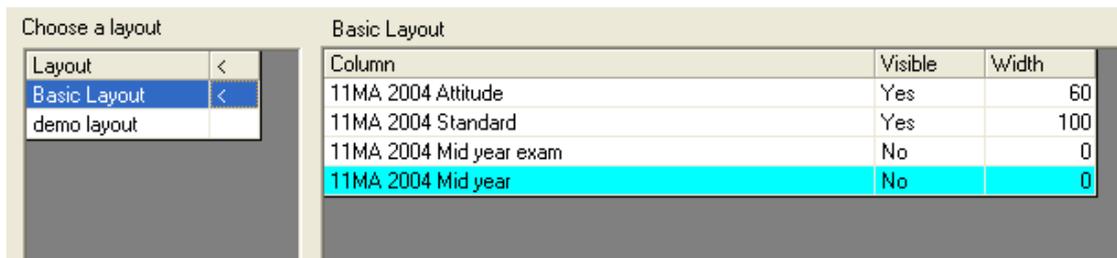
Figure 373: The Basic layout is the default

24.5.2 Column headings

There is a variety of ways in which you can have the columns headings displayed and these are controlled by the settings on the second tab.
You can display from one to four lines of the title and you can also elect to hide or show the formulae bar, the planning bar and/or the column data type. Sometimes its useful to know if a formula is attached to a particular column, and sometimes you might wish to identify the type of each column.
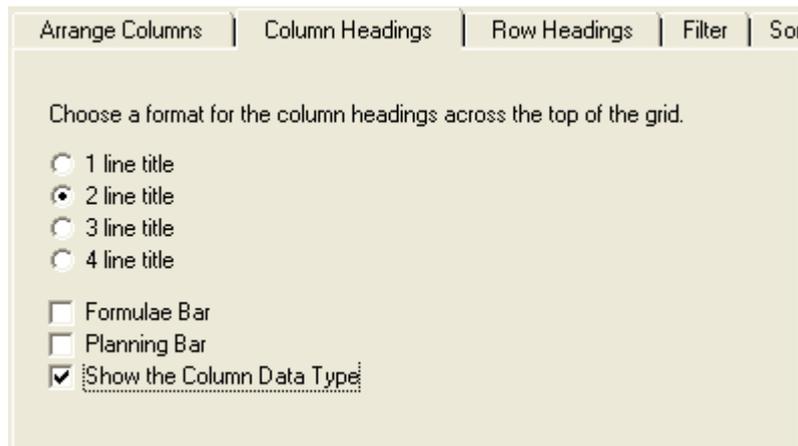
Figure 374: Changing the column headings display

The effect of the settings above is shown below.

Figure 375: The requested displays

24.5.3 Row headings

The third tab allows you to adjust the format in which the students' names are displayed.
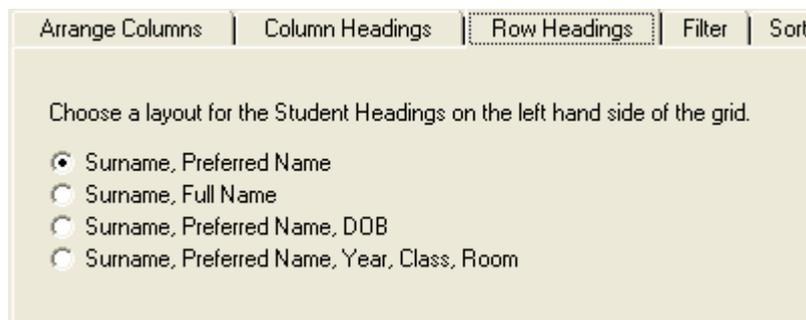
Figure 376: The row heading options

24.5.4 Filter

At last, after crossing its path on several occasions, we come to the filter.
This process allows you to make selections from the students in your dossier (or from the full school if you have entered with administrator rights). The details of the various possibilities within the filter are dealt with in full in an appendix devoted to this topic.

By default the filter is set to all Full time and Part time students. Remember however, that the filter applies to just those students in your currently selected dossier. If you have only year 3 students loaded then filtering for year 4 students will result in an empty display.
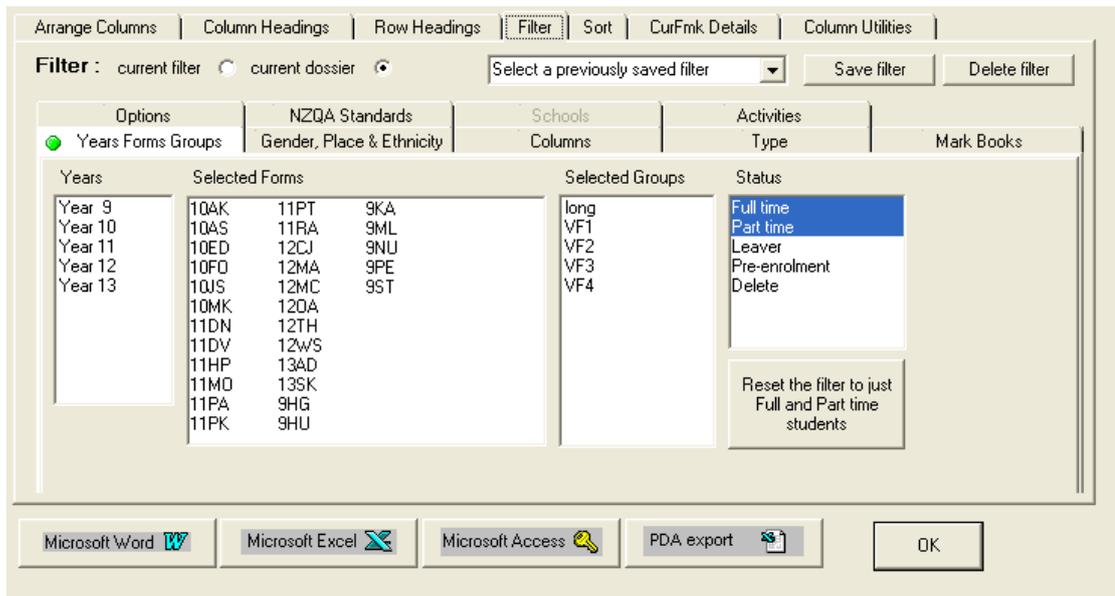
Figure 377: The first tab of the filter

You can also filter a selected column for particular contents using a column filter as described in the next section of this chapter.

24.5.5 Sorting

From time to time you might wish to sort one or more of the columns of the grid mode display. A sort applied to a single column can be performed more easily by using a column sort as described in the next section of this chapter. The sort tab under the 'Configure' button is shown below....
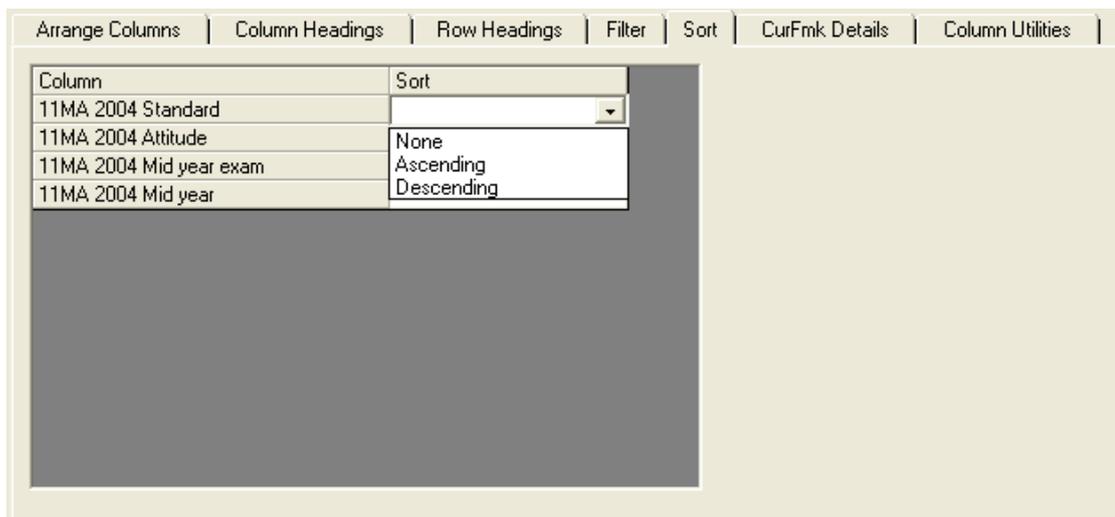
Figure 378: Setting a sort

As an example let's click on 'Ascending' against the '11MA 2004 Standard' column, and click the 'OK' button. The following illustrates the result.

FINLAY, HEATHER	1	63	88	
DICK, KRISTINE	1	75	45	
WILKINSON, CINDY	1	82	75	
LOVE, ANDREW	1	65	37	
MARSHALL, MICHAEL	2	64	84	
EASTHAM, REBECCA	2	85	34	
CLEATOR, BRENT	2	65	45	
CORSKIE, SHANE	2	46	65	
WESTERBY, MICHELLE	2	84	65	
LEPPER, CHARLES	2	75	47	
BENTLEY, ANDREW	2	60	65	(...)
NORGROVE, DEON	2	34	63	
REID, ADRIAN	3	45	51	
McHUTCHON, REX	3	53	74	

Figure 379: The results of the sort

24.5.6 Curriculum Framework settings

Before we visit this tab we must first have a look at a document which includes columns of the type 'Curriculum Framework'. The following is a small part of one such document. This school has set up three levels of progress towards Curriculum Framework objectives : Begun, Achieved and Mastered, and you can see the letters relating to these in the boxes alongside each objective. Once such box has been clicked and, as a result, a small popup display reveals that this student 'Began' this objective on 10/05/2004. Should the student have now Achieved or Mastered the objective you simply click in the area under the relevant level.
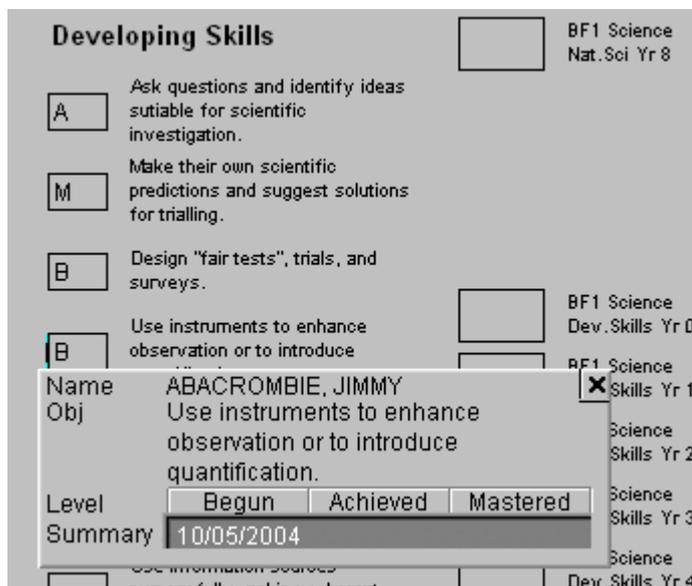
Figure 380: Curriculum Framework objectives

Switching to grid mode we can see that many students have results recorded for them. One in particular has been chosen and the small popup box again appears, in grid mode, allowing you to alter the entry.

Figure 381: Curriculum framework columns in grid mode.

Please note: If a column is a Curriculum Framework column, but dedicated to Exemplars, then only one 'level of attainment' – Achieved – will be offered via the popup box.

Now that you have seen these possibilities it is time to return to the 'Curriculum Framework' tab, which is shown below.

Figure 382: The Curriculum Framework options

On this tab you can alter the date which will be recorded against each entry as you click to enter levels of progress on students. The button in the centre allows you to quickly restore the current date. At the bottom of the screen is a tick-box which allows you to elect to have the small popup window 'frozen' in the top left hand corner of the screen while you use it to make entries all over the grid mode display.

The alternative is that the popup screen will move around grid mode with you as you move from cell to cell. Determine which setting you prefer and set it accordingly.

24.5.7 Column utilities

The final tab allows you to do two things:

1. You can remove all of the data from select column(s) by selecting them then clicking 'Proceed'.
2. You can exchange the formulae connected to two columns by selecting them both and clicking 'Proceed'. (Yes, one school did ask for this!)
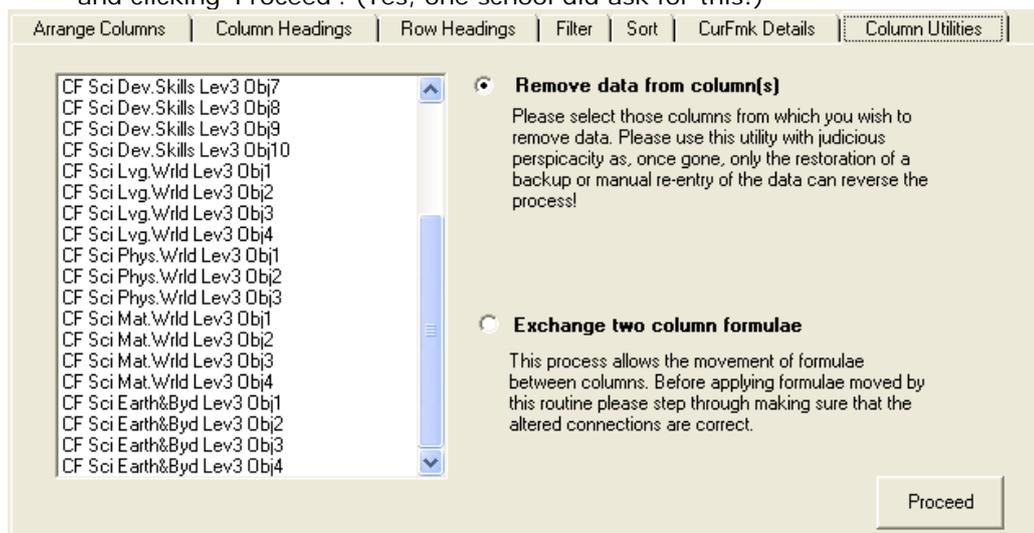
Figure 383: The column utilities

Before we leave the 'Configure screen' we must deal with the row of buttons at the bottom of the screen.
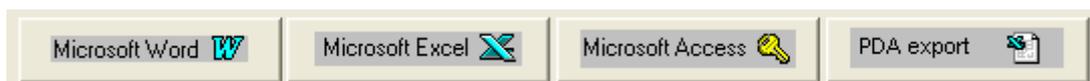
Figure 384: The export buttons

CMAdmin offers a wide range of export formats and processes. CMTeacher allows you these four, based on the current document – in this case a suitable one has been selected.

24.5.8 Microsoft Word

Figure 385: Exporting data from selected columns

The first step in the export process is to select the columns for which you wish to export data. This is done via the screen above. When you click 'Proceed' you will be asked to specify the destination and name of the file to which the data will be exported. This file will be given the extension '.cdl' – meaning 'comma delimited'. These files can be used as the basis of a mail merge into Microsoft Word, or can be loaded as a text file into a Word document.

The screen below illustrates the destination file dialogue.

Figure 386: Giving your file a name and destination

Click 'Save' and the export process will proceed, illustrated by …

Figure 387: An export under way

.. and, at the conclusion of the process, a message will assure you that things have happened.

Figure 388: A successful export.

24.5.9 Microsoft Excel

The export to excel follows exactly the same procedure, except the the extension of the file will be '.csv' (comma separated variables) and, at the end of the process, your screen will load Excel and display the contents of your file, as shown below.

Figure 389: An export to Excel

24.5.10   Microsoft Access

The third export possibility is to Access and, again, the procedure is virtually the same, except that, this time, the file extension is '.mdb' (Microsoft data base) and, at the end of the process you will be presented with the Microsoft Access screen, displaying the exported table of data.
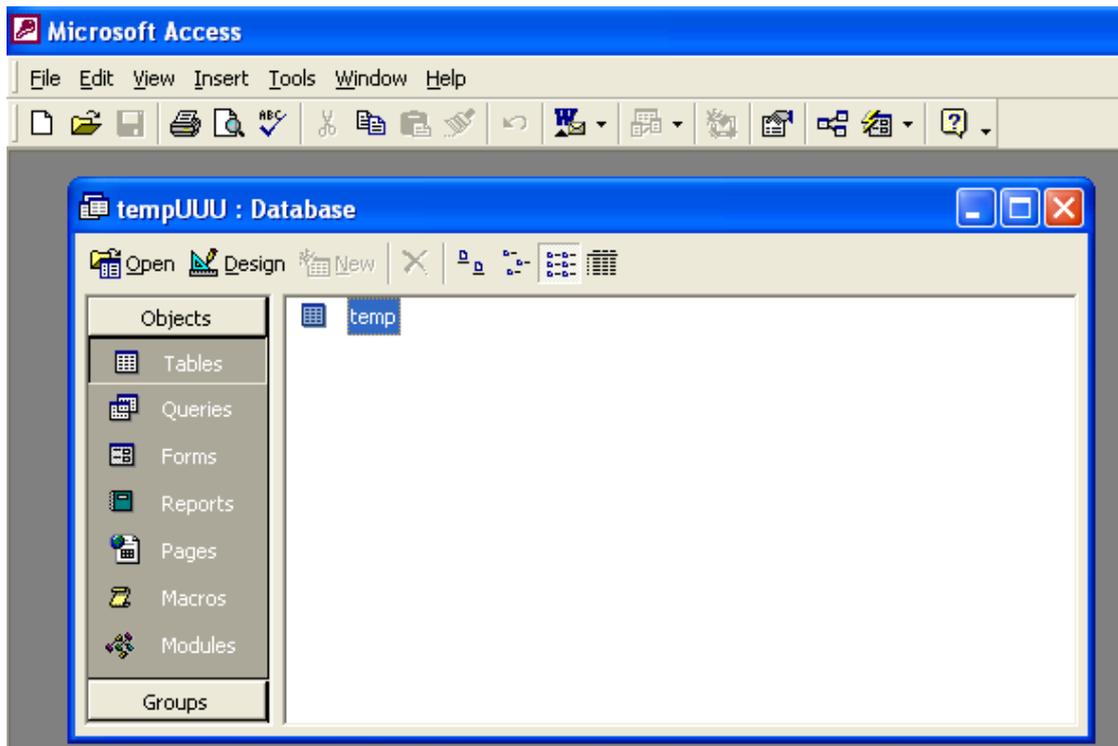
Figure 390: An export to Access

Double click on the table named 'temp' and it will be opened to reveal the data, as shown below.
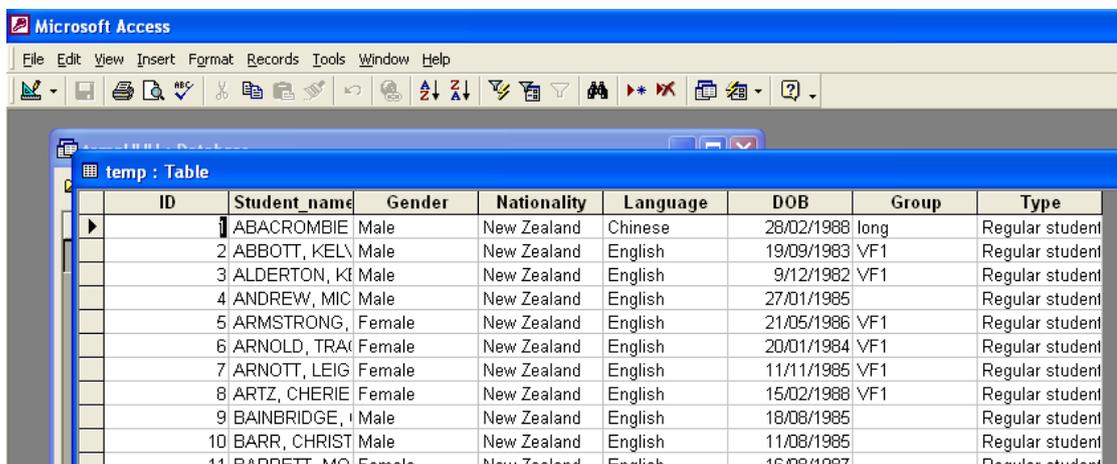
Figure 391: The data in Access

24.5.11 PDA export

The final export option is to a Personal Digital Assistant. The full notes for this were printed earlier in this user guide and are, again, available via the button labelled 'Print PDA Help file'. The result of the process will be a small export file of data in the nominated directory. You can then synchronise with your PDA to have the file transferred.
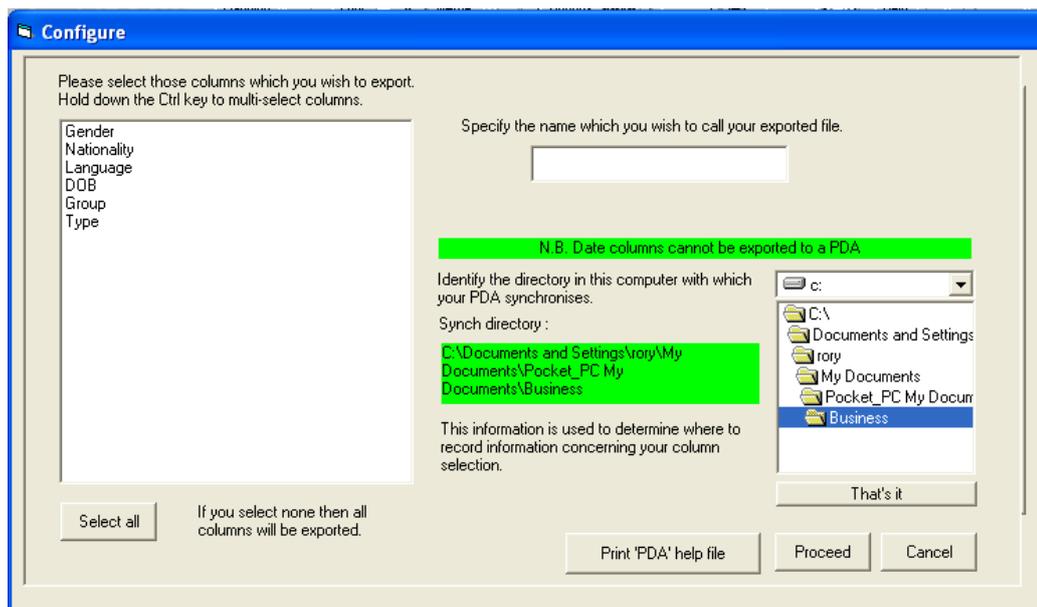
Figure 392: The PDA Export screen

24.6 The Grid Mode menus

If you right-click in a column heading area then a popup menu will appear offering a variety of functions. This menu is illustrated below.
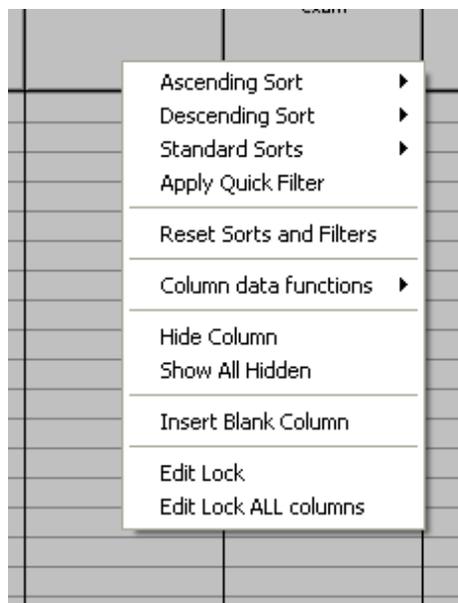
Figure 393: The column menu

The first four items offer a variety of column sorting options. Each of the first two allow you to sort a column Alphabetically or Numerically. (Remember that '9' comes after '10' if you sort alphabetically.)
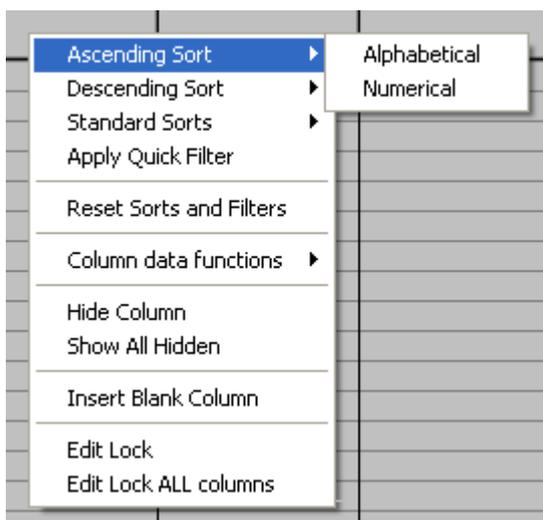
Figure 394: Sorting options

An example of a column sorted alphabetically is shown below. You need to be a little careful in sorting. If you have a number of blank entries then these can, in some circumstances, be sorted to the top or to the bottom, leading you to think that you have lost your data! Similarly, if the sort is done while the right hand slide is NOT at the top then the same thing can happen, with some results sorted to the top of the column up out of sight. This can also happen when you apply a column filter – dealt with further below.

Figure 395: A sorted column

There are five standard sorts available, frequently used in primary schools.
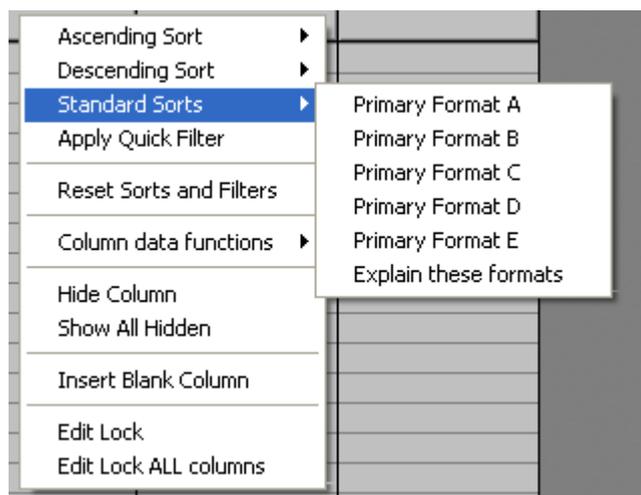
Figure 396: Primary sorting formats

The final option on the list offers an explanation of these sorts
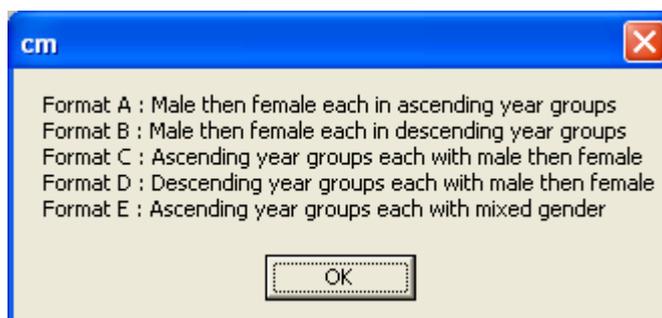
Figure 397: The sorting explanation

Next we come to the quick filter. The display of this will depend on the type of column you are in when you right-click to bring up the menu. To save space four of these have been combined to a single illustration, shown below.

The first applies to a text column and allows you to seach for entries which match, are before, are after, contain, are blank, are not blank or lie between two specified text entries.

A similar, but greater, range of possibilities is available for the second type of column – those containing numbers.
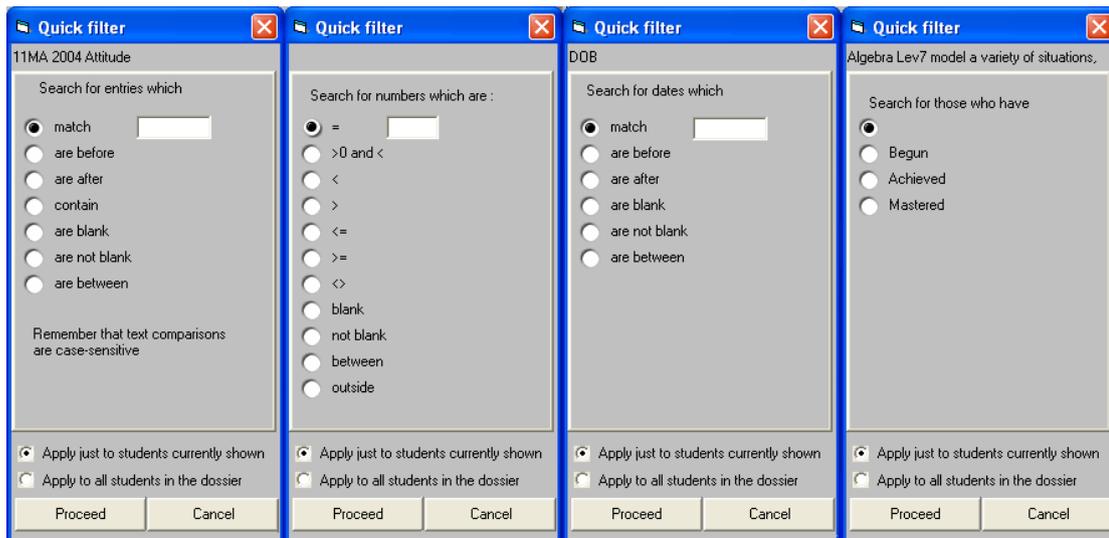
Figure 398: Four quick filters

The third applies to dates, and the fourth to Curriculum Framework columns. Note that these filters can be used to successively identify smaller and smaller groups of students. At the bottom of each filter screen you can elect to either apply the next filter to the currently displayed students or to all of the students in your dossier.

Next we come to the column data functions, of which there are a number, as illustrated below.
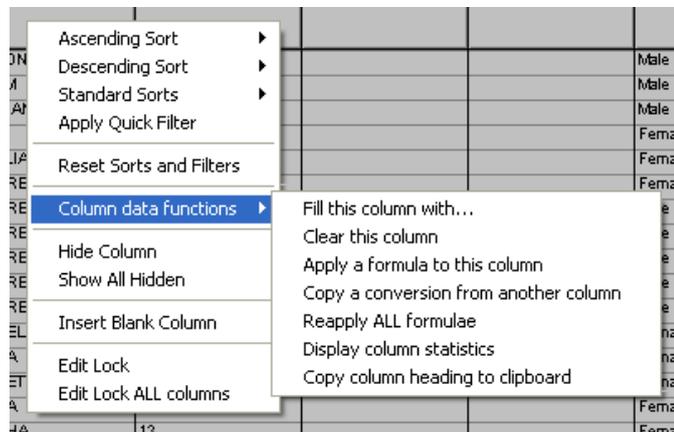
Figure 399: The column data functions

24.6.1 Fill this column with …

The first of these allows you to fill the selected column with data. Again, what you can fill the column with depends on the type of column and four examples of different column types are shown below.
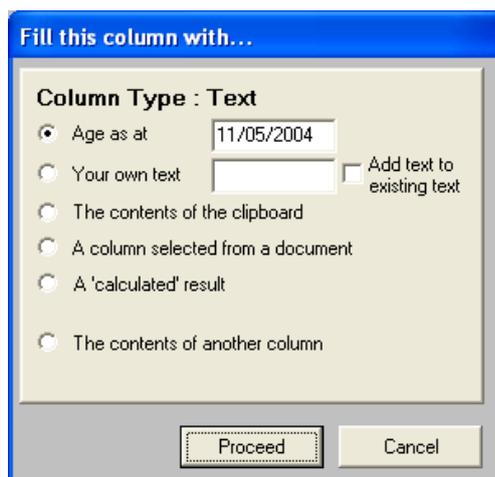
Figure 400: Fill a text column with…

If you attempt to fill one of the basic ten columns then you will receive the following message.

Figure 401: You cannot fill the basic ten columns

The basic ten columns are :

1. Family name
2. First names
3. Preferred name
4. Year
5. Horizontal grouping (Class, Form etc)
6. Vertical grouping (Room, House, Tutor group, Whanau etc)
7. Date of Birth
8. Status
9. Gender
10. Ethnicity

None of these may be globally filled with the same entry.

Filling with a text entry has the options shown in the illustration above. These are :

- The student's age as at the date provided. This will be in the format yy.mm.
- Your own text (which can be appended to any existing text)
- The contents of the Windows clipboard
- A comment selected from a document
- A 'calculated' result. These are data items derived from other items and may be selected from the 'Code insertion' tabs (see the relevant appendix). Examples of these are Time at this school, Total Level 1 credits, Age as at Jan 1st, their form teacher etc. An example of a code insertion screen offering some 'calculated results' is shown below.
- The contents of another column

Figure 402: An example of a 'Code insertion' tab

A second type of column which can be filled with nominated data is a Date column and the 'Fill with' window is shown below.

Figure 403: Fill a Date column with ...

If your column is a popup column then the possible entries are offered, as shown below. This example display is for a column connected to the simple 'Yes / No' popup.
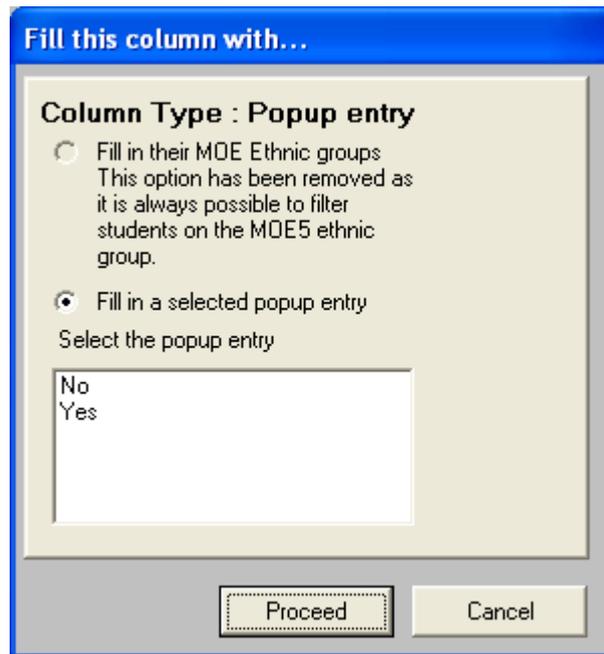
Figure 404: Fill a popup column with …

Next we come to a numeric column. This has the three possibilities shown below. If you elected to fill the column with the contents of another column then you would, of course, select another column holding numeric data.
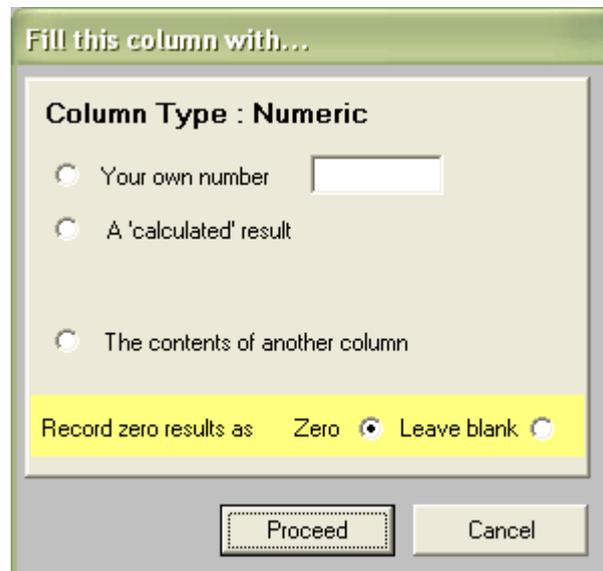
Figure 405: Fill a numeric column with …

You will notice the option at the bottom of the screen to record zero results are either '0' or leave them blank.

24.6.2 Clear this column

If you choose the second column data function you will be able to completely remove all data from that column for the displayed students. As this is a somewhat more drastic step, on the scale of things, you are asked to approve this action by typing 'Yes' in full, as shown below.
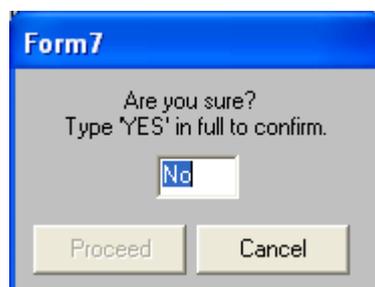
Figure 406: Deletion of data from a column

24.6.3 Apply a formula to this column

There is a variety of formulae which can be applied to the data in a column, with the results of the calculation being entered in to another column. The next chapter will be devoted to column formulae. In the meantime, here are the formulae which may be applied to a numeric column.
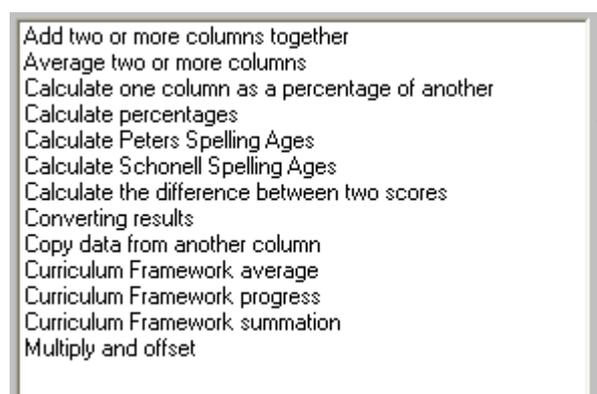
Figure 407: Column formulae

24.6.4 Copy a conversion from another column

This is one of those unusual possibilities which a school has asked for, although we can understand why. As you will see in the chapter on column formulae, a conversion is a relatively complex formulae. It allows you to specify a range of possibilities from the source column and the matching results which you wish to have entered in the destination column. Naturally, if you have created a complex conversion formulae and wish to apply it to other columns then this particular function is very time-saving.

24.6.5 Reapply all formulae

If several columns in a grid mode display have formulae attached then the selection of this option allows you to have all of these carried out – sequentially working from the left-most column.

24.6.6 Display column statistics

In case you have forgotten what the column data functions menu looked like – here it is again – to refresh your memory.
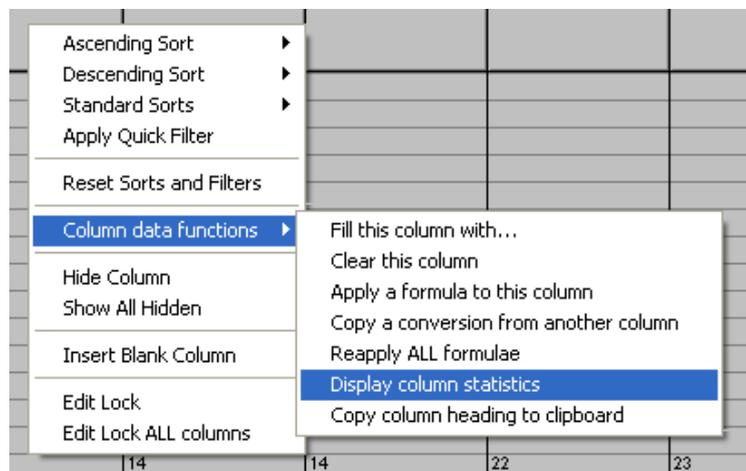
Figure 408: The column data functions

If you select the second to last then the bottom of the screen is temporarily replaced by three summary rows which display, as shown below :

- The number of data entries
- Their mean
- Their standard deviation
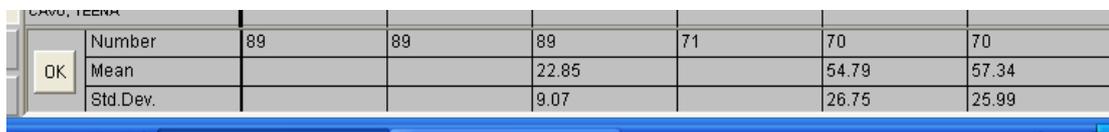
Figure 409: Column statistics displayed

When you have finished viewing these, click the 'OK' button at the left hand end to hide the display.

24.6.7 Copy the column heading to the clipboard

This is another of those 'You asked for it' functions. One of the 'Fill a column with' options is 'The contents of the clipboard'. Some schools have arrangements where this is a useful function. If you select it then the current contents of the clipboard are displayed for you to ensure that they meet your expectations.
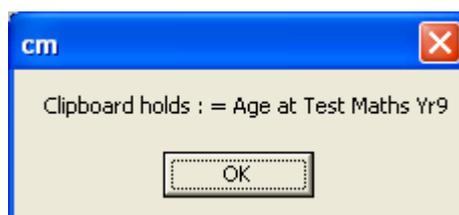
Figure 410: The clipboard contents

The next two functions allow you to temporarily hide individual columns and to then have all of the hidden columns re-displayed.
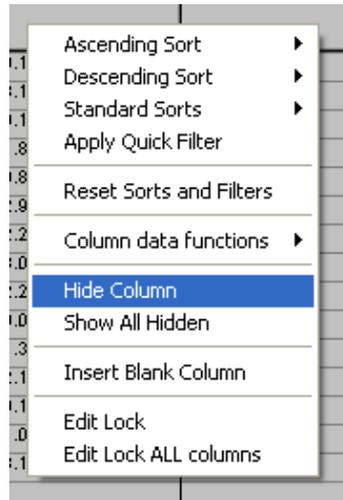
Figure 411: Hide and redisplay columns

The next possibility is to add a 'Blank' column after the current column. This can be used to separate groups of columns and an example of a blank column is shown below.

Figure 412: The addition of a blank column

The last two functions on the column popup menu relate to the locking of data in one or more columns. If you have been given the right to do so then you can click on the penultimate option and a small lock will appear in the top right hand corner of the column heading, as shown below.
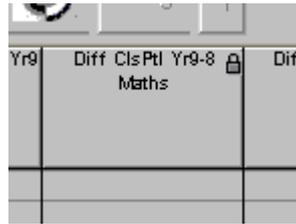
Figure 413: The column lock

If anyone subsequently attempts to change or enter data into any cell in a locked column the following message will be displayed.

Figure 414: A locked column

This final thing which you can do in grid mode is to resize the columns directly by using the cursor to drag the divider between them while up in the heading area. The screen capture below illustrates the effect of narrowing several columns.

Configure	Filter	Date Sat Maths Yr9	Age at Test Maths Yr9	Raw Score Maths Yr9	Scaled Score Maths Yr9	Class Percentile Maths Yr9	Age Percentile Maths Yr9	Clas
BENNET, SHANE		9/08/1999	12.11	23	31	56	67	5
BENTLEY, ANDREW		9/08/1999	20.1	13				
BIGNELL, GREGORY		9/08/1999	21.0	12				
BIRD, Jennifer		9/08/1999	13.1	14	14	22	23	3
BRAMWELL, KARL		9/08/1999	12.7	32	39	81	86	7
BROWN, LEIGH		9/08/1999	11.04	23	23	56	55	5
BURR, DELSON		9/08/1999	13.2	14	14	22	23	3
CAMPBELL, GRANT		9/08/1999	12.7	8	11	2	5	1
CLARK, BRUCE		9/08/1999	12.9	17	24	33	42	4
CLOSE, SCOTT		9/08/1999	12.7	15	21	26	33	4
COLLIE, ANNA		9/08/1999	13.6	26	26	67	61	6
COOKE, PAULINE		9/08/1999	13.6	28	28	73	67	6
CUNLIFFE, MICHAEL		9/08/1999	13.5	35	35	87	87	7

Figure 415: Adjusted column widths

Finally, as you leave grid mode then, if you have made changes which affect the appearance of the grid (changed column widths, hidden columns, added blanks etc) then you will be asked if you wish to have these changes saved as part of the current layout definition.
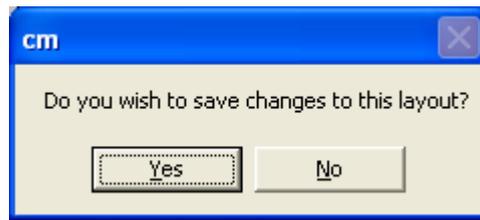
Figure 416: Save the layout changes?

Following the appearance and manipulation both in document mode and in grid mode, following is the various column formulae before moving on to the process of designing documents.

25   Column formulae

What's in this chapter?
1   Overview
2   The formulae for text columns
3   The formulae for numeric columns

25.1 Overview

In this chapter look in detail at the various formulae which may be applied to data in columns from grid mode. Some formulae apply only to numeric columns and others apply to only text columns and some apply to both.

In each case we will look at:
- the formula to be selected
- the grid mode screen before the formula is applied
- the specification of the formula
- the grid mode screen after the application of the formula

If should be noted that, in all cases, the results of applying a formula will be stored **in the column to which the formula is applied.** This can be a little different to some of the formulae in electronic markbooks, which we will meet later.

Once a formula has been selected and specified for a column its details are stored against that column and it can easily be reapplied at a future date. We've already met a column data function which allows you to 'Reapply all existing formulae'.

25.2 The formulae for text columns
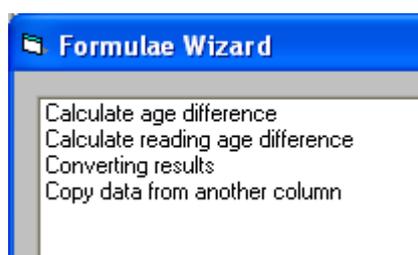
Figure 417: The text column formulae

25.2.1 Calculate age difference
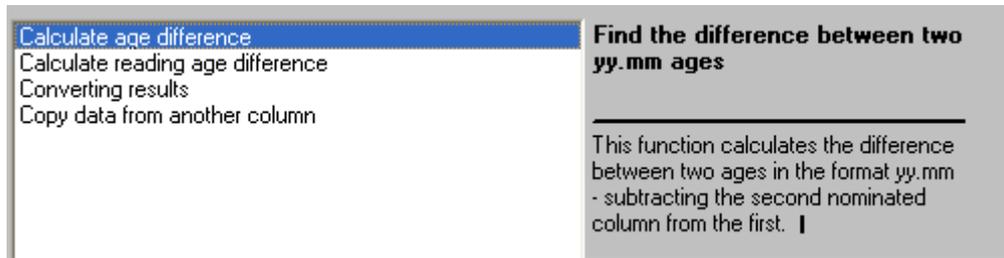
Figure 418: Calculate age difference

The purpose of this formula is to calculate the age difference between ages in two other columns. The two ages must be in the form yy.mm and the formulae subtracts the second column from the first. The two data columns before applying the formula are shown below.

Figure 419: Two age columns

The first step is the selection of the column FROM which you wish to subtract the second. In the illustration below I have selected my second age column as I wish to subtract the first of the two from the second in order to find the INCREASE in age.
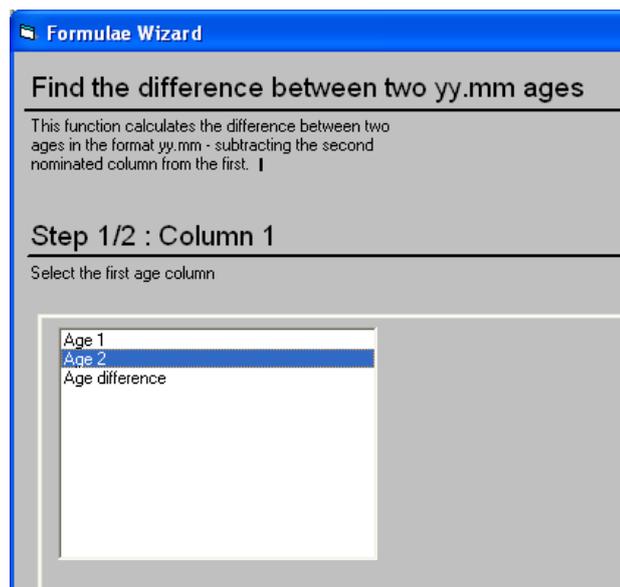
Figure 420: Selection the column you are subtracting FROM

Step 2 is the selection of the column to be subtracted.
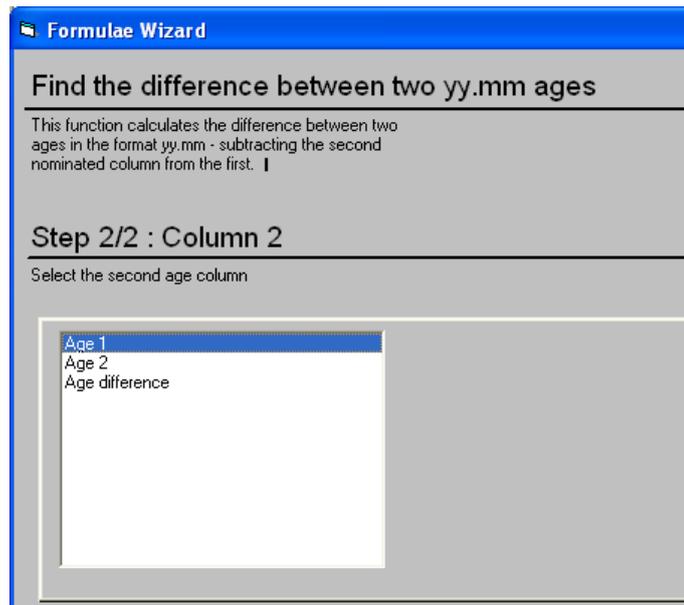
Figure 421: The column to be subtracted

In the example above I've selected the FIRST of my two columns as I am subtracting the first FROM the second. Proceeding, the various formula step specifications are checked to see that they contain valid entries. If so then the following message is displayed.
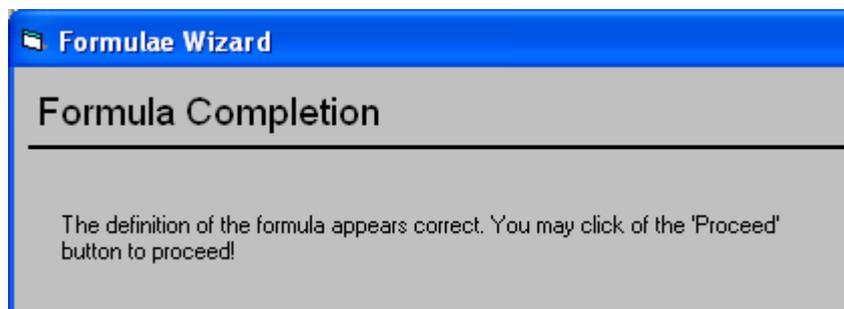
Figure 422: OK to proceed

If an existing formula is found attached to the column you have selected then the following message will appear, asking if you really do wish to replace the existing formula.
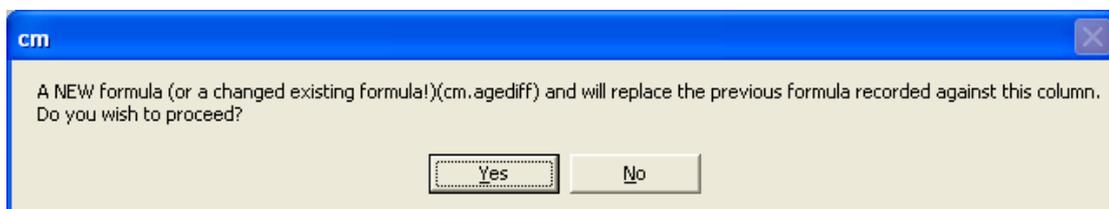
Figure 423: Overwriting an existing formula

Proceeding, the results appear, as shown below.

Figure 424: The applied formula

25.2.2 Calculate reading age difference

The purpose of this formulae is to calculate the difference between a set of reading ages and the students' chronological ages as at a specified date.
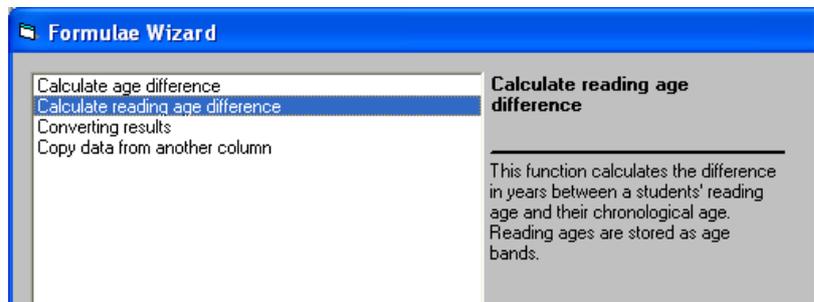
Figure 425: Calculate reading age difference

In the example below, we have a column containing some reading ages.

Figure 426: The screen BEFORE

The only step of the specification is to nominate the date at which the students' chronological ages are to be calculated.
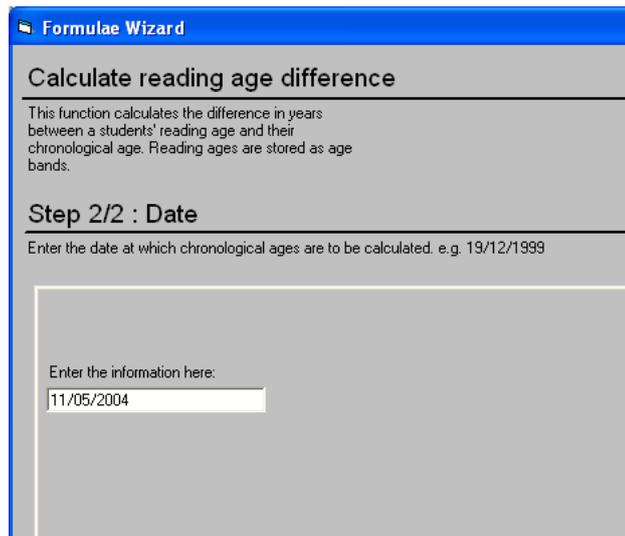
Figure 427: Specifying the calculation date

The result of the application of the formula is shown below.

Figure 428: The screen AFTER

25.2.3 Converting results

This is one of the more complex formulae. It allows you to examine the entries in a particular column and convert them to text entries in the column to which you are applying the formula.
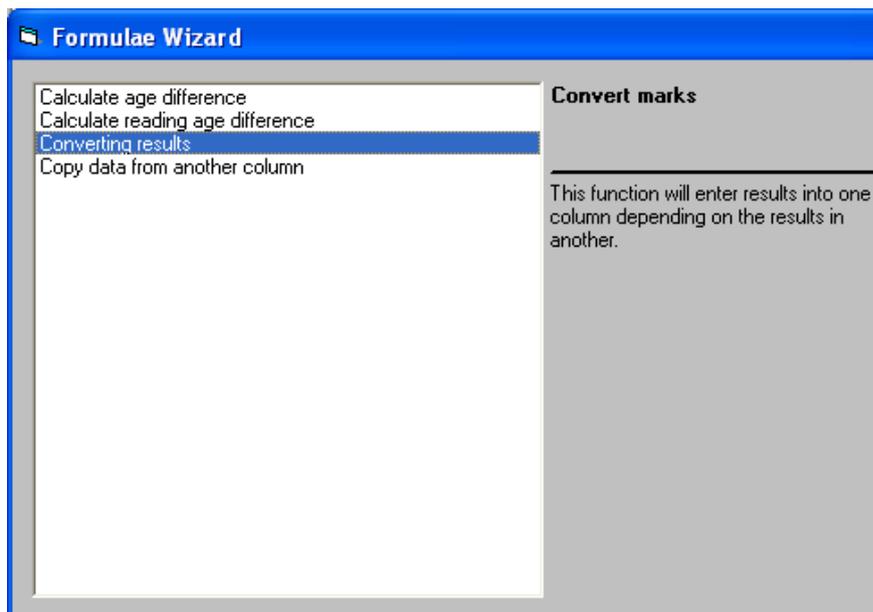
Figure 429: Converting results

The screen below shows the column which we are going to convert. It contains a number of colours – presumably reading groups.

Figure 430: The screen BEFORE

The first step is to select the column containing the data to be converted.
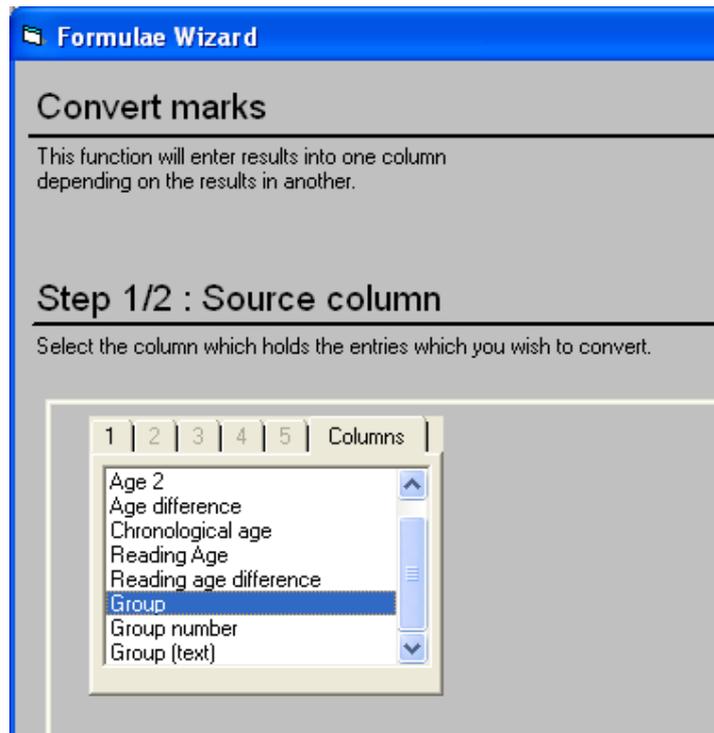
Figure 431: Selecting the base column

The details of the conversion are shown below. We wish to convert any entries of 'Red' or 'Blue'
to the group '1a', any entries of 'Green' or 'Yellow' to the group '2a', any in 'Black' to '2b' and
any others to '3'. Note the use of the word 'else' to refer to 'any others'. You can also use the
word 'copy' to instruct the formula NOT to change the corresponding entry or entries. If you
wish to specify a range (of marks – presumably from a numeric column) then you do so using
the word 'to' e.g. 5 to 9.9
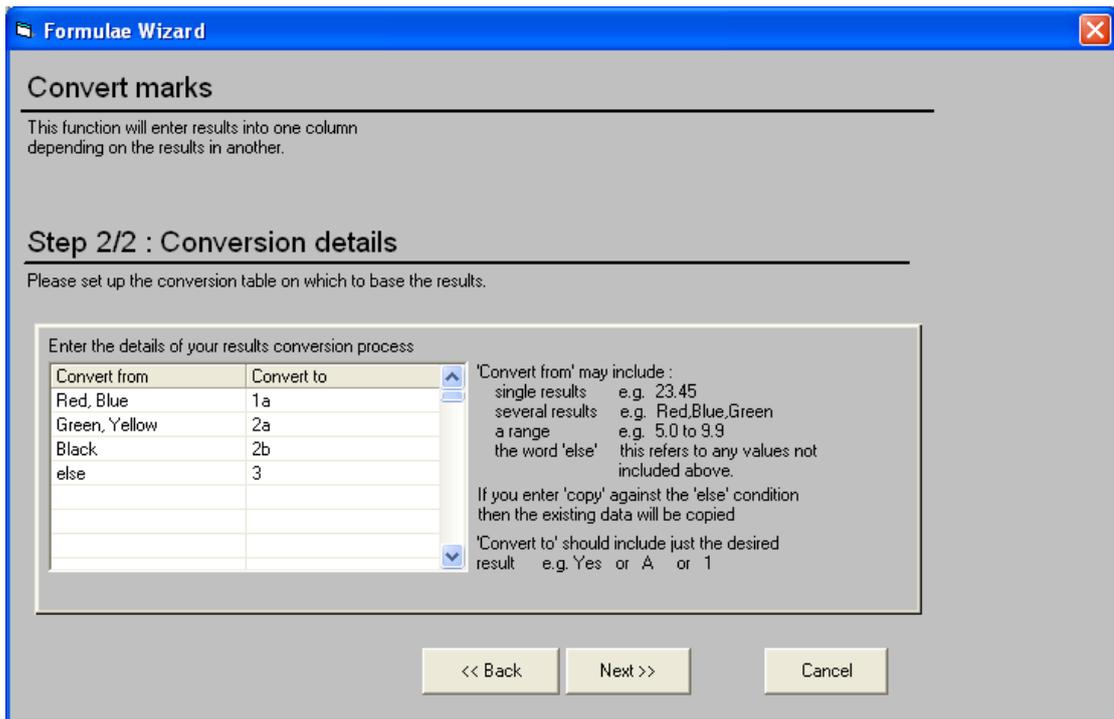
Figure 432: Specifying the conversion details

The results of the conversion are shown below.

Figure 433: The completed conversion

25.2.4 Copy data from another column

This formula allows you to copy the data from any other column to the selected text column.
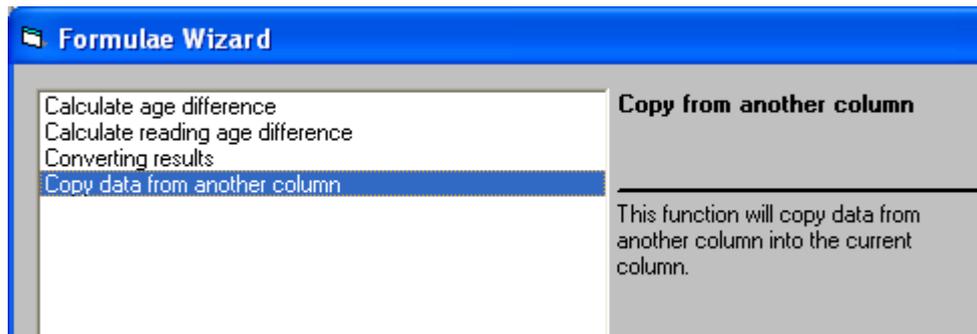
Figure 434: Copy data from another column

Before we apply the formula our column is empty. Its title indicates that the intention is to copy the students' ethnicities into this column.

Figure 435: The screen BEFORE

The only specification step is to nominate the column from which we wish to copy data....
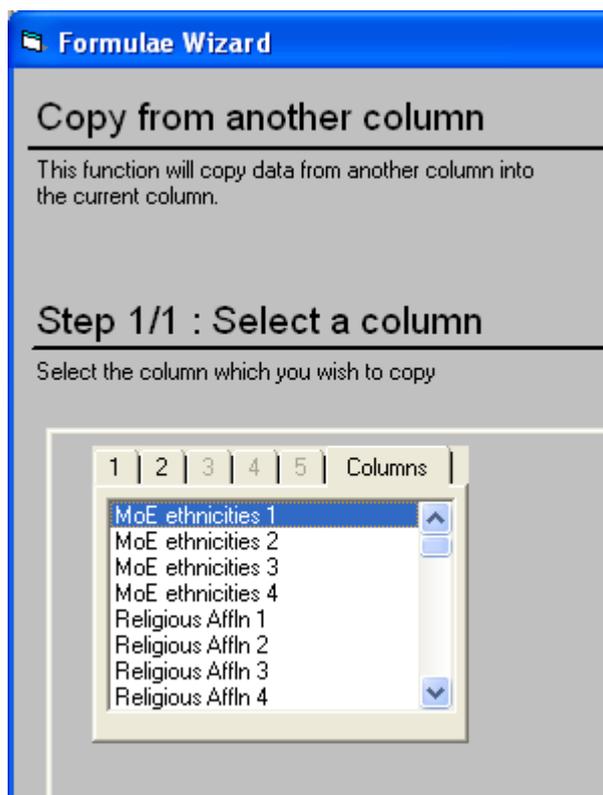
Figure 436: Copying ethnicities….

… and the results of the process are :

Figure 437: The copied ethnicities

25.3 The formulae for numeric columns

There are thirteen formulae which can be applied to numeric columns. Some are very specific and some are a little more general in their application.
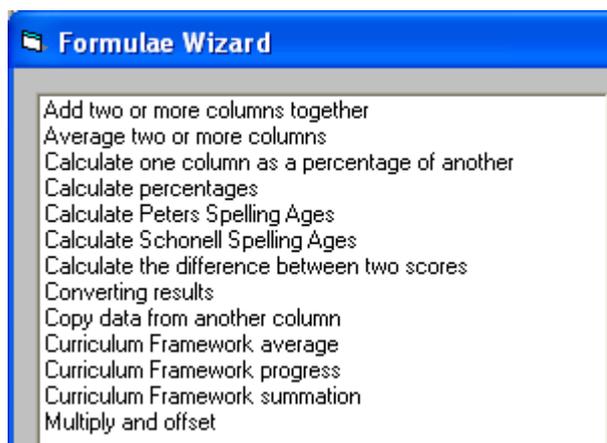
Figure 438: The formulae for numeric columns

As with those for the text columns we shall look at the formula selection, the 'Before' grid mode, the specification of the steps and the 'After' result.

1. **Add two or more columns together**

The purpose of this formulae is fairly obvious. It allows you to add several columns together and have the totals recorded in the column to which you apply the formula.
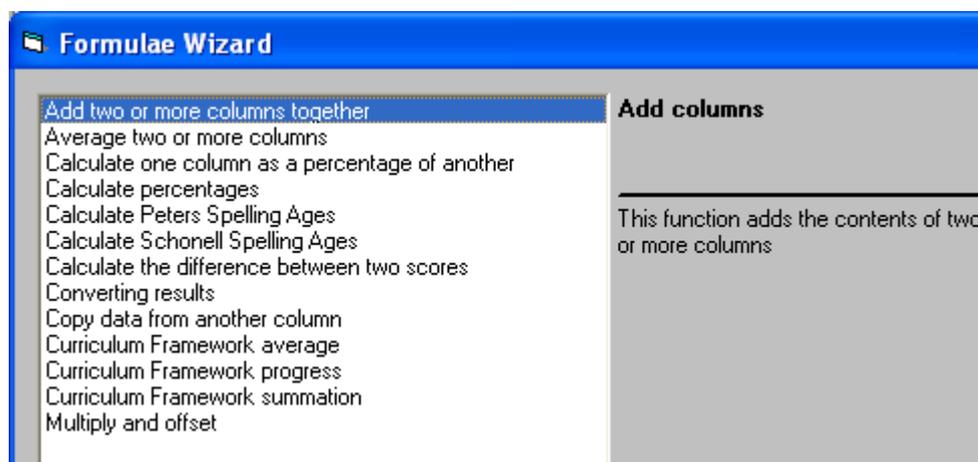
Figure 439: Add two or more columns together

Two number columns have been created and some numbers entered, as shown below.

Figure 440: The 'Before' columns

The first step of the formula is to select the columns which are to be added together.
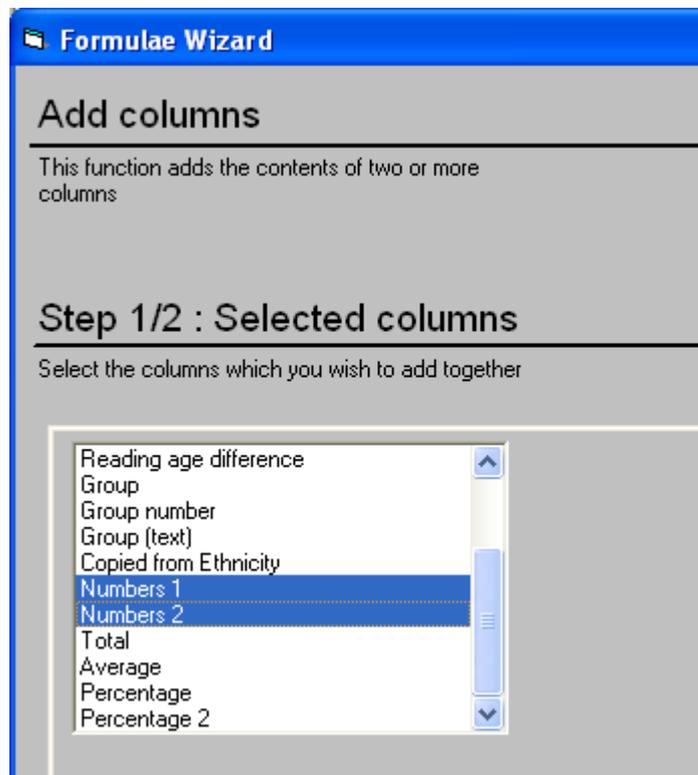
Figure 441: Selecting the columns to be added

Now indicate how you wish to have blank entries treated. If a blank is found it may, depending on the purpose of the addition, invalidate the addition process and you can elect to have such totals left blank.

Alternatively, the blanks can count as zeroes, and the additions can proceed regardless.
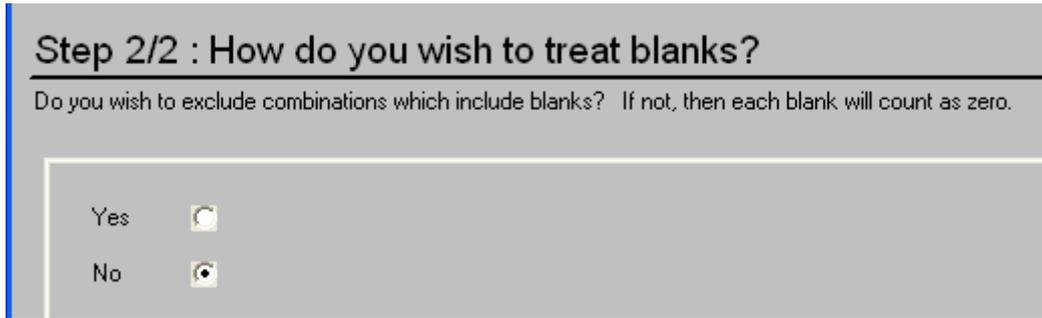
Figure 442: Ignore blanks?

The results of the addition are shown below.

Configure	Filter	Numbers 1	Numbers 2	Total
ABBOTT, KELVIN		1	23	24
ALDERTON, KELVIN		3	13	16
ANDREW, MICHAEL		4	21	25
ARMSTRONG, JENNY		3	13	16
ARNOLD, TRACEY		4	12	16
ARNOTT, LEIGH		5	13	18
ARTZ, CHERIE		4	15	19
BAINBRIDGE, GLENN		3	16	19
BARR, CHRISTOPHER		2	14	16
BARRETT, MONIQUE		3	21	24
BARRETT, NICHOLAS		4	25	29
BARRIE, NOEL		3	23	26

Figure 443: The added columns

2. Average two or more columns

The purpose of this formula is also obvious. It allows you to find the average of two or more columns.
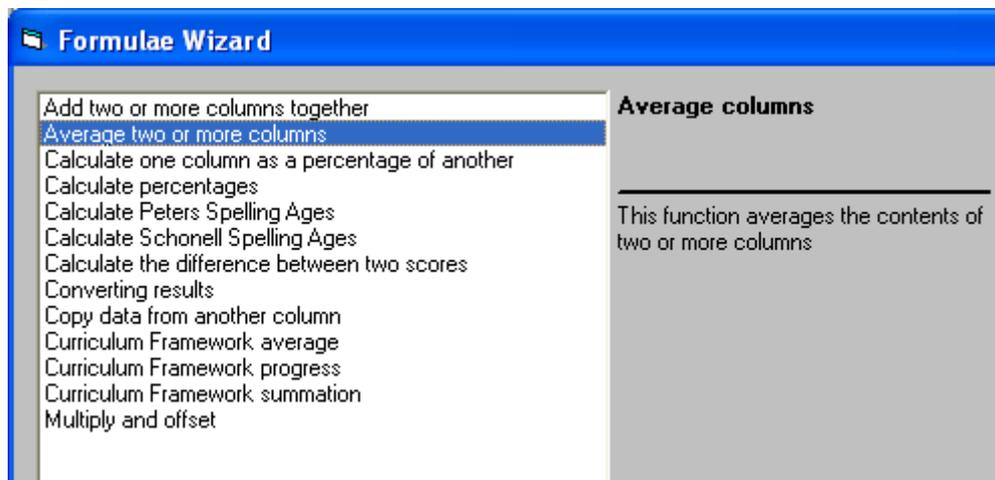
Figure 444: Average two or more columns

For this example, we shall average the three columns shown in the illustration above.

The first step of the process is to select the columns to be averaged....
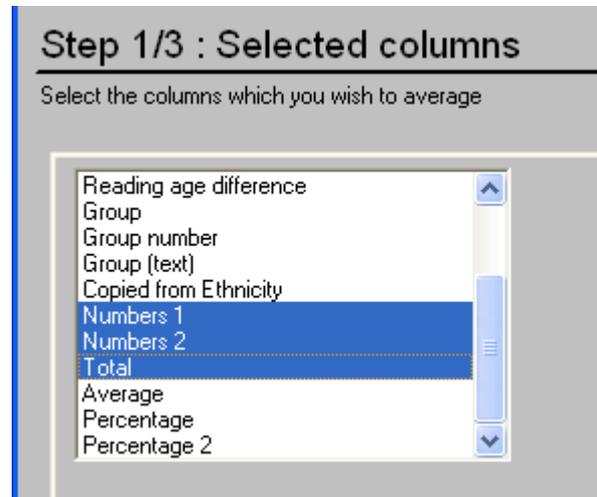
Figure 445: Selecting the columns to average

... and the next step is to decide what you want done if blank entries are encountered. These can either be excluded from the calculation or can be taken to count as zeroes.
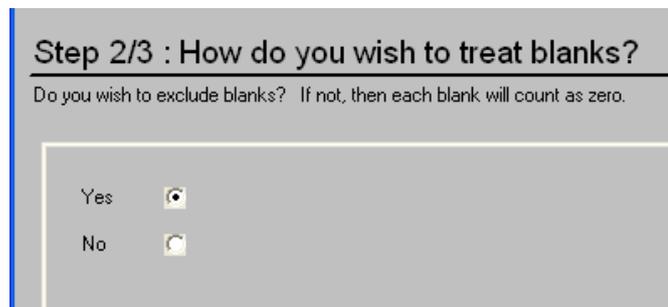
Figure 446: Exclude blanks?

Finally, you decide how many decimal places you wish to have displayed in the averages.
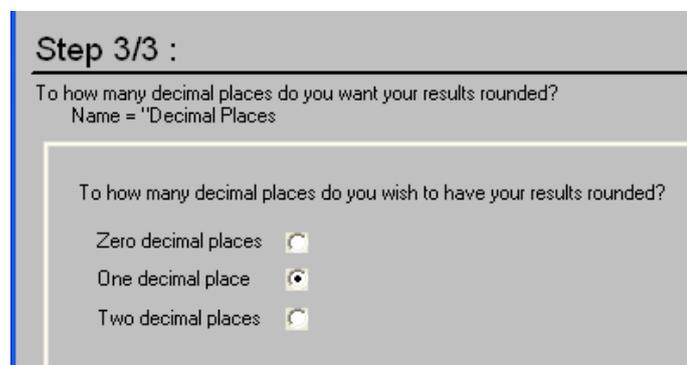
Figure 447: Decimal places

The results of the process are shown below.

Figure 448: The three columns averaged

3. Calculate one column as a percentage of another

The purpose of this formula is to calculate one column as a percentage of another and to have the results recorded in the column which holds the formula.
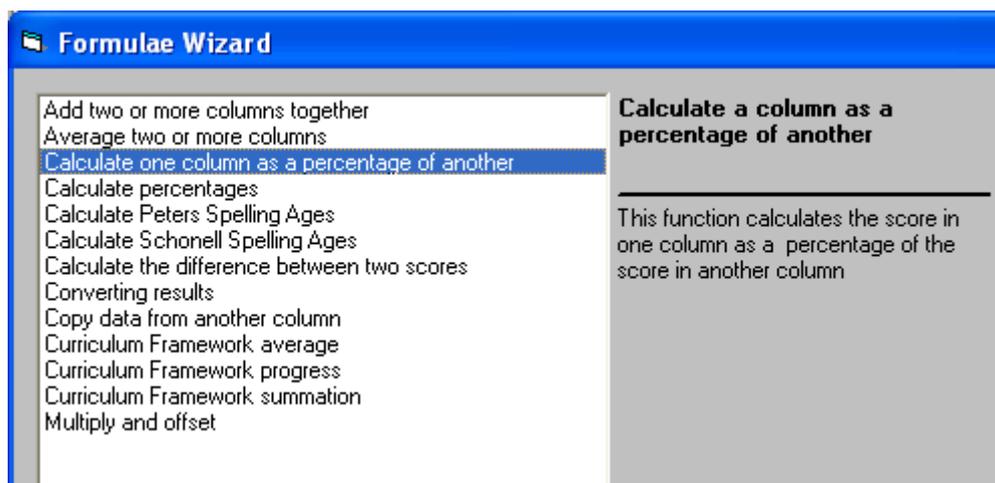
Figure 449: Calculate one column as a percentage of another

For this demonstration we shall use the latter two columns of the preceding example – the Total column and the Average column and we shall have the average calculated as a percentage of the total.

		Total	Average	Percentage
Configure	Filter			
ABBOTT, KELVIN		24	16	
ALDERTON, KELVIN		16	10.6	
ANDREW, MICHAEL		25	16.6	
ARMSTRONG, JENNY		16	10.6	
ARNOLD, TRACEY		16	10.6	
ARNOTT, LEIGH		18	12	
ARTZ, CHERIE		19	12.6	
BAINBRIDGE, GLENN		19	12.6	
BARR, CHRISTOPHER		16	10.6	
BARRETT, MONIQUE		24	16	
BARRETT, NICHOLAS		29	19.3	

Figure 450: The 'Before' columns

The first step is to select the column to be converted to a percentage…
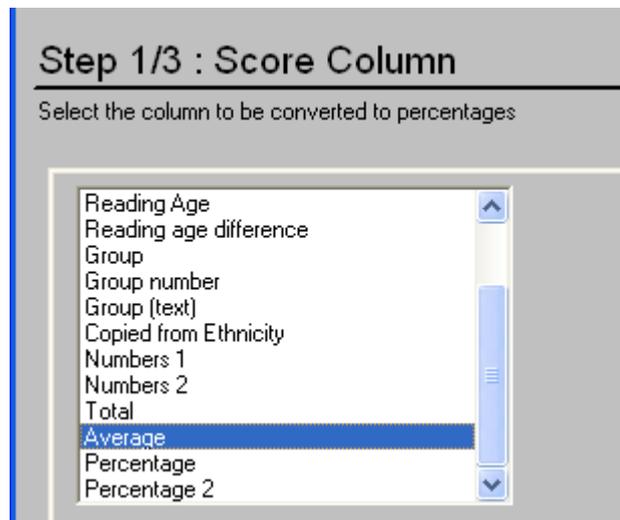
Figure 451: Selecting the column to be converted…

… and the second is to select the column of which the percentage is to be calculated.
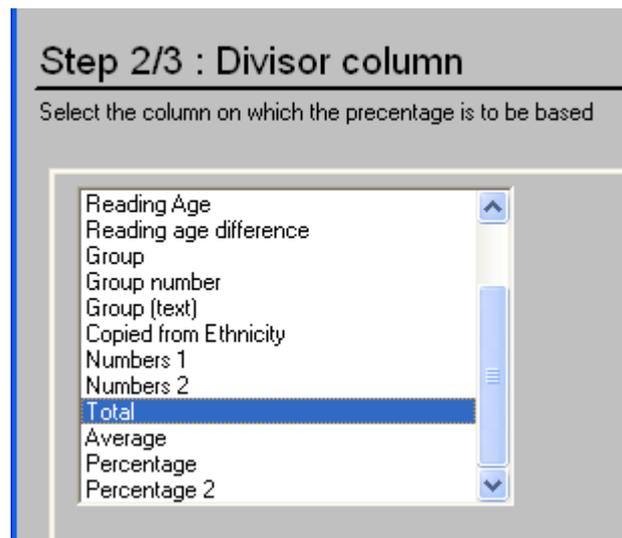
Figure 452: … the 'as a percentage of' column

Finally, decide on the number of decimal places for the final result.
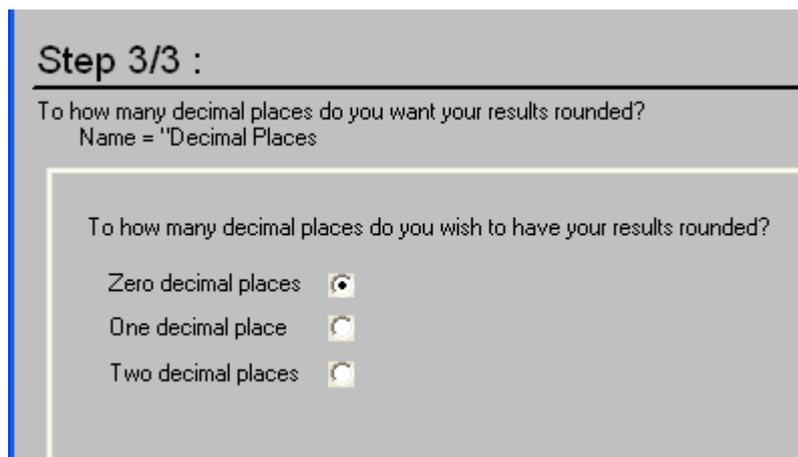
Figure 453: Decimal places?

The final results are shown below. Note that the percentages are all very similar. This is because of the nature of the data used for the examples. The first number column held a very small number which had little relative influence on the totals, and hence on the averages and hence on the percentages!

Figure 454: The final averages

4. Calculate percentages

The purpose of this formula is to allow you to calculate the entries in one column as a percentage of a nominated figure.
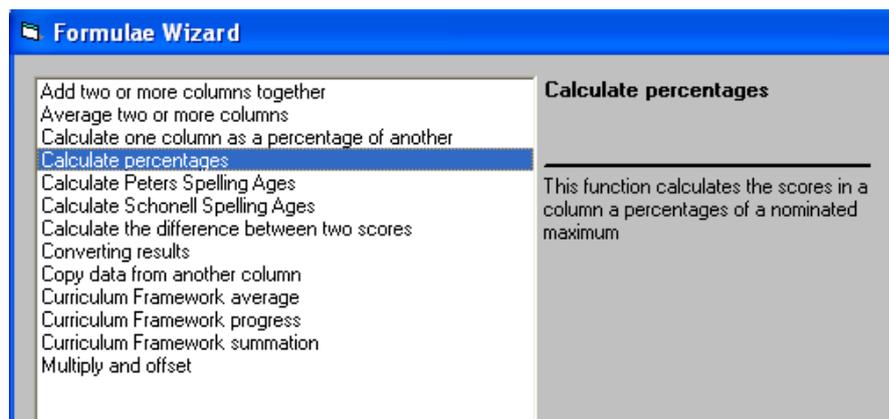
Figure 455: Calculate percentages

For this demonstration calculate the figures in the 'total' column…

Figure 456: The 'Before' screen

… which must be selected as the column to be converted …
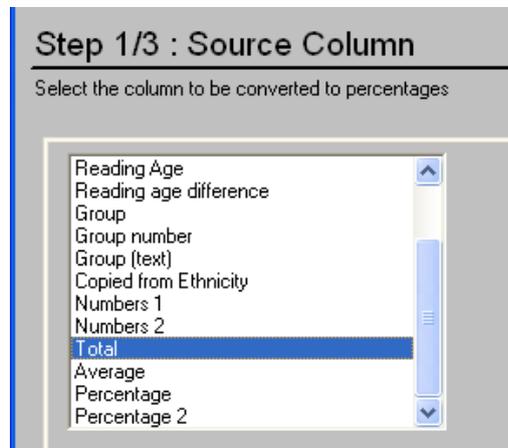
Figure 457: The column to be calculated as a percentage of…

… as a percentage of 37.
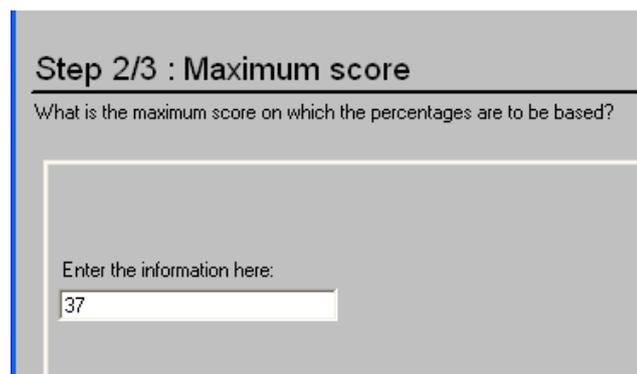
Figure 458: … the nominated maximum

The number of decimal places must be specified.
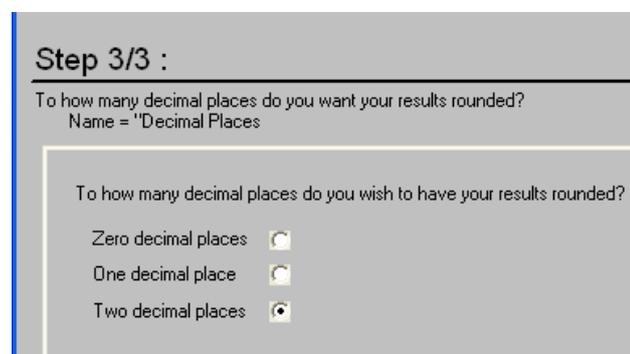
Figure 459: The decimal places

The final results are displayed below.

Figure 460: The final results

5. Calculate Peters Spelling Ages

The purpose of this formulae is to calculate the students' 'Peters Spelling Ages', based on a raw score in a selected column.
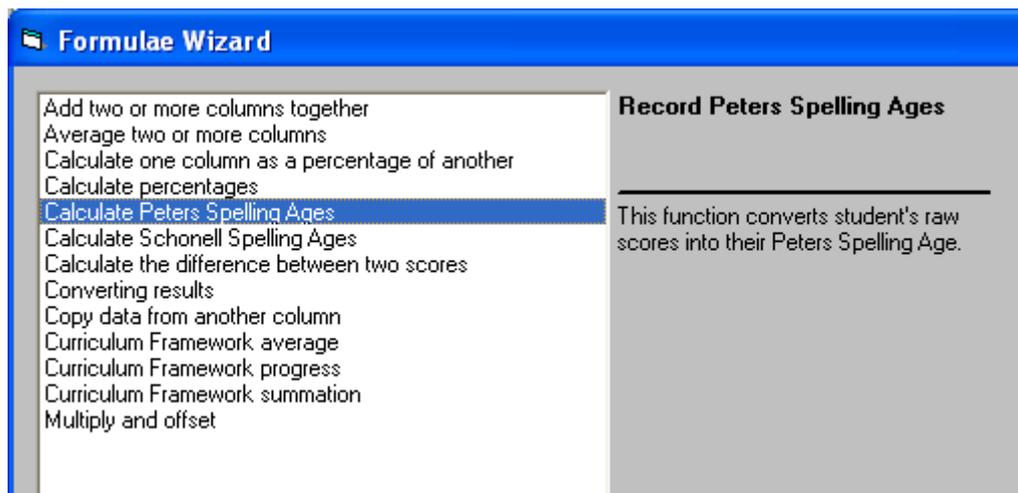
Figure 461: Calculate Peters Spelling Ages

Data must have been entered in to a numeric column as the raw scores for the Peters Spelling Test.

Figure 462: The 'Before' screen

The only step in the definition of the formula is to select the column holding the raw scores. The formula involves a simple calculation based on the raw score to generate a 'Spelling age'.
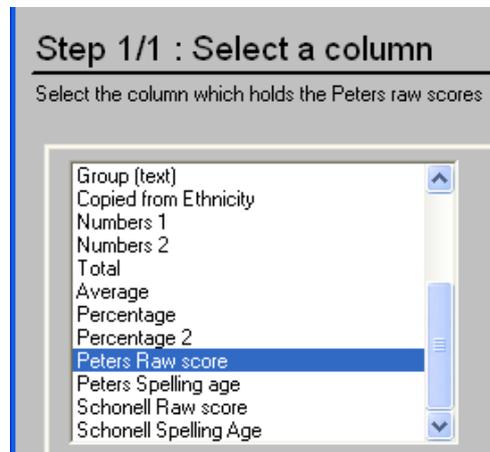
Figure 463: Selecting the Peters raw score column

The results of the formula are shown below.

Configure	Filter	Peters Raw score	Peters Spelling age
ALDERTON, KELVIN		10	6.1
ANDREW, MICHAEL		15	6.6
ARMSTRONG, JENNY		24	7.7
ARNOLD, TRACEY		28	8.2
ARNOTT, LEIGH		36	10.2
ARTZ, CHERIE		42	12.5
BAINBRIDGE, GLENN		47	13

Figure 464: The calculated ages

6. **Calculate Schonell Spelling Ages**
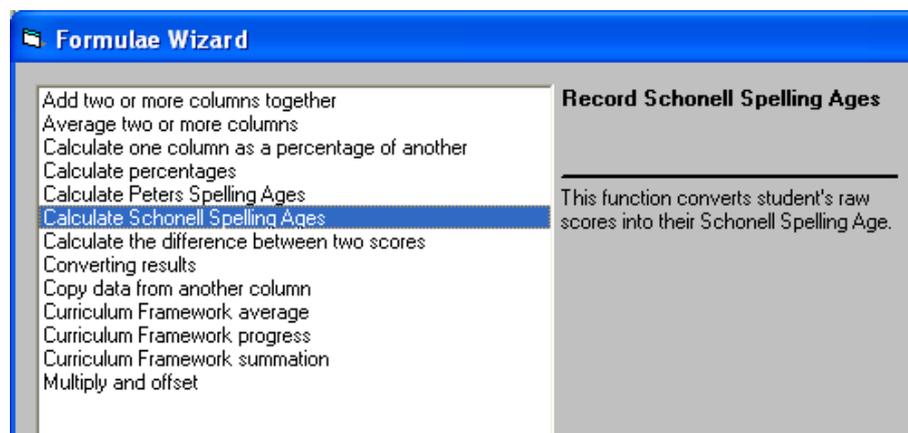
Figure 465: Calculate Schonell Spelling Ages

Data must have been entered in to a numeric column as the raw scores for the Schonell Spelling Test.

Figure 466: The 'Before' screen

The only step in the definition of the formula is to select the column holding the raw scores. The formula involves a simple calculation based on the raw score to generate a 'Spelling age'.
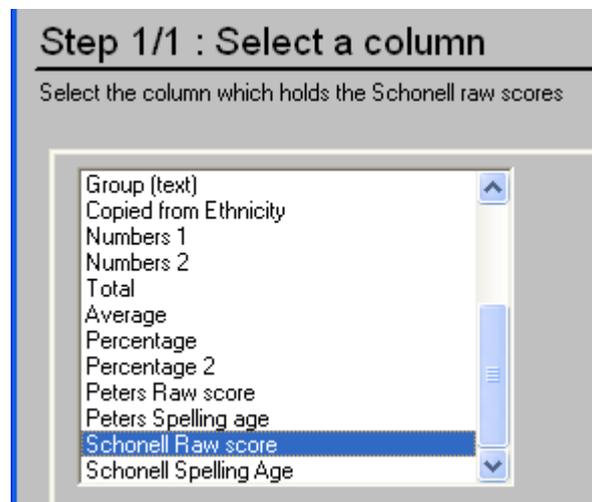
Figure 467: Select the Schonell raw score column

The results of the formula are shown below.

Figure 468: The Schonell Spelling Ages

7. Calculate the difference between two scores

This formula could have been called 'Subtract one column from another'....
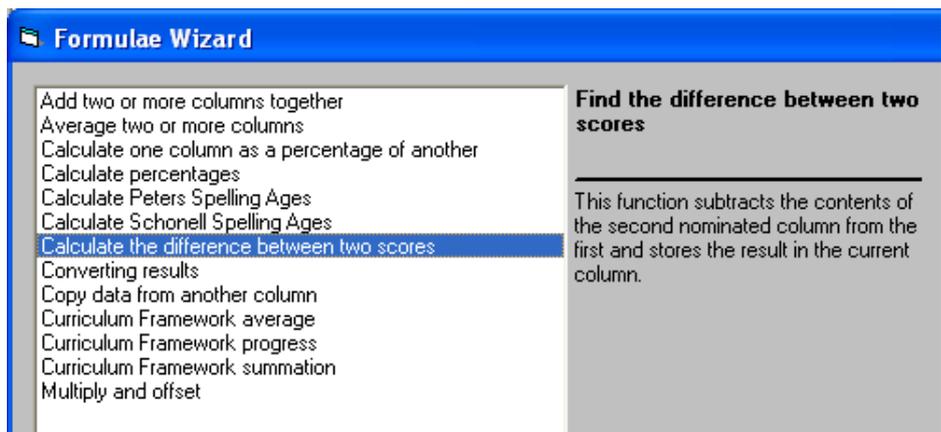
Figure 469: Calculate the difference between two scores

For this example find the difference between the Peters Raw Score and the Schonell Raw Score.

Figure 470: The 'Before' columns

The first step is to select the first column….
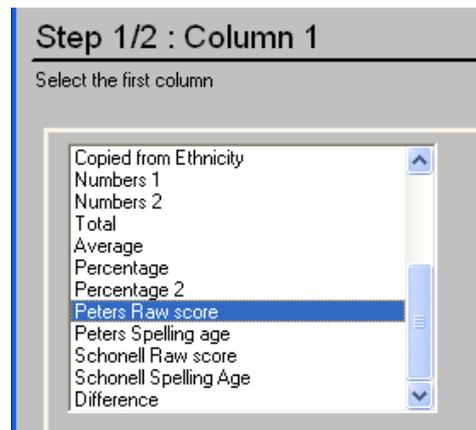
Figure 471: Selecting the first column…

… and the second step is to select the second column….
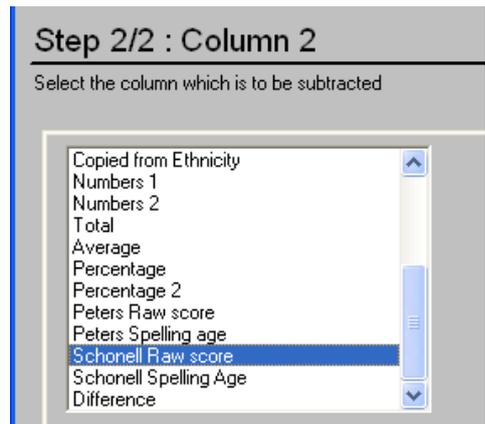
Figure 472: ... and the second

... leading to the result of the subtraction, shown below.

Figure 473: The result of the subtraction

8. Converting results

The purpose of this formula is the same as that for the conversion process available for text columns, except that in this instance the result is going in to a numeric column and must therefore be a number.

We shall convert data very similar to that in the previous conversion example, but this time the results of the conversion will be numbers.
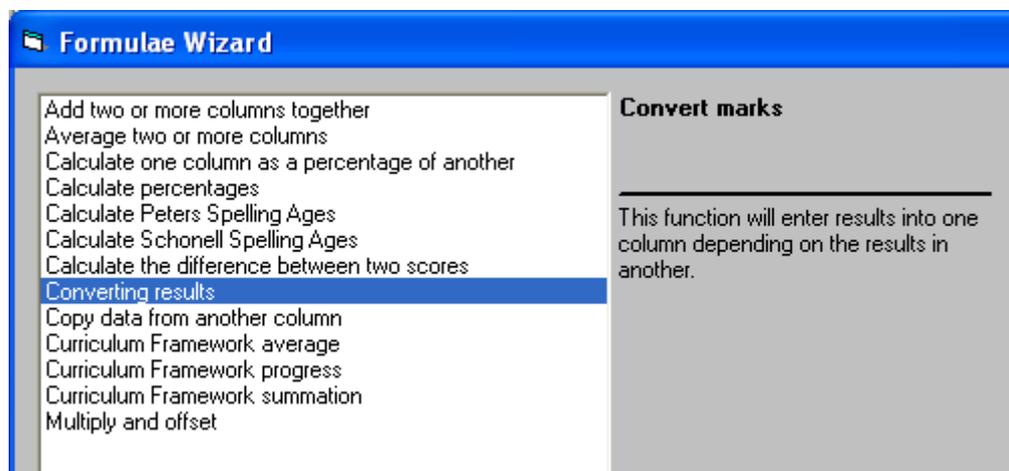
Figure 474: Converting results

The data to be converted is shown below.

Figure 475: The 'Before' columns

The first step of the specification is to select the column holding the data to be converted.
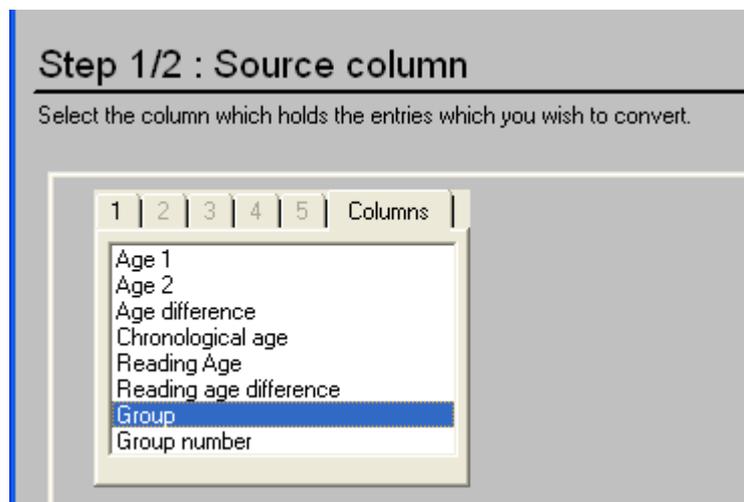
Figure 476: The column containing the data

The second step is to specify the various conversion possibilities.
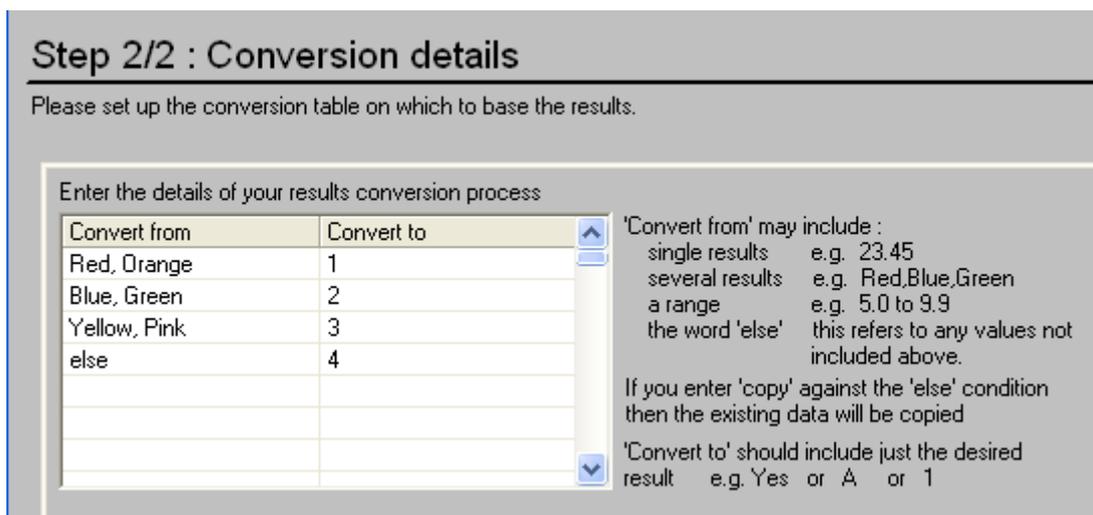
Figure 477: The conversion details

Note again that you can specify several source possibilities by separating them by commas, or you can specify a numeric range (using 'do' as the separator), you can use 'else' in the last entry to refer to 'anything not covered by the previous cases', and you can use 'copy' to indicate that you wish to retain the original entry. In the example above we could not use 'copy' as the source column is a text column.

Figure 478: The converted results

The results of the conversion are shown above.

9. Copy data from another column

The purpose of this formula is obvious and is the same as the corresponding formula for text columns. Of course, in this case, you would have to copy from a numeric column. In the example below we shall copy the results from the Peters Spelling Age column into a new column titled 'Peters age copied'.

You can copy data from one column to another using the 'Fill column with' column data function, but that would not store the process as a formula for instant simple reuse at a later date.
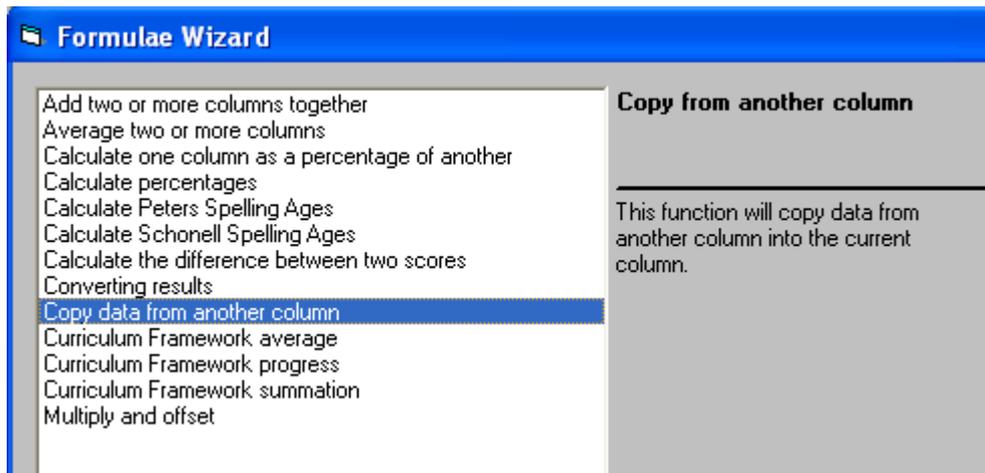
Figure 479: The converted results

The screen before the formula is applied is shown below.

Figure 480: The converted results

There is one step and that is to specify the column to be copied.
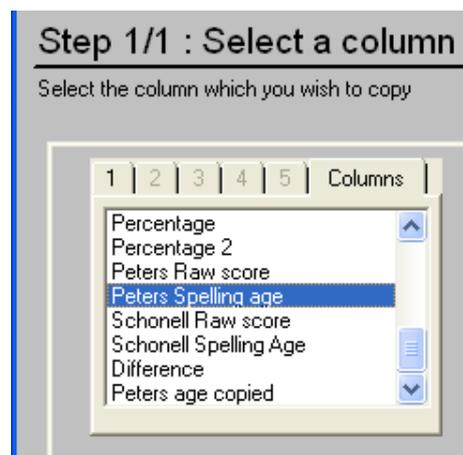
Figure 481: The converted results

The result of the application of this formula is shown below.

Figure 482: The converted results

We now come to three columns devoted to the Curriculum Framework. These are the calculation of an average, of progress, and a summation.

Use the same Curriculum Framework area for each of these calculations – Subject : Mathematics and Strand : Algebra.

Figure 483: The students Curriculum Framework results

Some data was entered on 12/05/2004 as shown below.

Figure 484: Data entered on 12/05/2004

And some columns have been prepared for the three results, shown below.

Figure 485: The three prepared columns

The purpose of this formula is to visit each student's results in a particular subject and strand and to find the average progress made in that strand. The average can be calculated by giving each level of progress a numeric value. The settings for this school are displayed in the illustration below – quite a bit below!
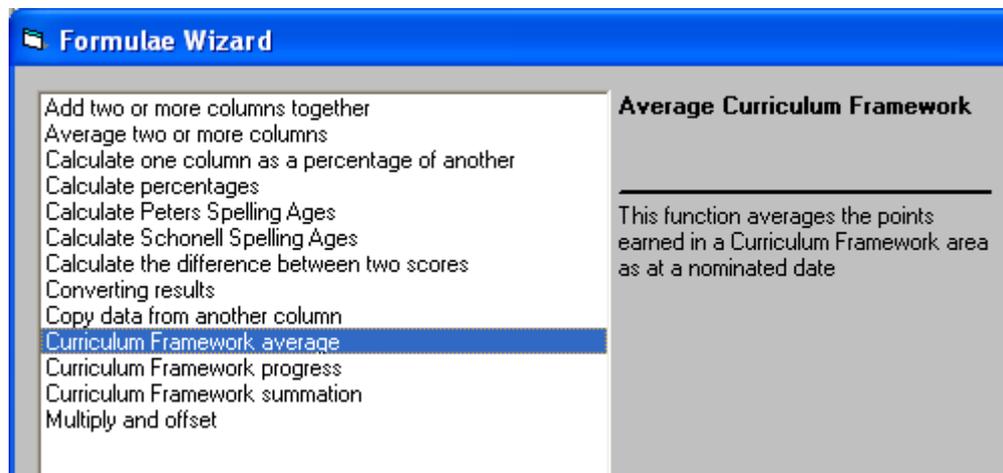
Figure 486: Curriculum Framework average

The first step is to select the subject and strand, as shown (just) below.
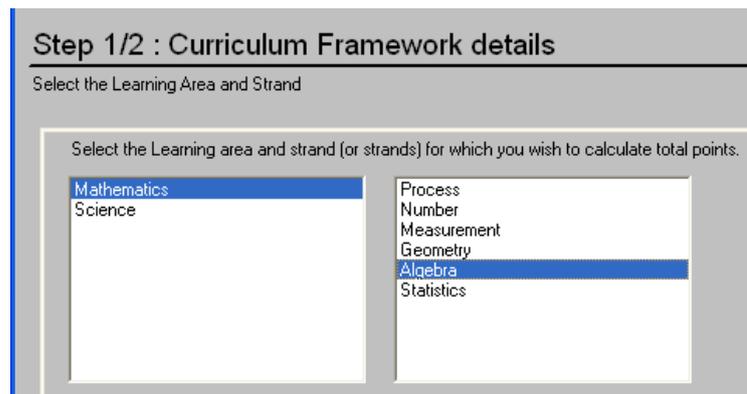
Figure 487: Selection of subject and strand

You must also specify the date at which the average progress of each student is to be calculated.
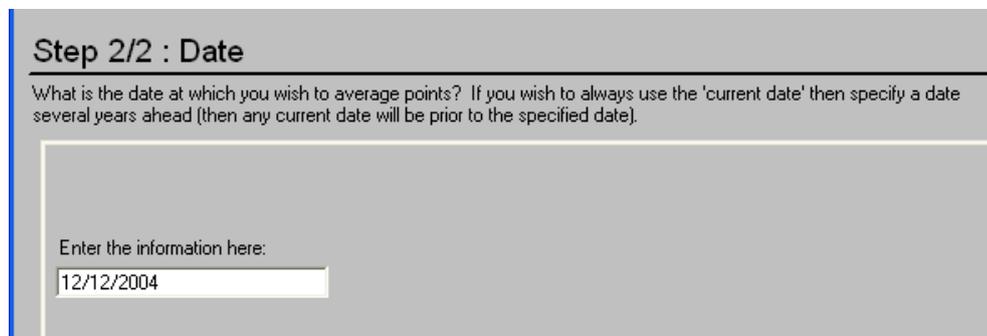
Figure 488: The date at which average is calculated

The results can then be calculated, as shown below.

Figure 489: The CF averages

A student scoring 2.1 as their average has done just a little better than 'Achieved' on average.

11. Curriculum Framework progress

The purpose of this formula is to visit each student's results in a particular subject and strand and to find the progress made in that strand between two dates. The progress can be calculated by giving each level of progress a numeric value and finding the difference between the progress made as at the two dates specified.

Figure 490: Further data entered on 12/07/2004

Further data was entered, as the students progressed, on 12/07/2004. An example of a student's entries for this is shown above, and, to refresh your memory, we've looked back in CMAdmin, at the specifications made for this school's implementation of the Curriculum Framework.

Figure 491: The Curriculum Framework settings

We select the progress formula, as shown below....

Figure 492: Curriculum framework progress

... and specify the subject and strand....
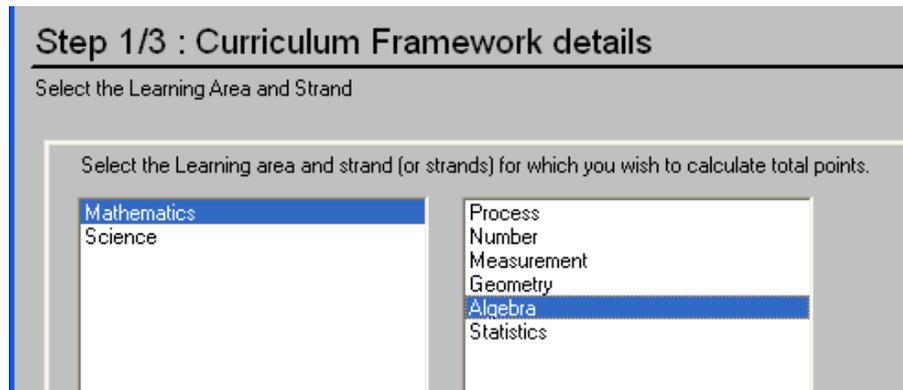
Figure 493: Selection of subject and strand

… followed by the date FROM which progress is to be measured …
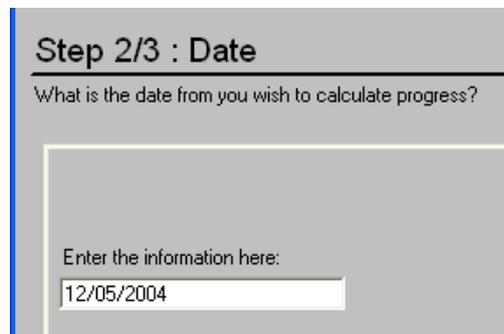
Figure 494: The date from which progress is measured

… and, finally, the date TO which progress is to be measured…..
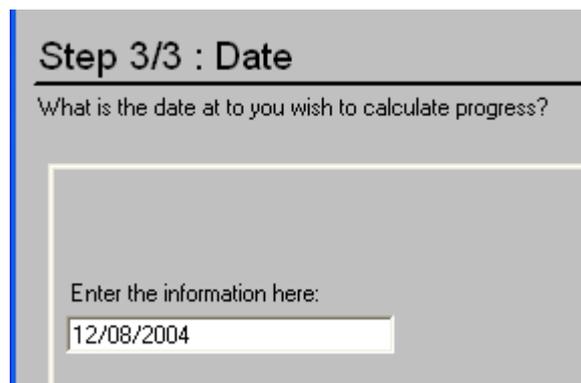
Figure 495: The date to which progress is measured

… leading to the final results, displayed below.

		CF Average	CF Progress	CF Summation
Configure	Filter			
ANDREW, MICHAEL		1.9	8	
ARMSTRONG, JENNY		1.7	10	
ARNOLD, TRACEY		2.1	11	
ARNOTT, LEIGH		1.5	10	
ARTZ, CHERIE		1.9	4	
BAINBRIDGE, GLENN		1.7	3	
BARR, CHRISTOPHER		1.7	3	
BARRETT, MONIQUE		1.7	4	
BARRETT, NICHOLAS		1.8	3	
BARRIE, NOEL		2	1	
BASSETT, DIANNA		1.4	0	
BASSETT, LEIGHANNE		1.8	0	

Figure 496: The progress is calculated

The first student, Michael Andrew, has made 8 units of progress in this strand between the two dates. (Note that, in this case, a 1 is scored for a move from B(egun) to A(chieved) etc.

12. Curriculum Framework summation

The purpose of this formula is to visit each student's results in a particular subject and strand and to find the total progress made in that strand as at a certain date. The progress can be calculated by giving each level of progress a numeric value and finding the total progress made as at the date specified.
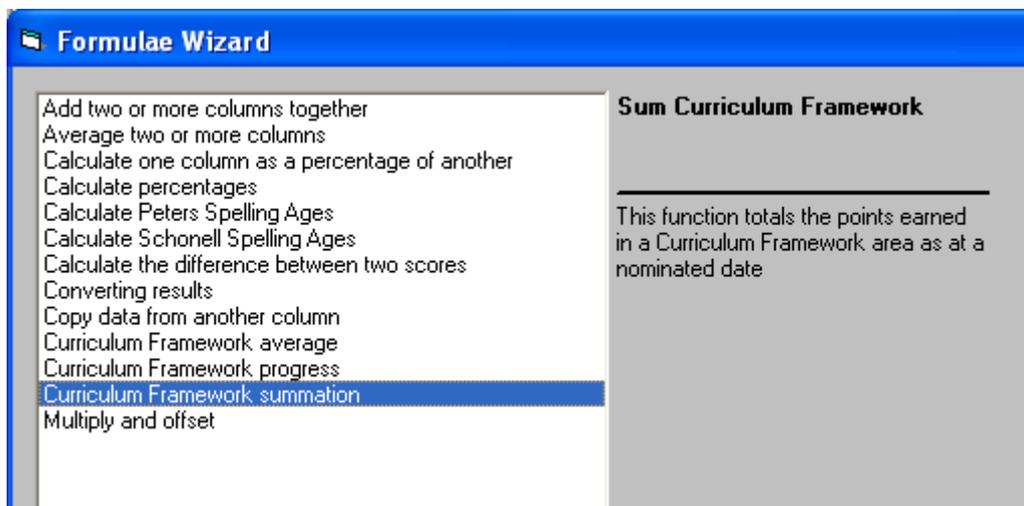
Figure 497: Curriculum Framework summation

Firstly, the subject and strand are specified …
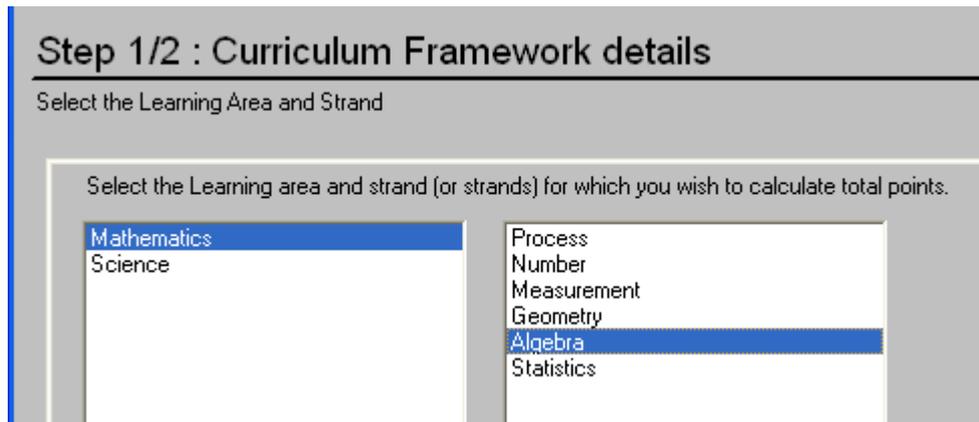
Figure 498: Selection of subject and strand

… followed by the date at which the progress is to be summed…..
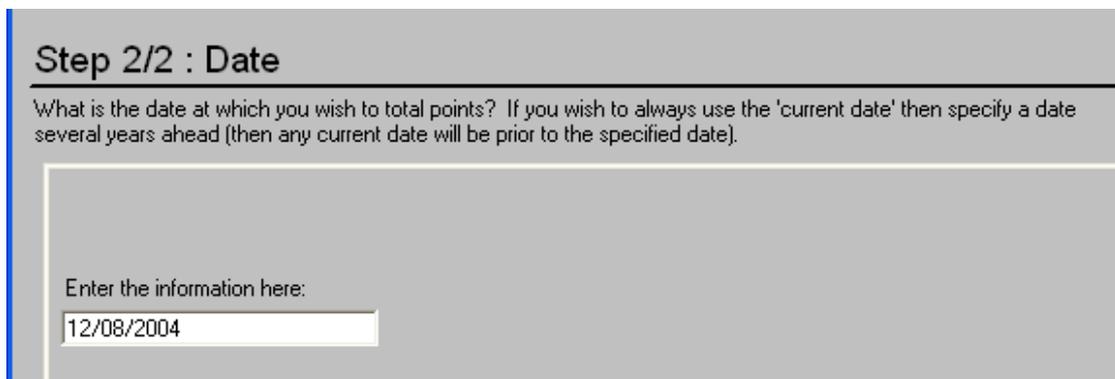
Figure 499: The date of summation

… leading to the final results, as shown below

Figure 500: The results of summation

13.   Multiply and offset

Early in the life of ClassRoom Manager we received the request to be able to perform simple linear transformations of student numeric data. What this means is that the schools making the

request wished to 'multiply each score by some number then add another number' – that's what a linear transformation is. The more mathematically minded will recognise the formula used for a transformation as $y = ax + b$. To specify this formula you will need to decide on your values of a (the number you wish to multiply by) and b (the number you wish to add.

Of course, you can achieve a variety of results by using a fraction to multiply by (e.g. a = 0.5 will result in halving the number) and by using a negative value of b (e.g. b = -2.5 will result in 2.5. being subtracted from the value (after its been multiplied by the value of a).
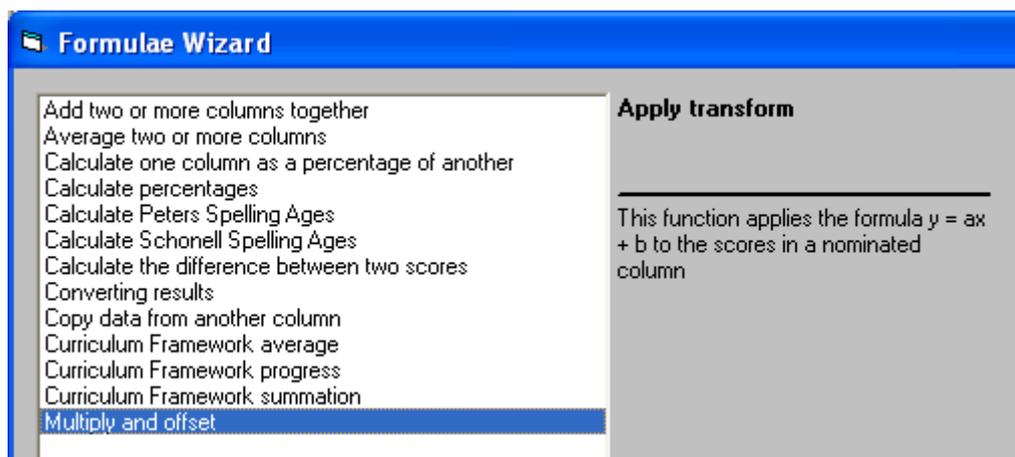
Figure 501: Multiply and offset

We are going to apply the formula $y = 3x + 9$ to the values in the CF Summation column, and a numeric column titled (strangely) 3x + 9 has been created to receive the results, as shown below.

Figure 502: The 'Before' columns

The first step is to select the source column, in this case the CF summation column. These are the values which x will take in the formula.
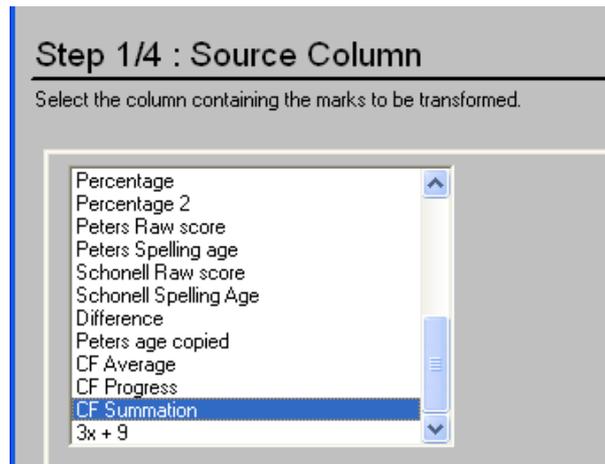
Figure 503: The 'source' column

Secondly, we must specify the value of a – in this case '3'....
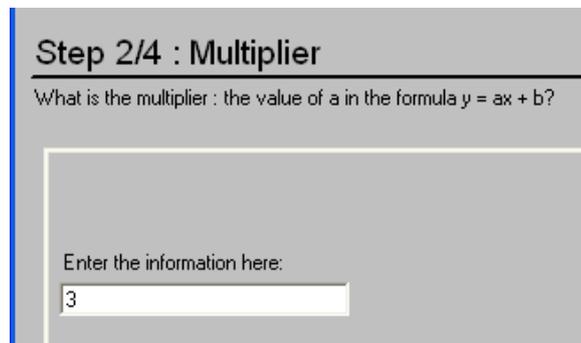
Figure 504: The multiplier

… followed by the value of b, in this case '9', as shown below.
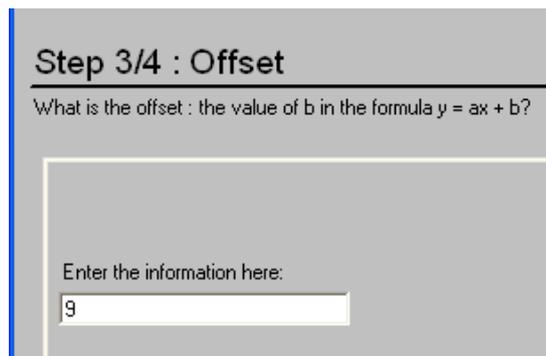
Figure 505: The value of b – the offset

The last step is to specify the number of decimal places required in our results.
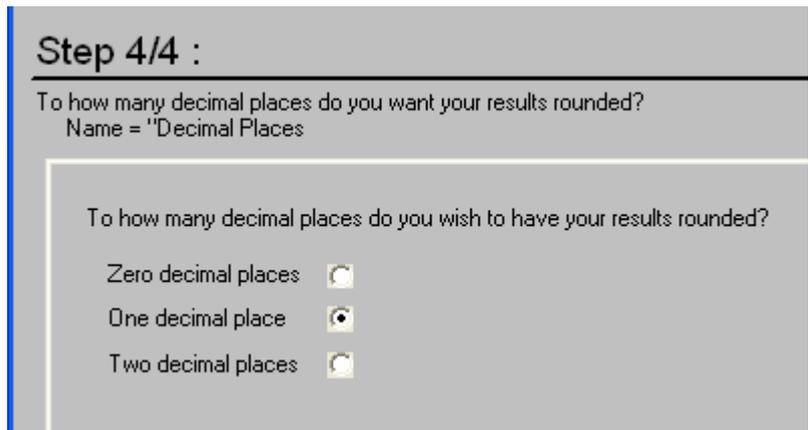
Figure 506: The decimal places

Finally, the results will be produced, as shown below.

Figure 507: The results of the formula being applied.

If you incorrectly specify a step when setting up a formula: the final step of the process will appear as shown below, indicating to you where you went wrong!

Figure 508: The incorrect specifications message.

In producing the screen captures for this chapter, a number of columns were created and these were added to a rather primitive document which was then viewed in grid mode. Frequent use was made of the ability to hide particular columns and, frequently, the horizontal slide was moved to the right to line the left most column of interest up against the students names.

The document used is shown below. We have already dealt with the creation of columns in the CMAdministrator section and we shall deal with the design of documents in an appendix to this user guide.

Figure 509: The document used in this chapter.

26   Working with Markbooks

What's in this chapter?

26.1 Overview of electronic markbooks

In this chapter we shall look in detail at electronic markbooks. Markbooks can be created for individual subjects and hold up to one hundred marks (in columns common to all teachers whose students are in a particular markbook) and a further one hundred (in columns where each teacher can set their own column headings, maximums etc). In addition, up to eight report comments can be stored against each student. Each column can hold an entry up to eight characters in length.

Data from markbooks can be extracted directly on to documents in the form of cumulative records and reports.

Markbooks provide the user with a wide variety of functions and processes, some of which are the same as those in grid mode (with its column data functions) and others which are specific to markbooks.

Markbooks also are used to record students' unit and achievement standard results in columns specially devoted to that purpose. We shall examine the functionality relating to NZQA in a separate user guide devoted to the use of ClassRoom Manager for NZQA purposes.

Markbooks can be merged, allowing teachers to enter marks and report comments on remote machines.

26.2 Accessing a markbook

The usual way to access a teacher's markbook is for them to select it from the contents of their dossier, as shown on the left of the following illustration.
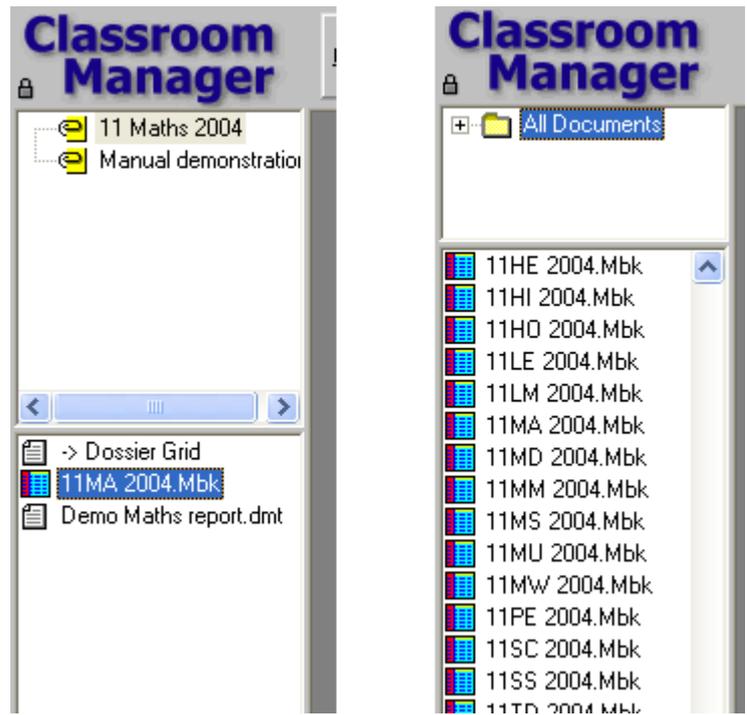
Figure 510: The ways to access a markbook

Alternatively, if you enter CMTeacher with full rights, you will be able to access ALL markbooks for the current year, as shown on the right in the illustration above.

Remember that, to see markbooks from a previous year, you must select the year required through the 'Options' buttons at the top of the screen, followed by 'various options' and 'Markbooks year'.

26.3 The four screens

Figure 511: The 'Common columns' Screen.

Figure 512: The 'Teachers' columns' Screen.

Figure 513: The 'Background details' Screen.

Figure 514: The 'Individual's details' Screen.

The four screens shown above are each accessed by one of the buttons at the bottom of the screen. These buttons are shown below.

Figure 515: The screen access buttons

The horizontal slide above the screens can be used to slide across to columns off-screen to the right, and back again. A similar vertical slide on the right hand side of the screen can be used to move up and down through the students.

The screen below illustrates that, in addition to the 'traditional' columns shown above, there are also columns devoted to achievement (and/or unit) standards.

Figure 516: The columns to the right

Prior to capturing the screen above, the 'Hide' button (in the bottom left hand corner of the main screen, had been clicked, causing all columns without test names to be hidden.

Figure 517: The 'Show' button (which was 'Hide')

The 'Hide' button's caption was changed to 'Show' as shown above, and can then be used to redisplay all columns.

26.4 The 'Common columns' screen

For the purposes of this user guide some marks have been entered into the test columns. You will notice that, in between each test column is a 'scaled' column, which will hold the results of scaling the marks. Scaling is a process frequently used in CM markbooks and there is a variety of methods available.

Number	Tchr	1	2	3	4	5	6	7	8	9	(lock_h) 10
Test		Test 1	Test 1 scale	Test 2	Test 2 scale	Assignment	Ass 1 scaled	Test 3	Test 3 scale	Mid year exa	Mid year sca
Date		Feb	Feb	Mar	Mar	Apr	Apr	May	May	June	June
Maximum		30	30	25	25	20	20	40	40	100	100
Weight		0	10	0	15	0	10	0	18	0	60
Formula											
BENTLEY, ANDREW SAMUEL	BT	12		12		9		18		56	
BISHOP, ADAM RUSSELL	BT	14		14		7		32		53	
BRIND, DAKIN NEIL	BT	23		21		12		15		47	
CLEATOR, BRENT DOUGLAS	BT	21		13		15		26		48	
COLLINS, SALATIELA	BT	9		17		7		27		37	
CORSKIE, SHANE DAVID	BT	21		14		15		21		73	
DICK, KRISTINE LEIGH	BT	16		16		12		34		74	
EASTHAM, REBECCA ANNE	BT	12		21		17		25		35	
ERAMIHA, SARAH JUNE	BT	18		23		11		30		47	
FINLAY, HEATHER LOUISE	BT	21		8		8		17		56	
HARRIS, DANIEL JASON	BT	24		15		13		16		62	
HODGSON, TRINEZE RENATA	BT	20		6		5		34		58	
HULL, BEVAN DESMOND	BT	19		13		16		26		63	
LEPPER, CHARLES DAVID	BT	25		16		14		24		83	
LOVE, ANDREW GARTH	BT	16		24		12		18		57	
MARSHALL, MICHAEL CAMERO	BT	14		21		9		26		45	
McHUTCHON, REX	BT	25		20		7		9		38	
NORGROVE, DEON JOSEPH	BT	28		18		11		31		62	
REID, ADRIAN JOHN	BT	22		14		8		26		91	
SUTTON, BRENT GARY	BT	26		17		13		32		43	
TAIT, TERRANCE	BT	27		15		16		15		56	
WESTERBY, MICHELLE MARIE	BT	21		18		13		17		74	
WILKINSON, CINDY ANNE	BT	15		21		12		13		37	

Figure 518: The columns with their raw marks

Each cell (an individual student's mark in a particular column) can be up to eight characters in length. If you enter 0*, this indicates that a student scored zero but that the score should obey the rules which you set for 0* in scaling. You can also enter '*est' to indicate that an estimate of this student's score is required. (See the formula for calculating estimates later in this chapter.)

Of course, in the case of unit and achievement standard columns, all that is required is a single key. In the illustration below, a number of results have been entered for students.

An incorrect key has been pressed, causing the small prompt window to appear, informing you of the valid entries. These are dealt with in the MUSAC NZQA user guide.

Figure 519: Entry of achievement standard results

In the example below, two standards have been 'withdrawn' from a student by entering an 'X' in the cells.

Figure 520: Two 'withdrawn' entries

To enter the title (or other details) of a column simply click in the relevant space at the top of the column. It will switch to a white background and you can type in your required test headings, Date, Maximum scores, and weightings. You cannot type in a formula but, if one has been applied to a column, its name will be shown in the fifth line.

Figure 521: The entry of a new column title

The new column added has been given a special name : 'Cohort', and, in the illustration below, three possible entries have been made in the student's results in this column : A, B, and C. The 'Cohort' column may be used to group students into groupings other than those determined by their teacher's code.

Figure 522: The entries in the new column

In other words, for example, you might have students from five different option classes in your markbook and you might wish to split them into eight different groups. To do this, create a column called 'cohort', and enter the eight different entries against the students. Then, when you are scaling, or printing etc you can elect to have each 'Cohort' group dealt with separately. Examples of this will be seen later in this chapter.

Please note: Columns allocated to NZQA standards have the standard code in the 'Date' row.

You should NOT attempt to connect a standard by entering a code in the 'Date' row. Standards may only be connected as described in the CMAdministrator section. If you wish to set up a

'Progress' column for a standard then use a different format, e.g. use 90136-1 instead of 9013601E. A warning will appear if you attempt to do this.

Let's return to our columns of marks and proceed to scale them. This process will take us through some of the menu entries which will be dealt with in full later in this chapter. At this stage, they will serve to illustrate the general process.

Right-click in the column title area at the top of the second column, and the following popup menu will appear. This can be accessed by right-clicking anywhere in the heading area of the markbook.

Figure 523: The first popup menu

We wish to scale the results in a column and this option appears under the first entry in the menu, Column Formulae and Functions, which will expand into a sub-menu when you select it, as shown below.
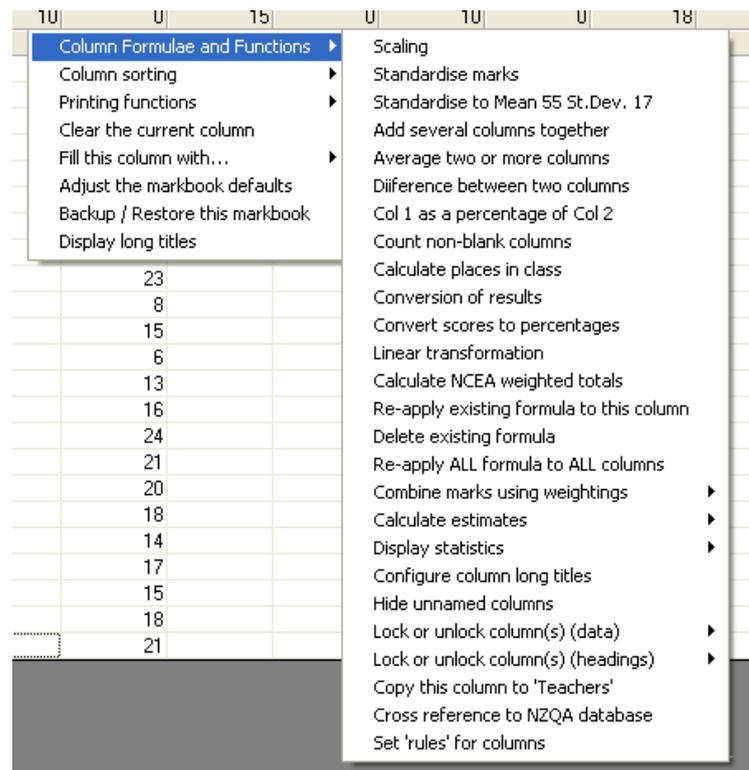
Figure 524: The 'Column Formulae and Functions sub menu

The menu item we require is the first in the sub-menu, so click on that and you will enter the 'Formula wizard' in which we spent a considerable amount of time in the last chapter.
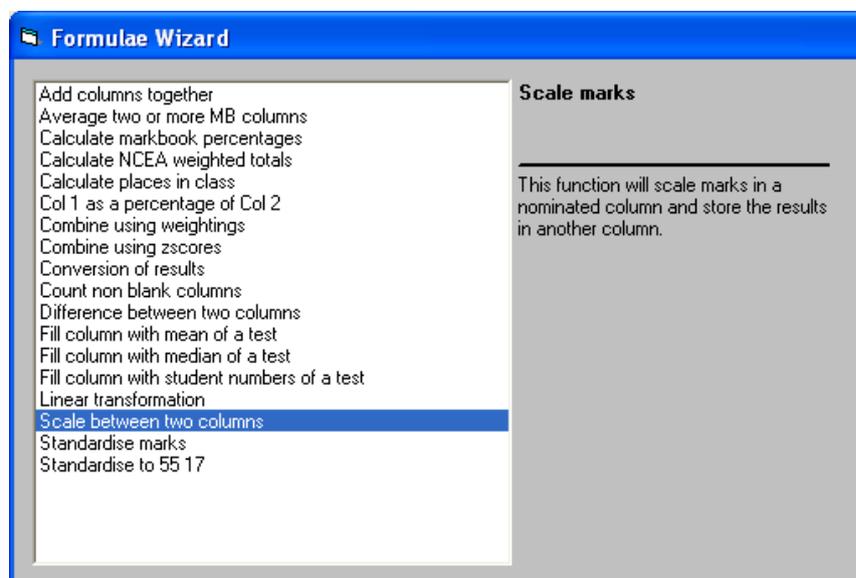
Figure 525: Scale between two columns

There are several entries in the formula wizard list which correspond to entries in the sub-menu above. There are others which are accessed from different areas of the sub-menu. Selecting 'Scale between two columns' (which will already be selected for you, having selected 'Scaling' from the sub-menu), the first step of the formula specification process will appear, as shown below.
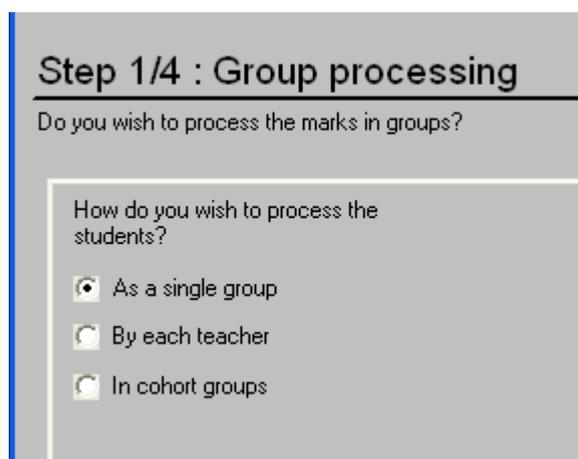
Figure 526: By group?

You will see three possibilities here. We can treat our class as a single group, which indeed it is. If we had several classes in the markbook then we could have each scaled as a separate class group. The third alternative is the one which we met just recently. This allows us to have each cohort group treated separately.
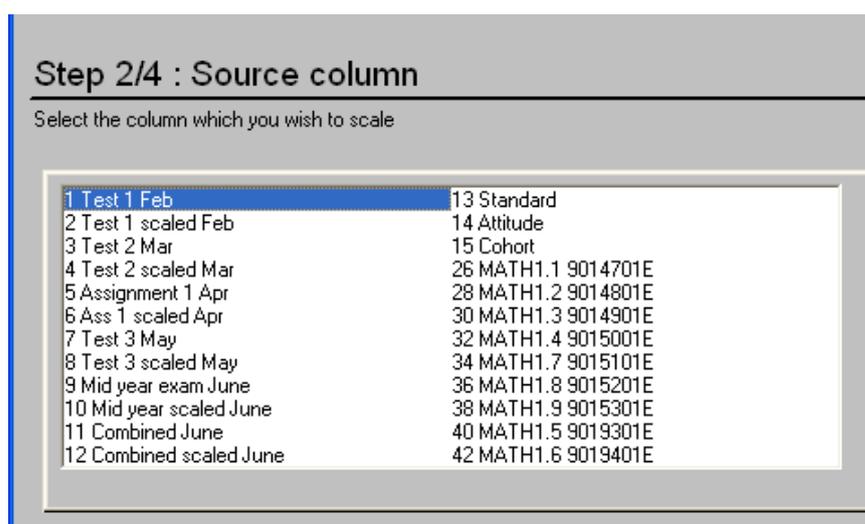
Figure 527: Selecting the column to scale (The 'Source')

The next two steps of the process involve selecting the 'Source' column, i.e. the one holding the marks which we wish to scale, and the 'Destination' column i.e. the one where we wish to have the results of the scaling process stored.
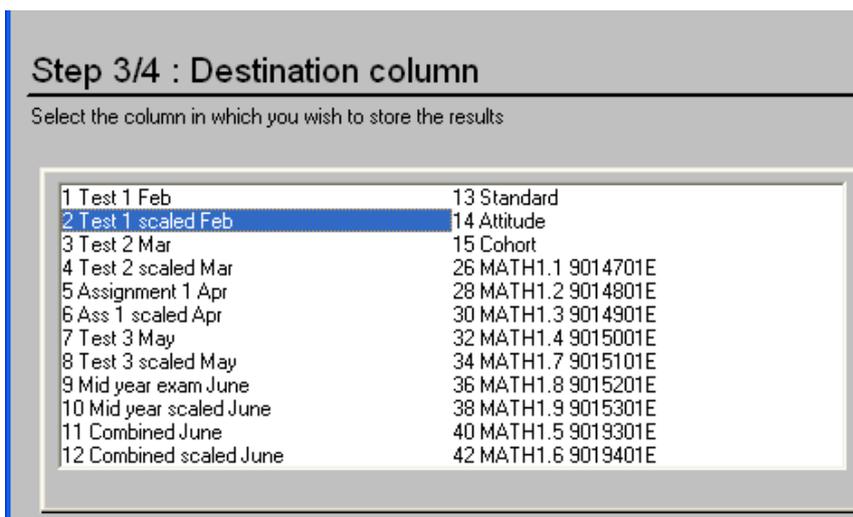
Figure 528: Selection of the column to store the results (The 'Destination')

Finally, in step 4, we are asked to specify the parameters of the scaling process. There are five alternative methods offered. How fortunate that we have five sets of marks to be scaled!

For the first scaling we shall use the second method on offer, where we simply have to supply the mean and standard deviation of the desired resulting distribution of marks.
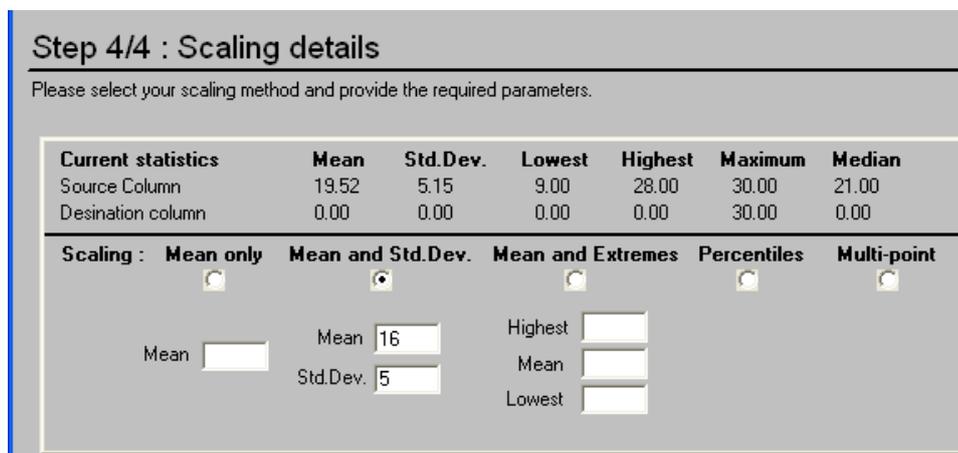
Figure 529: Scaling by 'Mean and Standard Deviation'

The top of the panel displays the statistics relating to the marks currently found in both the 'source' and the 'destination' columns. We can see that the mean and standard deviation of our original results are 19.52 and 5.15 respectively. We shall set the required values to 16 and 5 respectively, then proceed. All going well, the screen below will be displayed.

A word of caution about scaling. The old computer phrase 'Garbage in, garbage out' is never so true as when it is applied to scaling. If you have a badly skewed original distribution and you are not careful in your selection of the new mean and standard deviation then you can easily find that some of your results will end up either below zero or greater than the maximum score for the test. In these cases the results are stored as zero
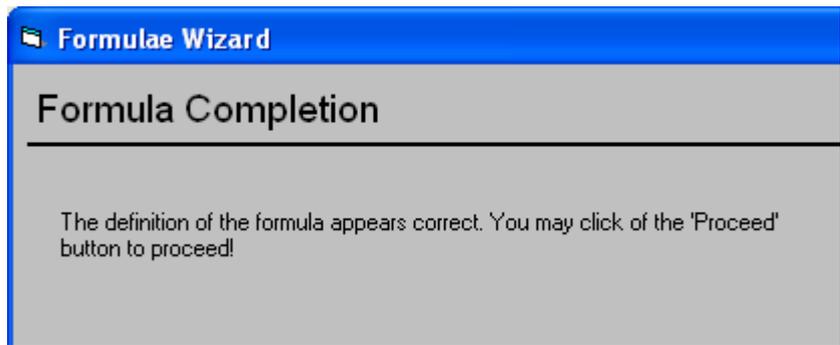
Figure 530: All set to go!

Before the scaling process occurs we are given one final chance to opt out, via the screen below.
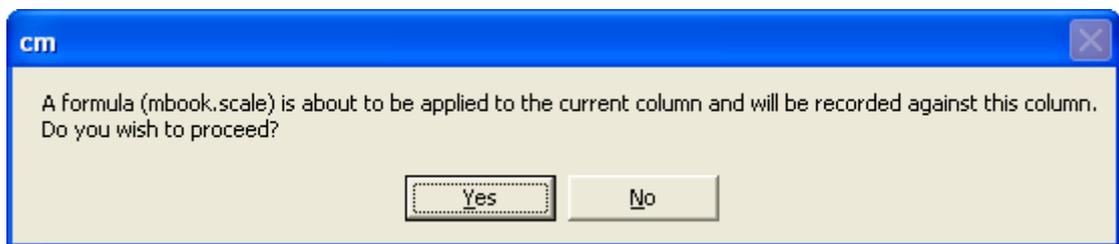
Figure 531: A final chance to exit without scaling

We shall, however, proceed, and the results of the scaling are presented in the second column, as shown below.

Number	Tchr	1	2	
Test		Test 1	Test 1 scale	Test
Date		Feb	Feb	Mar
Maximum		30	30	
Weight		0	10	
Formula			scale	
BENTLEY, ANDREW SAMUEL	BT	12	8.70	
BISHOP, ADAM RUSSELL	BT	14	10.64	
BRIND, DAKIN NEIL	BT	23	19.38	
CLEATOR, BRENT DOUGLAS	BT	21	17.44	
COLLINS, SALATIELA	BT	9	5.78	
CORSKIE, SHANE DAVID	BT	21	17.44	
DICK, KRISTINE LEIGH	BT	16	12.58	
EASTHAM, REBECCA ANNE	BT	12	8.70	
ERAMIHA, SARAH JUNE	BT	18	14.52	
FINLAY, HEATHER LOUISE	BT	21	17.44	
HARRIS, DANIEL JASON	BT	24	20.35	
HODGSON, TRINEZE RENATA	BT	20	16.46	
HULL, BEVAN DESMOND	BT	19	15.49	
LEPPER, CHARLES DAVID	BT	25	21.32	
LOVE, ANDREW GARTH	BT	16	12.58	

Figure 532: The results of the scaling process

The next few screens show the fourth step of the specification of the scaling method for each of the other four columns we wish to scale. In each case we have elected to use a different one of the scaling methods available.

Figure 533: Scaling using 'Mean, Highest and Lowest'

The use of 'Mean, Highest and Lowest' at least guarantees that you won't exceed the limits of the distribution but, if you choose values significantly different from the existing ones then some really large changes may be made to marks to meet your specifications.

Figure 534: Scaling by Percentiles - before

The use of percentiles is rarely, if ever, used. It has the advantage of allowing you to determine the shape of the final distribution and really amounts to multipoint linear scaling. In the illustration above the 'dummy' figures of 10, 20, 30 etc are pre-entered as the new percentiles. You can change them to match the distribution you desire, as has been done in the illustration below.

Figure 535: Scaling by Percentiles - after

The next method is multi-point linear scaling in its simplest form. You have to specify the pairs of marks. Each pair represents a position in the source distribution and the result to which you wish to scale it in the destination distribution (after scaling).

Figure 536: Multi-point linear scaling

The final example is where you simply specify the mean of the scaled distribution.

Figure 537: Scaling using just the mean.

Having carried out the five scalings the markbook now appears as shown below.

Figure 538: The results of the scalings.

The next part of the demonstration involves the combination of the five sets of scales scores according to the weightings specified at the top of their columns. This process is accessed via the popup menu, only this time we shall select the 'Combine marks according to weightings' option.

Figure 539: The Combine marks using weightings options.

There are two alternative methods of achieving the combination of marks. The first (Using weighted percentages) involves converting each score to a percentage, then multiplying it by its contribution factor (its weighting divided by the total of all the weightings). Finally, all of the contributions are summed.

The alternative method (use weighted z-scores) calculates the z-score of each mark within its own distribution (the z-score is the number of standard deviations by which the score lies above the mean), then weighting each of the z-scores using the same process as used in the previous example. By summing the contribution, the total z-score is determined for each combination and this is used, in conjunction with the specified mean and standard deviation, to calculate the final result for each student.

For the example, let's run through the second of the alternatives. Firstly, the selection of the process …

Figure 540: Combine using z-scores

The first specification screen asks you to select those columns which you wish to combine using a weightings process. Only columns with values in their weightings column will be offered for selection. In the illustration below you can see that several achievement standards have also be offered. This is because entries of 8888 or 9999 in the weightings column are used to indicate whether the standard is internally or externally assessed. You should, of course, ignore these entries.
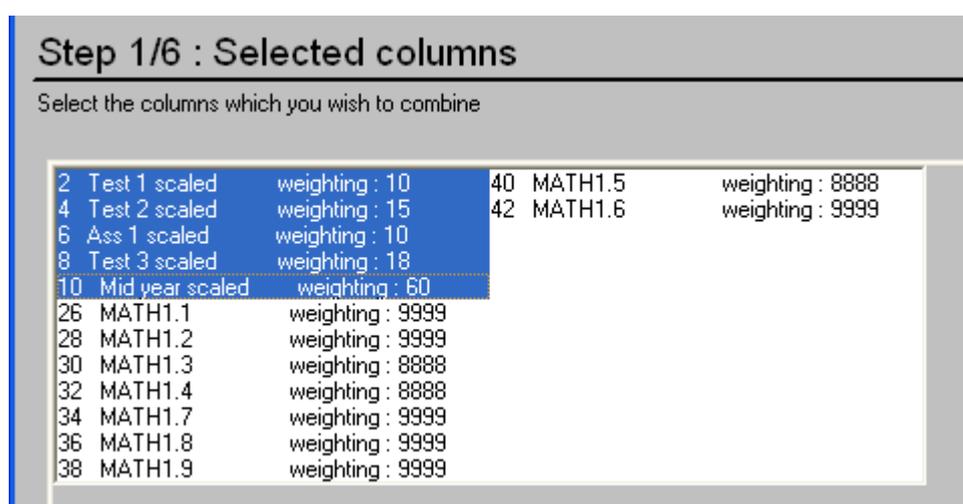
Figure 541: Selecting the columns to be combined

The second step asks you to nominate, out of the total number of scores found, how many you wish to have counted, omitting the worst of them. This is commonly called the 'Yachting principal' where, in a series of yacht races, only the best certain number of results are counted towards the competitor's overall score. In the case below we shall accept the default and count ALL of each student's scores.

Figure 542: The 'Yachting' principal

The third step asks whether or not you wish to have the details of each calculation sent to the printer. An example of such a report is presented further below. You can see how the process works.

Figure 543: The option to print

Step 4 asks you to specify the column which will receive the calculated scores, Step five asks you to nominate the mean of the final distribution, and step six asks for the standard deviation of the final distribution. These three steps are shown in the following three illustrations below.

Figure 544: Selecting the destination column

Figure 545: Nominating the final mean

Figure 546: Nominating the final standard deviation

After the combination process has been completed, a warning indicates that you might have to rescale the results to match your requested final parameters. Under this process, these would only be obtained by having a perfectly normally distributed set of input scores, as this very rarely happens in practice.
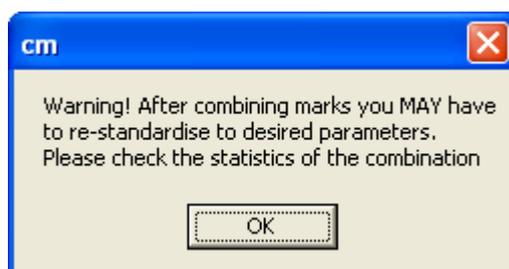
Figure 547: The standard warning

The following table illustrates the process for the first student.

This process determines the mean and standard deviation of each test, then calculates each students z-scores. Remember that a z-score is the number of standard deviations which a particular score lies above the mean. In the example below, all of the students scores except the last lie below the mean, leading to negative z-scores.   The z-scores are then combined them according to their weightings. At the end of the process the resulting combined z-score is applied to the requested mean and standard deviation to generate the student's score.

Test	Mean	St.Dev.	Score	z-score	Weighting	Proportion	Score contribution
Test1 scaled	16	5	8.7	-1.46	10	0.089	-0.130
Test2 scaled	16.02	4.83	11.51	-0.93	15	0.133	-0.124
Assgm 1 scaled	13.12	4.87	8.8	-0.61	10	0.089	-0.054
Test3 scaled	29.27	7.03	26.0	-0.47	18	0.159	-0.075
Mid year scaled	57.98	14.6	58.18	+0.01	60	0.531	+0.005
Total					113		-0.378

Figure 548: The calculation of a student's final score

The student score can then be determined by using the final z-score in conjunction with the requested mean and standard deviation. This leads to a final score of

57 − 0.378 x 14.5 = 51.22

Some of the final results of the combination are shown below, ready for a final scaling.

Figure 549: The resulting combinations

The alternative process of combining scores using weighted scores works as shown in the illustration below.

Test	Score	Maximum	%	Weighting	Proportion	Score contribution

Test1 scaled	8.7	30	29.00	10	0.0884	2.56
Test2 scaled	11.51	25	46.04	15	0.1327	6.11
Assgm 1 scaled	8.8	20	44.00	10	0.0884	3.89
Test3 scaled	26.0	40	65.00	18	0.1593	10.35
Mid year scaled	58.18	100	58.18	60	0.5310	30.89
Total				113		53.80

Figure 550: The calculation of a student's final score

In this process each score is converted to a percentage and each weighting is converted to a proportion (of the total weigh 113), then each contribution is simply the product of the two figures (the percentage and proportion) and the final result is the sum of the contributions.

Now check the contents of the popup menu which appears if you right-click on a student's name in the left hand column. (The popup menu from the column headings already seen briefly, is dealt with later in this chapter.

Figure 551: Right-click on a student

26.4.1 Print an individual summary

It is possible to get a summary of a single student's results sent to the printer.

The dialogue shown below allows you to select the results which you wish to print. When you are ready click 'Proceed' and the summary will be printed. (It is possible to print these summaries for ALL students via the printing menu later in this chapter.)
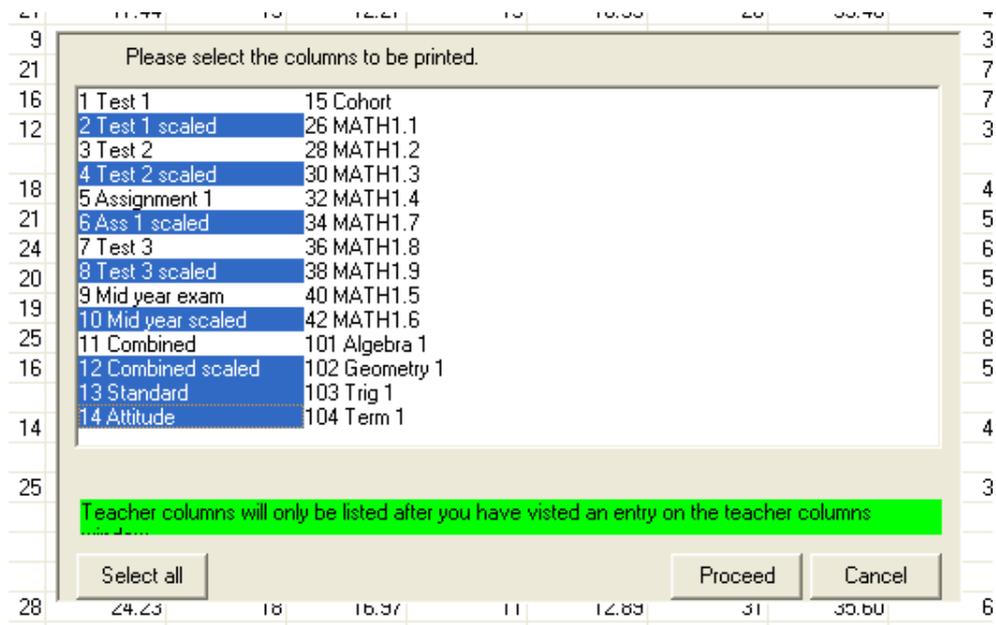
Figure 552: Selection of results to print

26.4.2 View all current markbook connections

The second menu item allows you to see which markbook the selected student is connected to in the current year. An example is shown below.
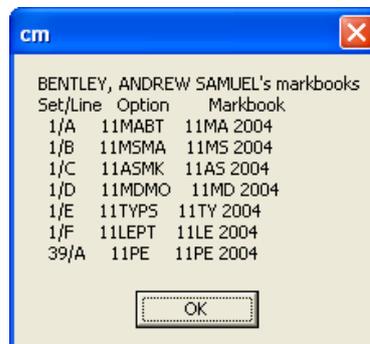
Figure 553:A student's markbook connections

26.4.3 Remove this student from this markbook

For one reason or another, you may wish to remove a student from a markbook without removing him or her from the option associated with the markbook. In this case they remain attached, but hidden. The following warning asks you …
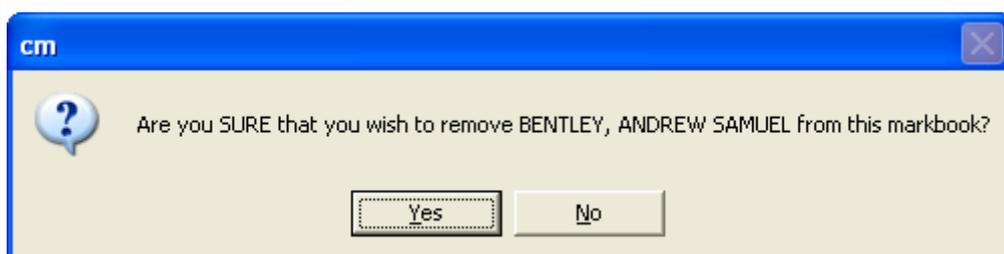
Figure 554: A penultimate warning

… and then, to proceed, you must type 'Yes' in full.
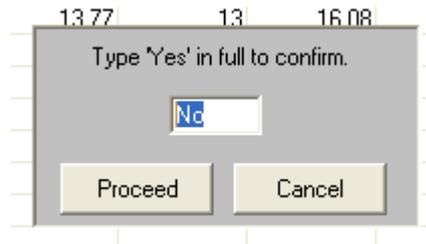
Figure 555: Final confirmation

A final message tells you that this process does NOT remove standards from a student and that that can only be done via the NZQA document, which you will meet in the MUSAC NZQA user guide.
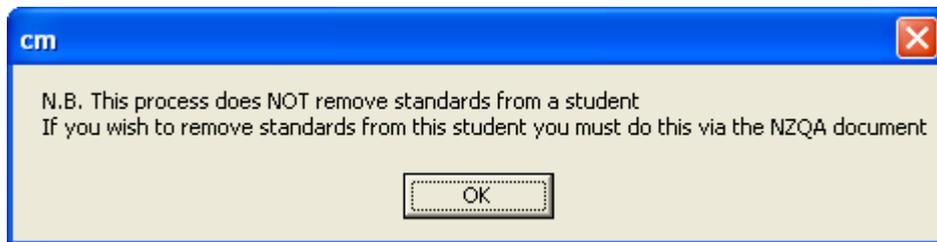
Figure 556: A warning

26.4.4 Move this student to another marbook

Another 'someone asked for it' option. You can move a student from this markbook to another markbook, by selecting the destination markbook from the list below. You also have the option of transferring their current marks and/or comments. Of course, it would be useful if the markbook to which you were transferring had exactly the same column configuration, so that the transferred marks might have some meaning.
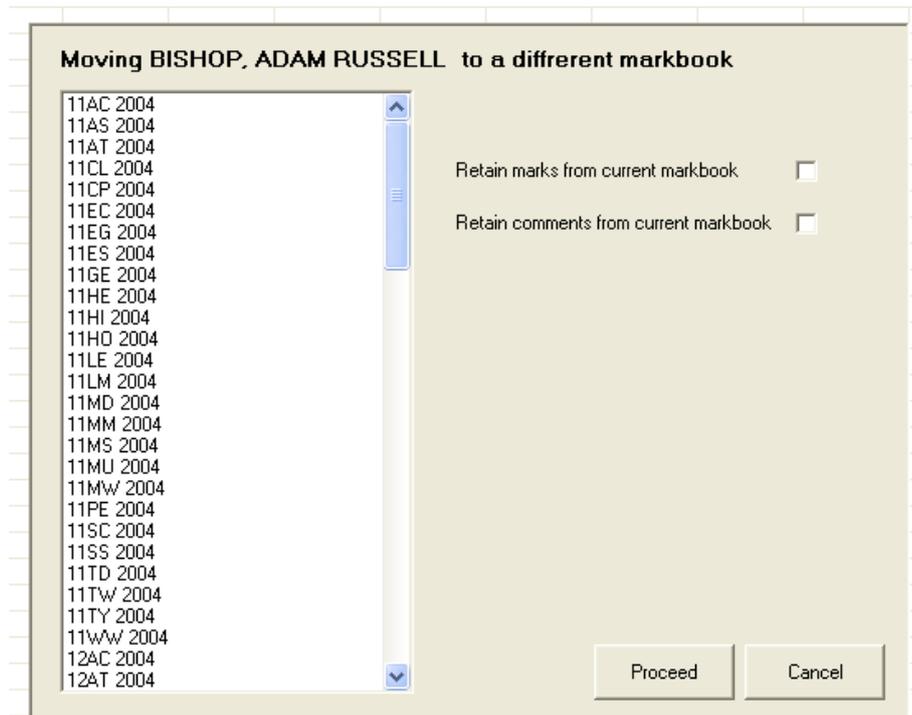
Figure 557: Moving a student to another markbook

26.4.5 Reattach previously detached students

Should you have detached a student from a markbook and decide to change your mind, then this menu option provides you with the way to reinstate the student. A list of all previously detached students are displayed and you can select from that list. An example of such a list is shown below, with our sole detached student awaiting.
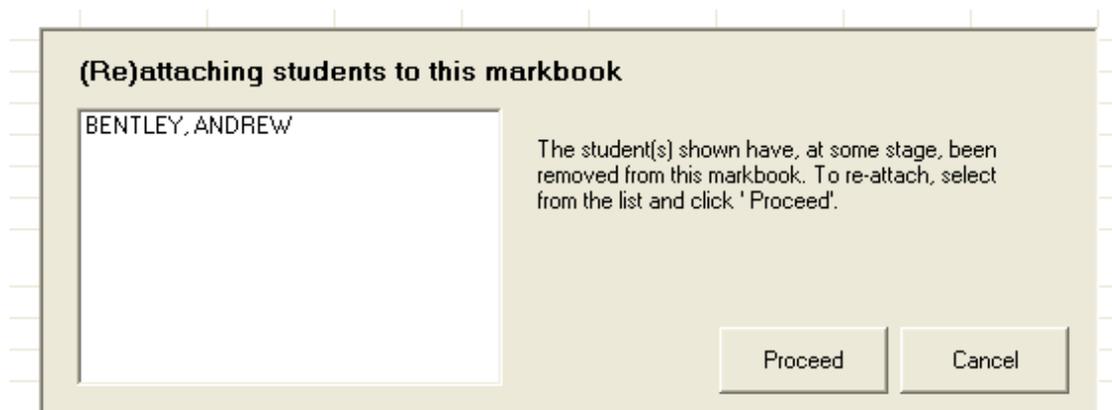
Figure 558: Reattaching previously detached students to markbooks

Click on the student(s) and click 'Proceed' and a small message will indicate that your request was 'received and understood'.
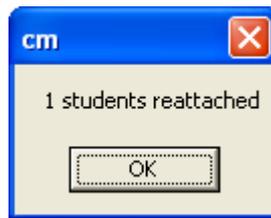
Figure 559: 1 student reattached!

26.4.6 Add other students to this markbook

It is also possible to add another student or students to the current markbook, even though they do not have take options associated with the markbook. Of course, in order to do so they must take the relevant option. This will be added to their list of options via the 25th option line... presumably unused.

The screen which offers this process is shown below.

1. Step 1 is to select the student or students whom you wish to connect to the markbook.

2. The second step is to choose the option against which you wish to have them registered.

3. The final step is to indicate which periods of the week they take their new option.
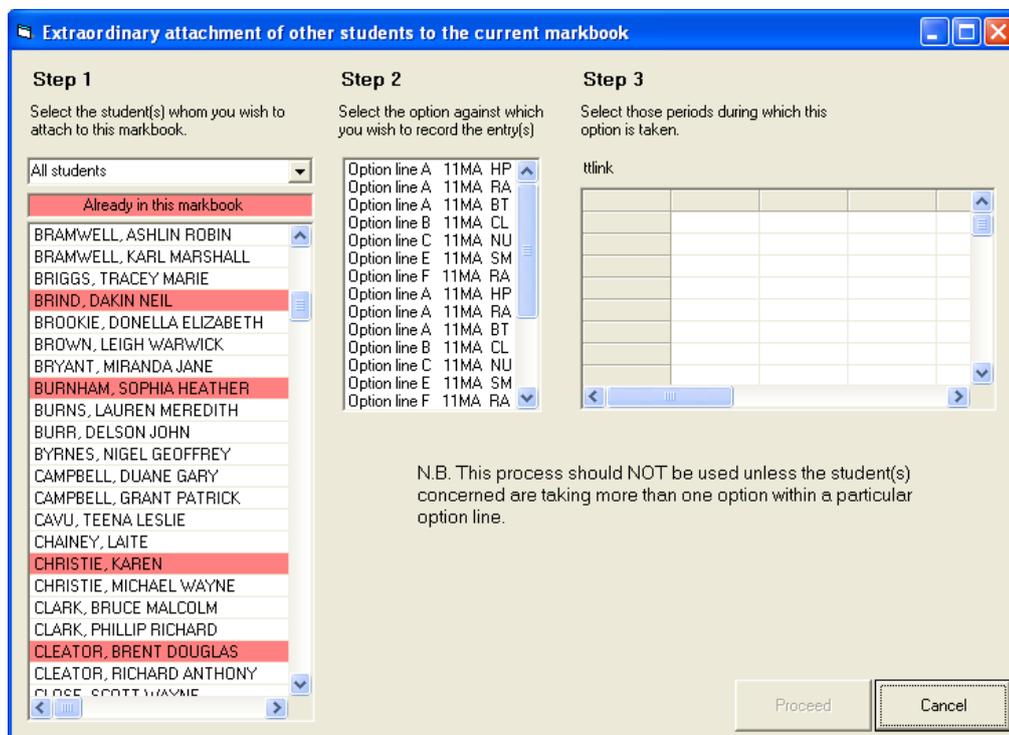
Figure 560: Preparing to add further students

In the screen below I've selected three students and completed the specifications forI the other two steps as well.
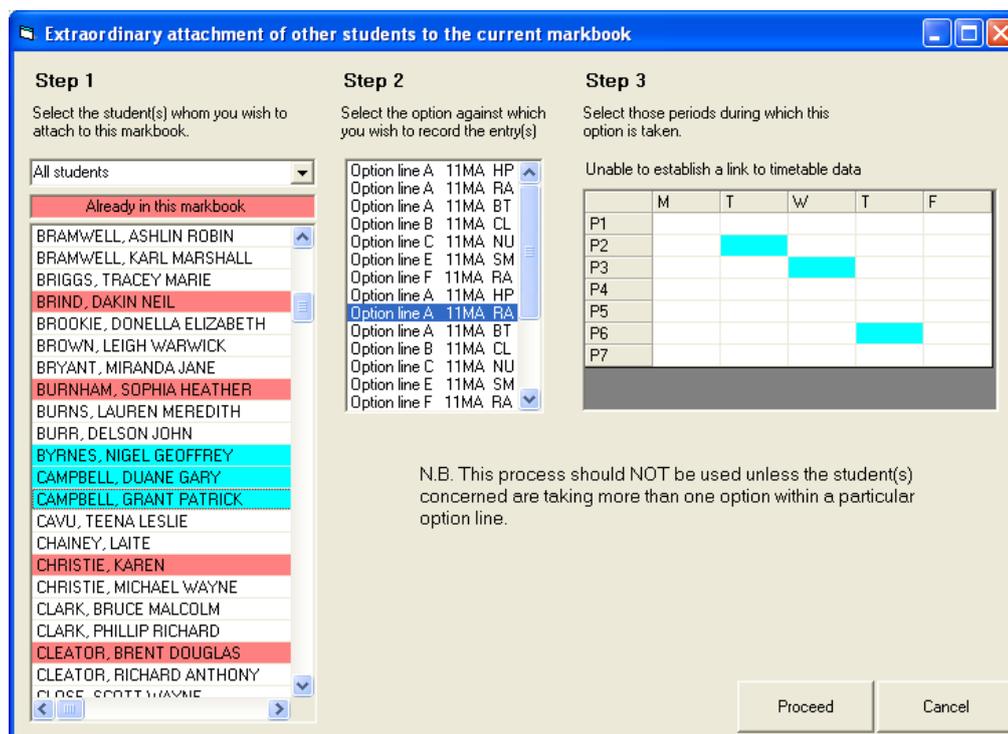
Figure 561: Ready to attach three further students to the markbook

This brings us to the end of the popup menu accessed from the left hand list of students.

Well, so far we've met the four screens of an electronic markbook and have begun looking at the first of these, the 'Common columns' in some detail. We've looked at the entry of several sets of marks, including some for Achievement Standards. We've met the popup menu and have briefly used two of its functions.

Let's move on now to the other screens and then return to go through all of the popup menu options, one by one. The alternative, that of launching into all of the popup possibilities at this stage would draw your attention away from the main look and feel of the overall markbook. So, we'll postpone that pleasure for a little while.

26.5 The 'Teacher columns' screen

Not long after ClassRoom Manager was released, a number of requests were received asking that each teacher using a particular markbook be able to have columns where they could set up their own test headings, independently of the other staff members whose students were in the markbook. The 'teachers' columns' screen was born.

On this screen each teacher can specify his or her own column headings. They do not have to have the same maximum scores or dates etc as the same columns for another teacher.

In order to display the properties of this screen it is necessary to have more than just a single option class loaded. When we first saw the screen, at the start of this chapter, it has but one class visible, as shown below.

Figure 562: The 'Teacher columns' screen

If you log on to CMTeacher with Administrator rights, or if you are an HOD with all classes in your markbook, then you will be able to see students from all of the options in this student. An example of the screen is shown below.

Figure 563: Students from multiple classes

The following is a close-up look at the top left of the teachers' columns screen.

Figure 564: The top corner of the 'Teacher columns' screen

Notice that there are no column headings.

Before you can enter column headings for a teacher you must select a teacher. This is done by selecting a student who has the required teacher. In the example below I've selected Andrew Bentley, whose teacher is BT. If you click in the heading area to enter headings you will receive the following message.

Figure 565: The prompt to editing column headings

Instead, right-click in the headings and follow the link below.
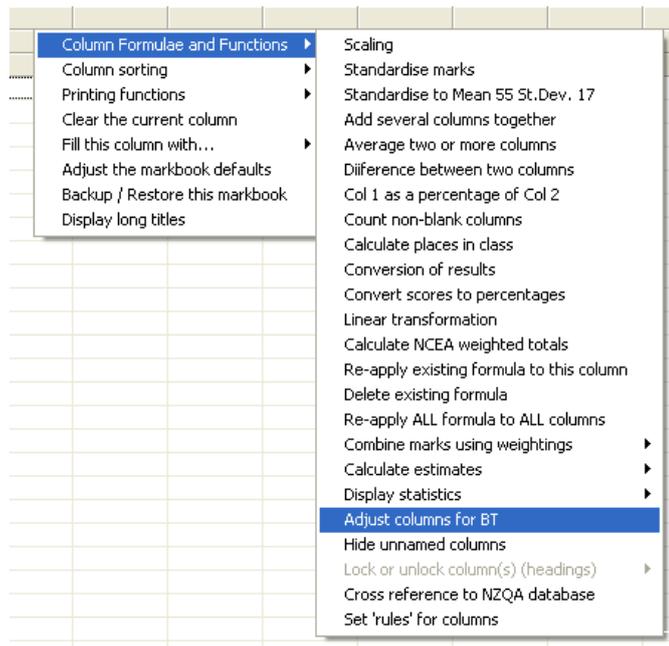
Figure 566: The entry to editing headings

The following popup window will appear wherein you can set up the column headings for the selected teacher. In the example below, three columns have been given headings.
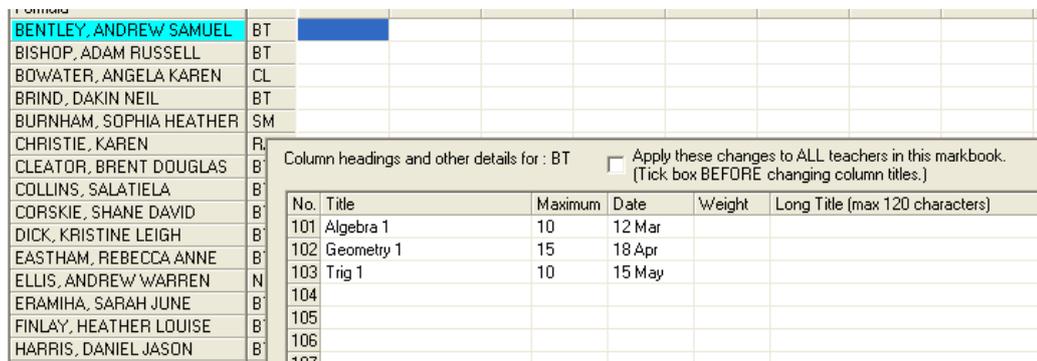
Figure 567: The teacher specific headings screen

At the completion of the process the headings are displayed….
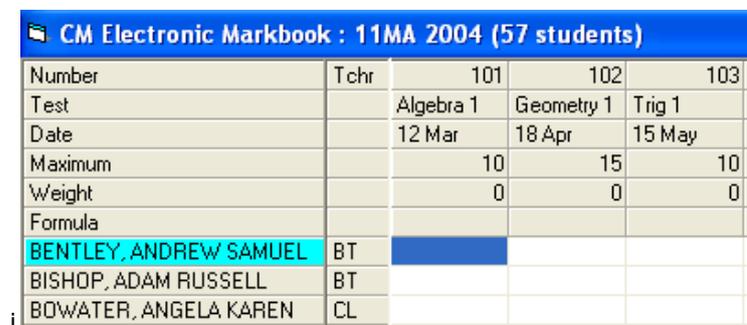
Figure 568: Three headings in place

… until you click on a student who has a different teacher ….

Figure 569: Another teacher, without headings

… who currently has no headings. Columns can be specified for the second teacher using the process described above.

Figure 570: New headings for a second teacher

This time, however, click in the small box at the top of the screen, which allows you to apply the new column headings to all teachers (provided that they do not already have headings of their own).

Figure 571: After ticking the 'all teachers' box

Confirming your intention, you can add further headings. In the example below, one further heading ('Term 1') has been added. On return to the main screen, this teacher now has four headed columns.

Figure 572: The new fourth heading ....

When you now revisit a student having the first teacher you will see that that teacher, too, now has the same fourth heading, while maintaining his or her original ones.

Figure 573: ... is on both teachers

Now for the entry of marks. Its rather difficult to do so on this screen when all of the different classes are loaded, so we shall sort the display into its various class groups by sorting on the teacher code. This is done by right-clicking in the top area to bring up the popup menu, from which we shall select 'Column sorting'. You can see, in the illustration below, that there are a variety of possible sorts. The first three do not apply to the column selected, whereas the following four do. The final option returns your screen to its original order – all students sorted alphabetically on their names.

Figure 574: Sorting options

The illustration below shows a portion of the sorted screen.

Figure 575: Sorted by teacher

Now we can proceed to enter marks. If you enter a mark greater than the maximum allowed then a warning will be presented, as shown below.

Figure 576: An error during entry of marks

At the completion of the task you will have all of your marks entered.

Figure 577: The marks have been entered

With marks in place on one teacher (and a surreptitious alteration of the fourth column maximum) apply another of our column formulae – this time to add the contents of the three columns. The illustration below shows the path to this formula.

Figure 578: Accessing the 'addition' formula

The usual 'Formula wizard' appears, with your choice highlighted.
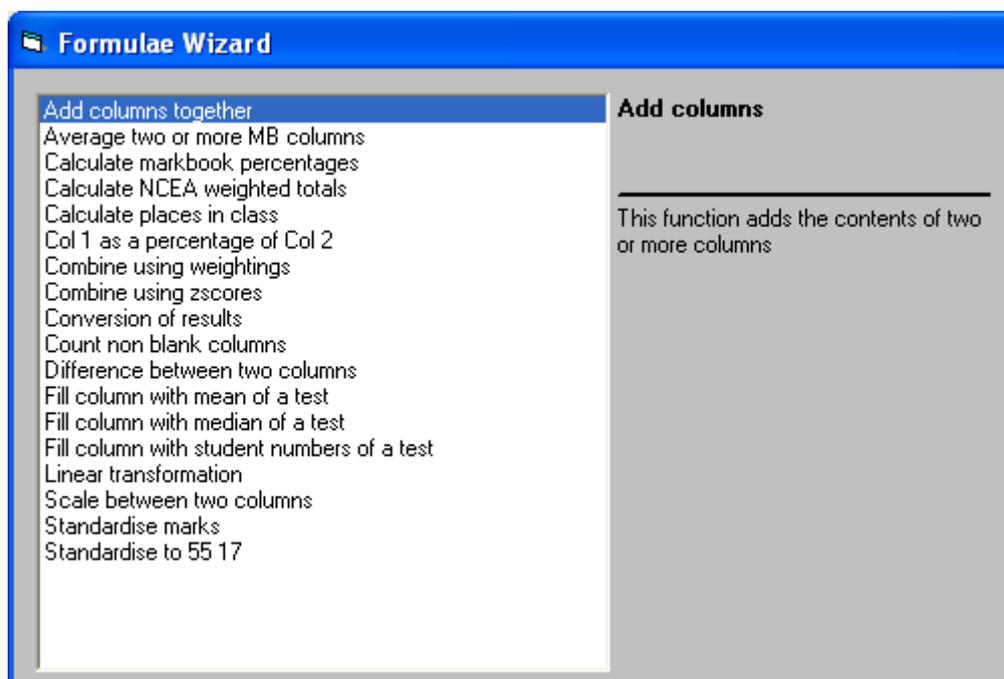
Figure 579: Add columns together

The first step is to select the columns to be added together. You will see from the screen below that you can select columns from both the current markbook and, via the column selector in the middle of the screen, from anywhere else in the database, including other markbooks. This allows you to generate entries in a 'total marks' column for students across a range of different markbooks.
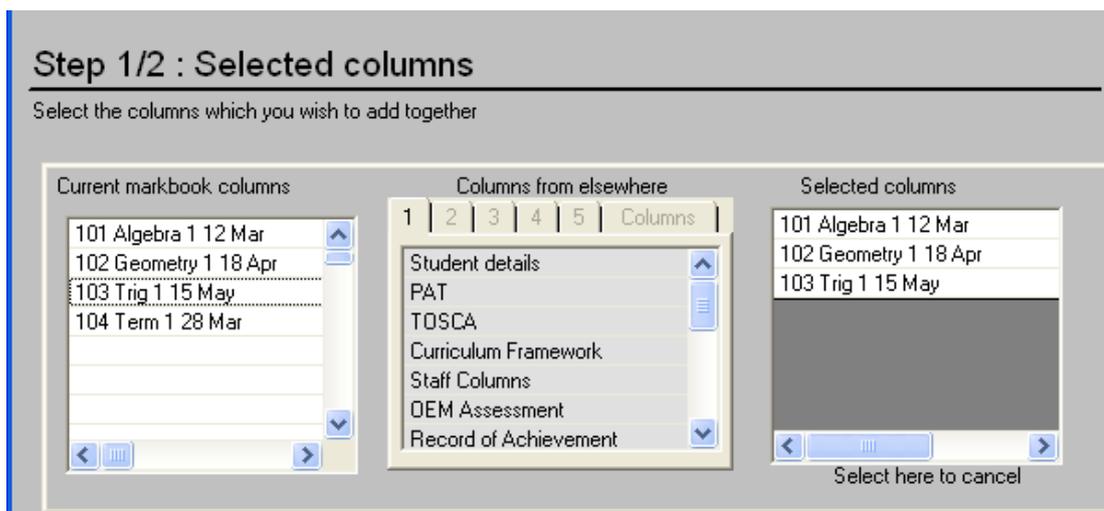
Figure 580: Selection of the columns

Our three columns have been selected, so we move to step two, which asks you to specify the 'destination' column where the totals are to be recorded.
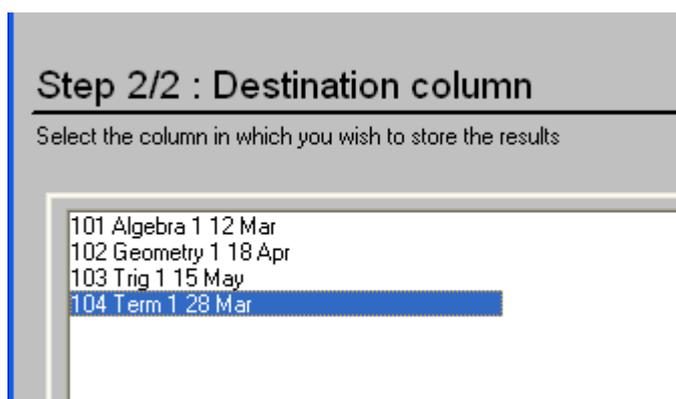
Figure 581: The 'destination' column

This done, you can proceed to apply the formula, and the totals are filled in as shown below. You will notice that the marks are recorded to two decimal places. This is a setting which has been made for this markbook. We shall come to the process of adjusting the settings later in this chapter.

Figure 582: The result of the addition

Some schools like to have a separate non-subject markbook where they import e.g. the final report marks from all subjects so that they can be available in one markbook and they then apply a variety of processes (adding, averaging, weighting etc) to determine the overall rank of students within their year level. To do this they sometime create a 'dummy' core subject. As it is a 'core' subject, every student at the level concerned takes the 'subject' and will hence appear in the markbook. Then it is a matter of 'filling a column with' – the contents of a column in another markbook – and repeating the process for each option line or for each subject until all of the contributing marks are in place.

Later we shall look in detail at more column formulae. Some will have restrictions when applied to teachers' columns as each teacher might have a different maximum for a particular column and it would not be feasible to apply a global scaling process to all students. Consequently, only the students in the currently selected teacher's class will be included in scaling (and other) processes which occur on the 'Teachers' columns' screen.

26.6 The 'Background details' screen

There are a few columns in the markbook which fall outside of the 100 common columns and the 100 teachers' columns. These are accessible via the 'background details' screen.

The columns are :

1. The subject (by virtue of which the student is in this markbook)
2. Their 'Current' teacher. (Their teacher may change from option set to options set during the year and this column should hold their 'current' teacher – see ('Reporting teacher' below)
3. Eight comment areas
4. Reporting teacher. If you wish to have the teacher appearing on the report to differ from their class teacher then enter the code of the relevant teacher here. Any entry in this column (which is normally blank) will override the entry in the 'teacher' column when extracted for reports.

If you attempt to change the subject codes then you will receive the following message.

Figure 583: Attempting to change a subject code

If you change the teacher code in the second column you will receive the following message.
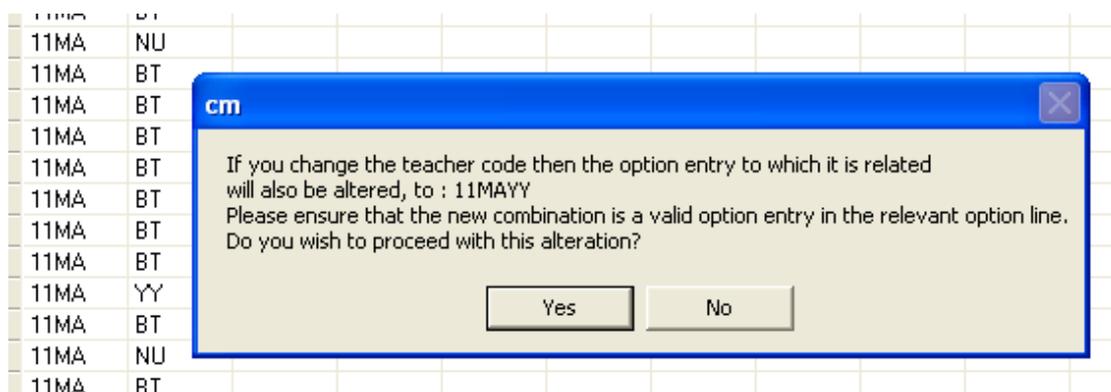
Figure 584: Changing a teacher code

In other words, you can do it if you insist, but you may be responsible for creating options which are not in the option lines! This would, in general, not be a good thing.

26.7 The 'Individual details' screen

This allows you to see all eight of the report comments at once. At the top of the screen are the three now obsolete fields along with the selected student's subject and teacher.
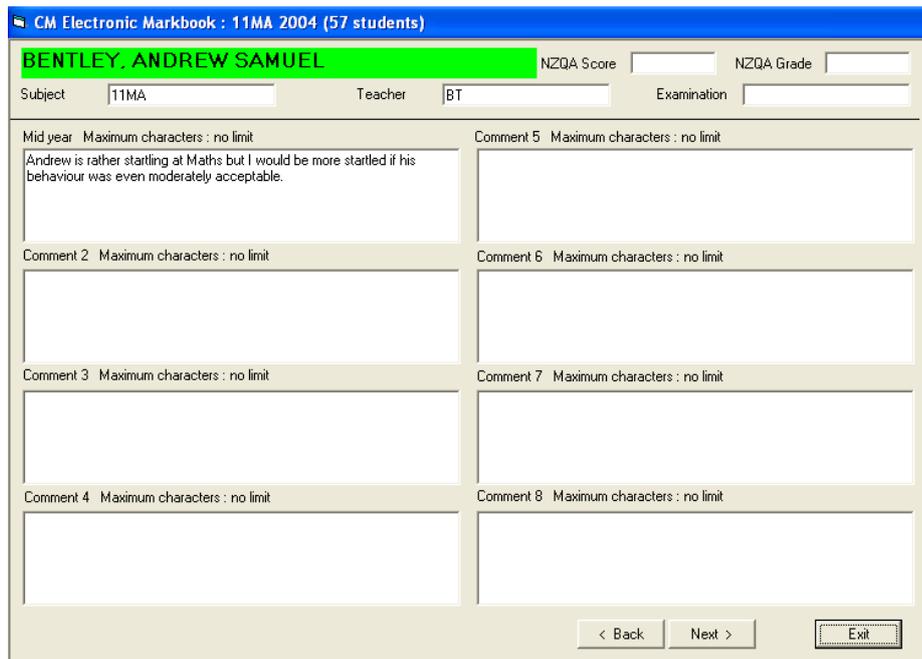
Figure 585: The 'Individual details' screen

To enter a comment click in the area corresponding to the required comment, and the word processor, shown below, will appear.
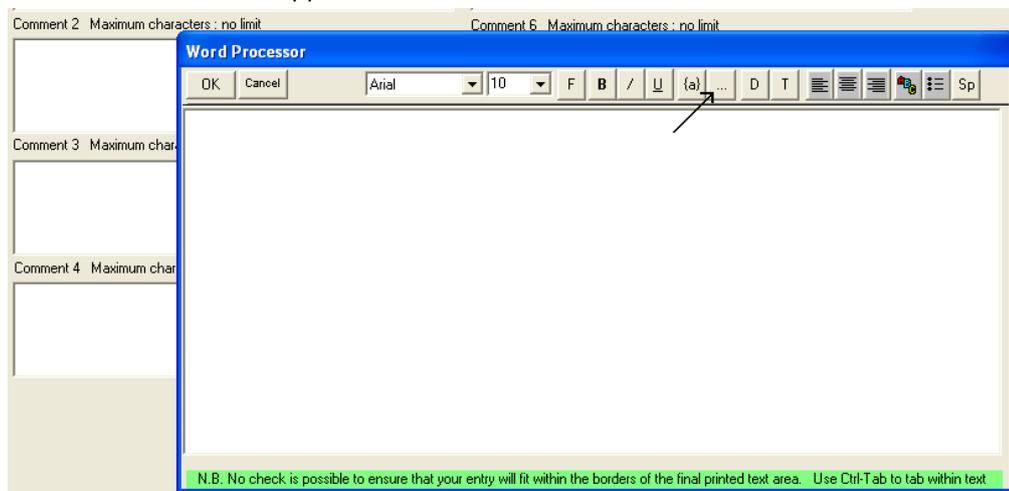
Figure 586: Entering a report comment

In the illustration above, an arrow points to the 'Comment insertion' button. Click on this button and the comment insertion tool will appear, as shown below.
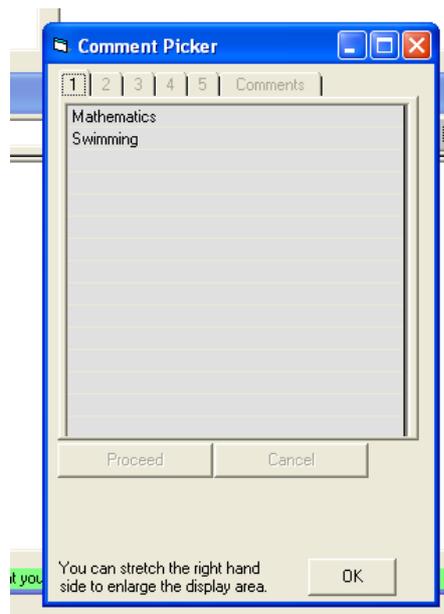
Figure 587: Selecting a comment bank

Select the bank from which you wish to select and it will appear, as shown below.
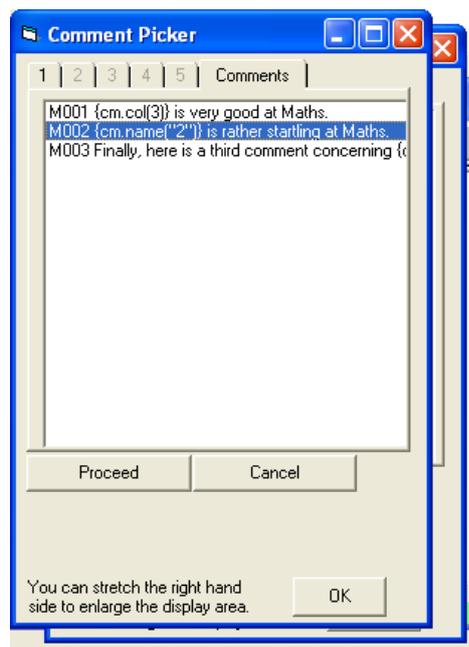
Figure 588: Selecting a comment from a bank

In the illustration above, I have selected a single comment. You may select more than one, in which case every second occurrence of the student's name will be replaced by the appropriate pronoun.
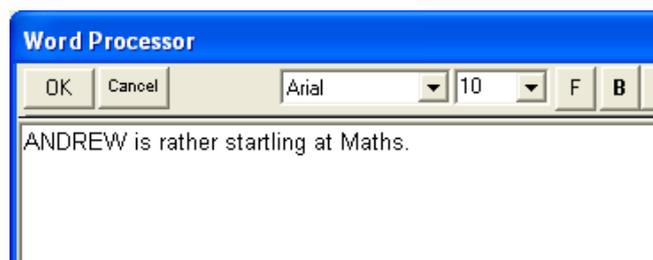
Figure 589: The selected comment

You will remember that this school has used upper case for its students' names, so that will require a modification of the comment. At the same time the comment has been added to, as shown below.
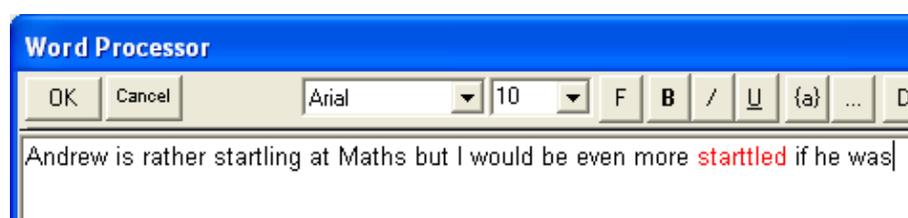
Figure 590: A spelling mistake

This comment includes a spelling mistake and, as the spell-checker is turned on, the incorrect word is highlighted in red. Right-click on the word and the prompt list will appear, as shown below.
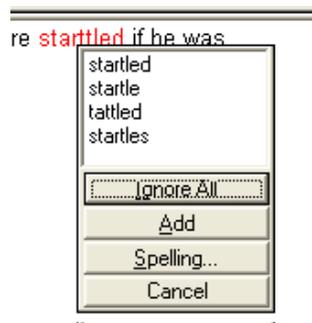
Figure 591: The spelling checker

Select the correct word by clicking on it and the correction will be made. You will notice that there are other buttons at the bottom of the spelling checker. In the example below I've clicked on the third of these and a more sophisticated version of the suggestions is displayed. This screen allows you to perform a variety of functions, including the adding of a new spelling to the dictionary used, and even the creation of or selection of a new dictionary.
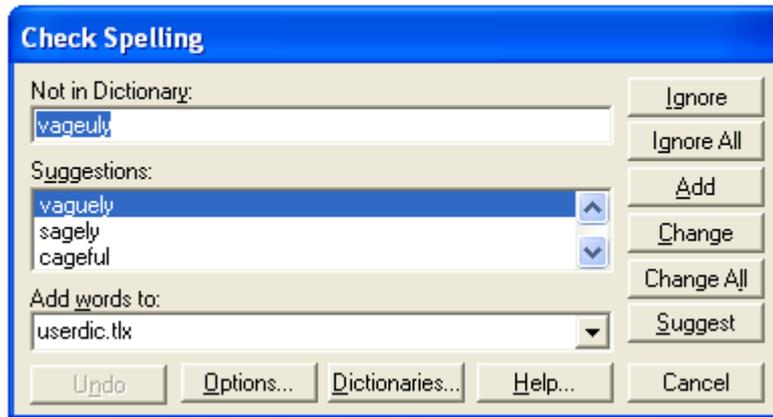
Figure 592: Select 'Spelling' from the spelling checker

At the top right hand corner of the word processor is the 'Sp' button which enables you to toggle the use of the spell-checker on or off. This process is illustrated below.
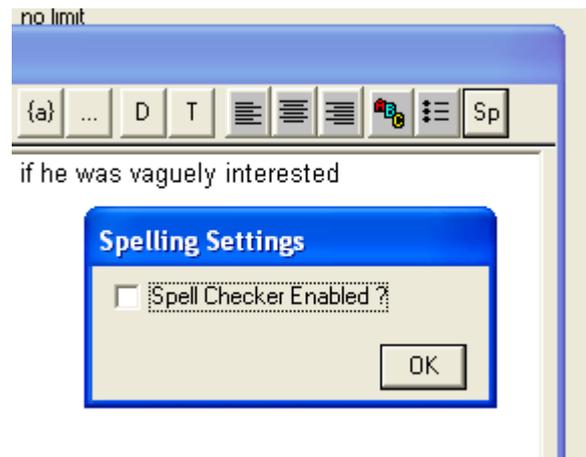
Figure 593: Toggling the spell-checker

Finally the comment is completed in the word processor. Click the 'OK' button and …
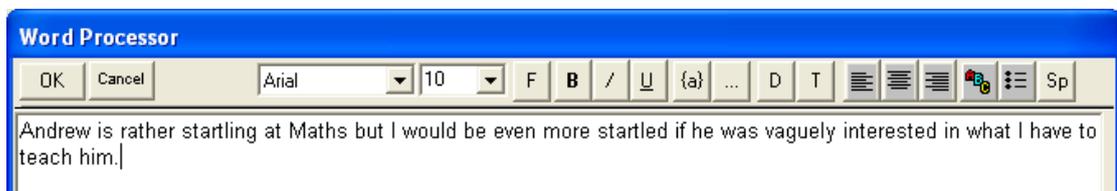
Figure 594: The completed comment …

… the completed comment will be displayed in its comment area, as shown below.
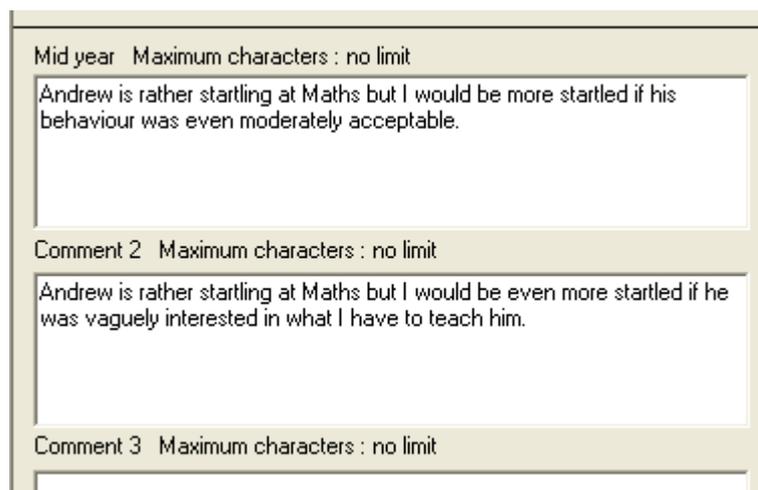
Figure 595: ... appears back in its area.

Each of the comment areas has its own name and it own maximum number of characters. We shall see how to change these shortly.

26.8 The popup menu

Let's return now to the popup menu which appears when you right-click anywhere in the markbook area. We've already dealt with a few of the possibilities but we shall now return to look at them in some detail. We shall not go in to excruciating details (as we did for the grid mode popup menu in chapter 6). Many of the formulae and other processes are the same. Instead we shall describe them and only provide screen captures for those which differ from anything described previously.

The main menu appears as shown below, and we shall deal with these entries, one by one.
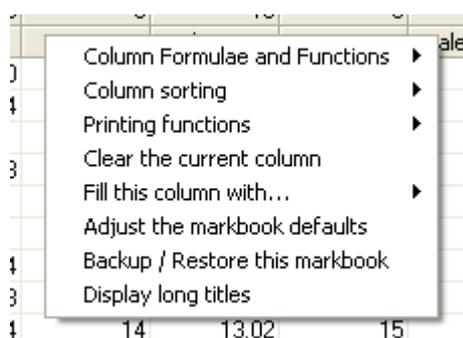
Figure 596: The column popup menu

26.8.1 Column formulae and functions

The submenu for this topic, shown below, is of considerable length and it offers a number of formulae as well as a variety of functions relating to the markbook columns.

Scaling

We have already been through the five various ways of scaling marks in a column earlier in this chapter.

Standardise marks

This process is used to alter the entries in a column so that they have the same mean and standard deviation as the entries in another column. The results can be entered into a third column.
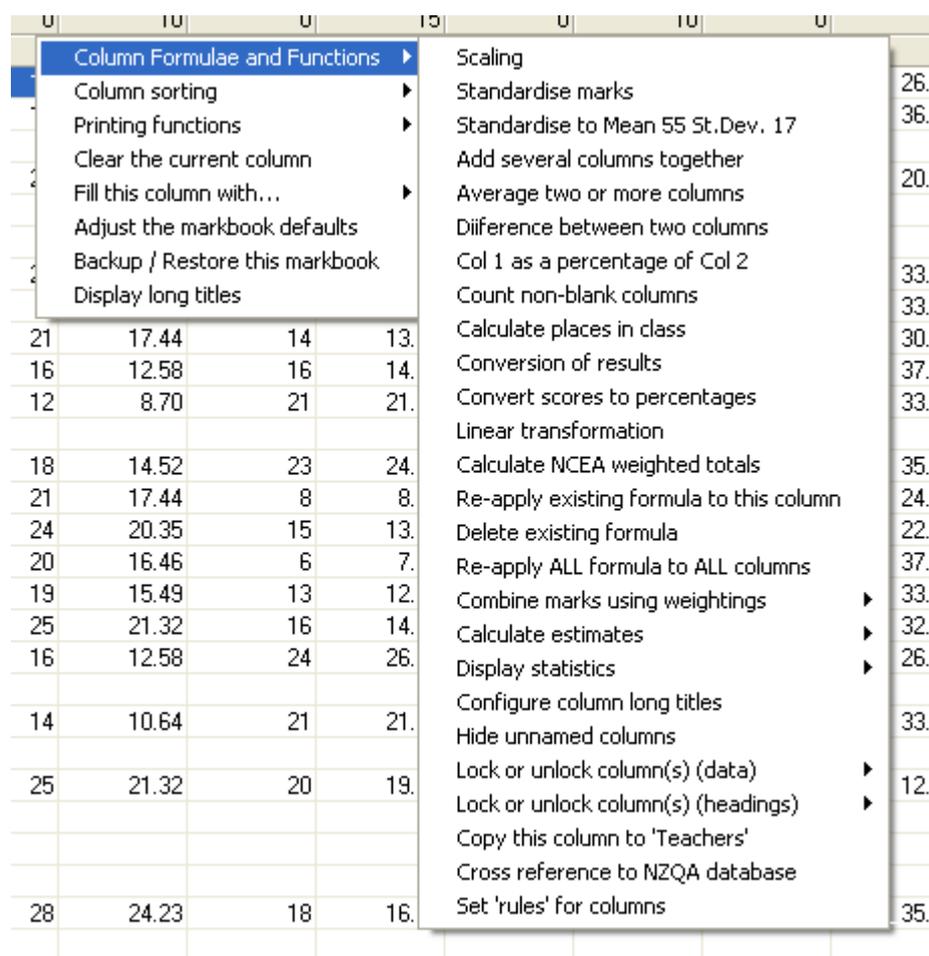
Figure 597: Column formulae and functions

Standardisation is used to allow for the fact that different teachers may well mark a particular test to different standards. Some teachers may 'mark hard' while others may be more generous in their approach. This causes, of course, one group of students to be unfairly advantaged over another. The standardisation process requires that there exist one column of marks which have been all marked to the same standard and that the distribution of these is deemed to be just and fair.

This can be achieved across a number of option classes in the same subject by having one (experienced?) teacher mark all of a common test. Alternatively, in the past, standardisation at Year 12 might well be based on the students' school certificate results.

To standardise a set of marks, click on the second item in the 'Scaling' menu and you will enter the, by now rather familiar' formula wizard.
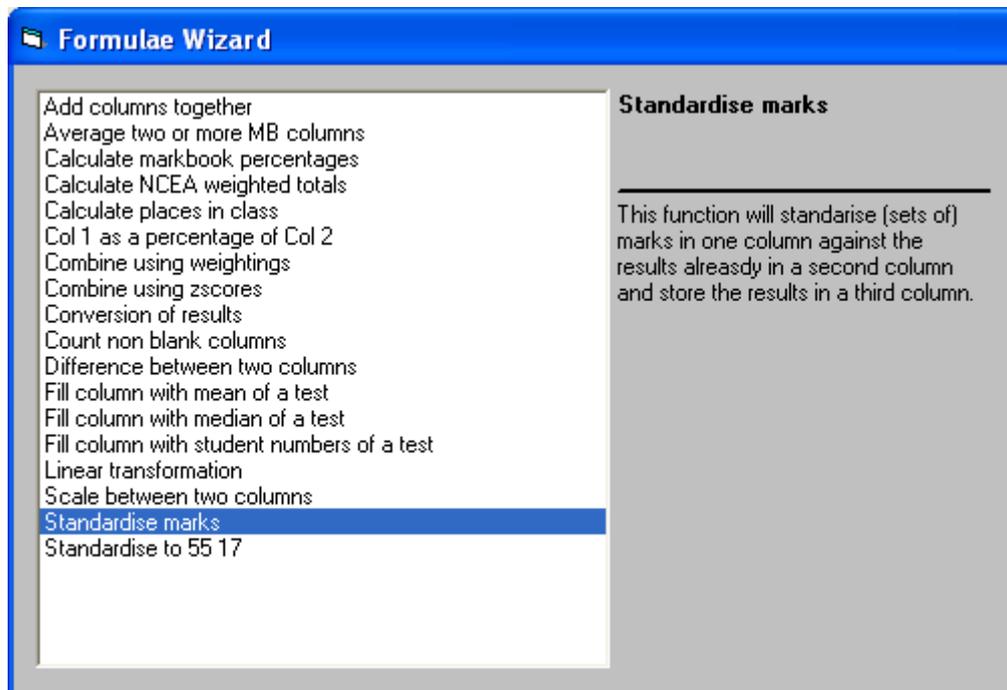
Figure 598: Standardise marks

The first step is to decide how you wish to group the students for the standardising process. The most common way is by teacher, and shown below.
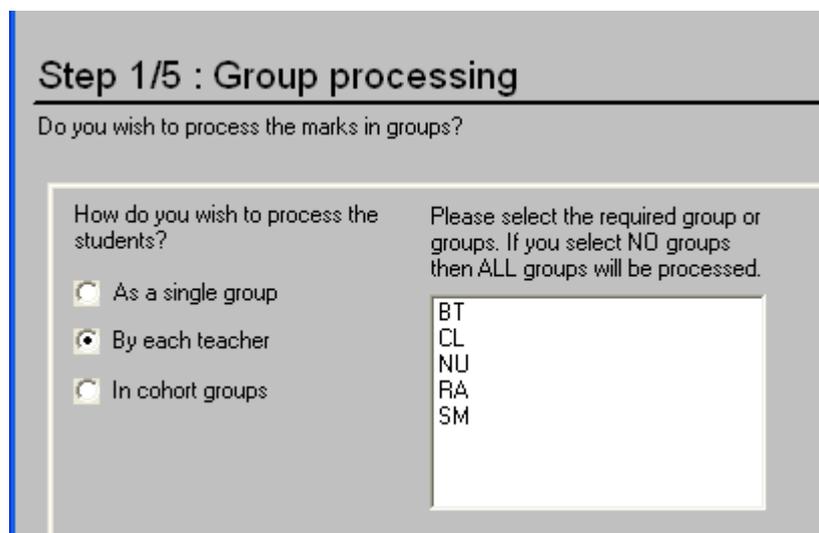
Figure 599: Selecting the group

Secondly, select the source column – the column containing the marks to be standardised.
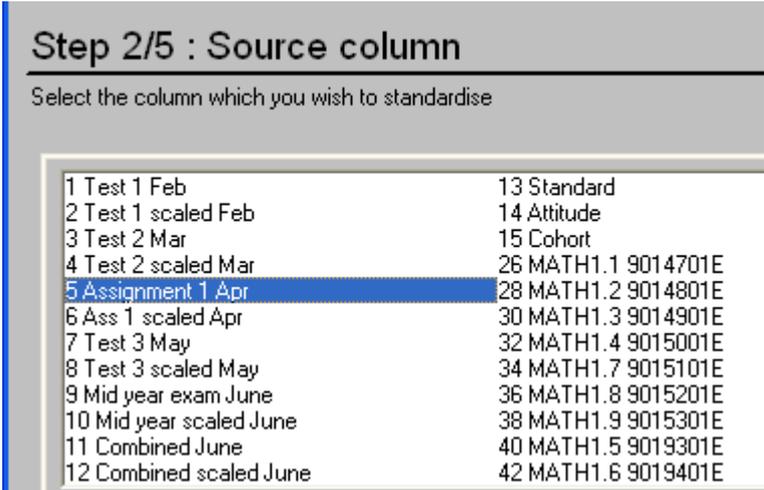
Figure 600: Selecting the column to standardise

Thirdly, select the column containing the previously standardised marks.
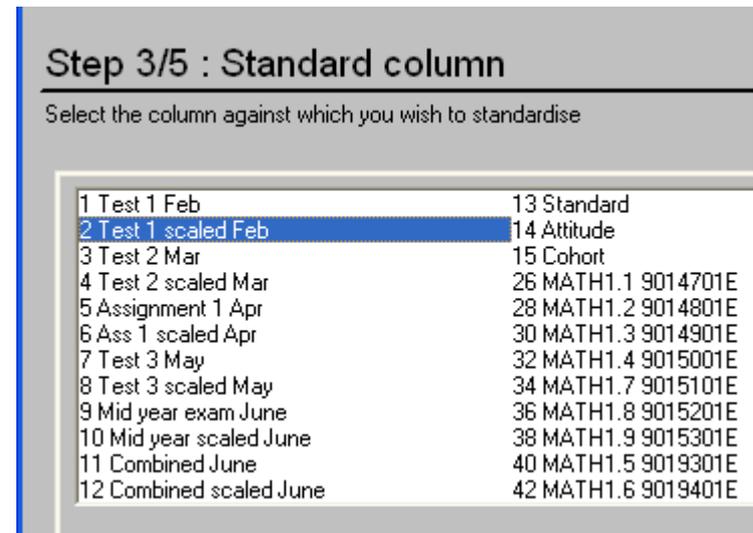
Figure 601: Selecting the base for the standardising process

Next select the column which will contain the results of the process.
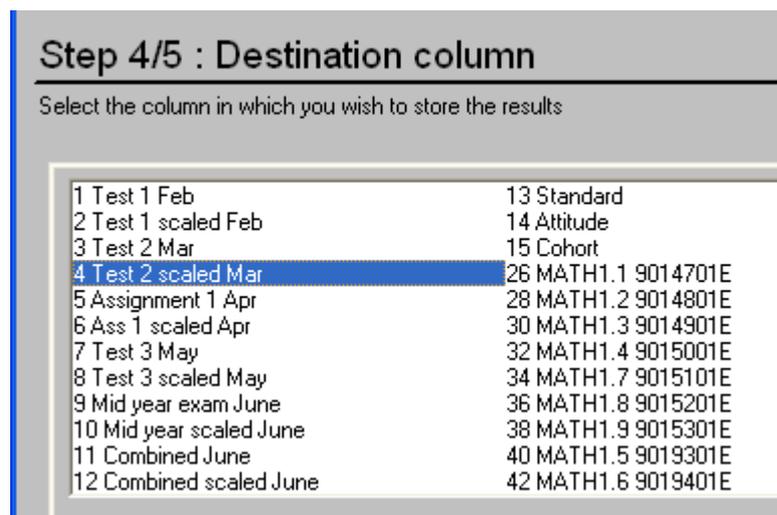
Figure 602: Selecting the destination column

Finally, select the method which you wish to use for standardising. There are two options.

(Means and Standard deviations – Each group (class?) standardised will have their results adjusted (scaled) so that the resulting mean and standard deviation of each group is the same as that for their group in the previously standardised column.

Medians and quartiles. The same process applies. Marks will be scaled so that the median and quartiles of the results are the same as those for the same group in the previously standardised column.
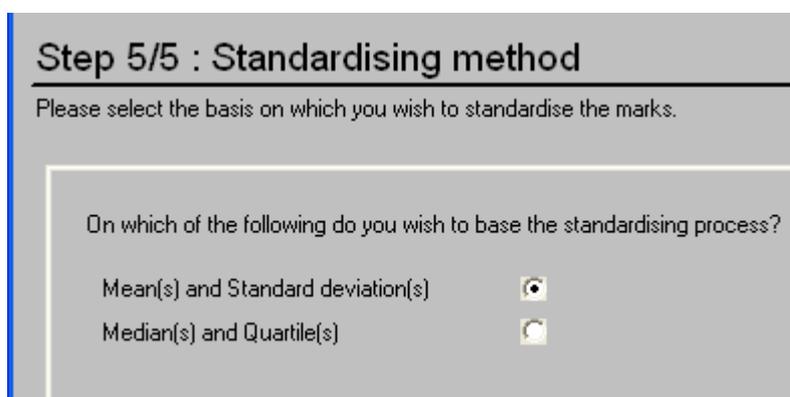
Figure 603: Selecting the method

Standardise to Mean 55 Standard deviation 17

This is an 'instant scaling' process which scales the marks in the 'source' column to a mean of 55 and a standard deviation of 17.

Add several columns together

We have already dealt with this process earlier in this chapter.

Average two or more columns

We have already dealt with this and the next two processes in Chapter six which dealt with column formulae.

Difference between two columns

Col 1 as a percentage of Col 2

Count non-blank columns

This formula fills the nominated column with the number of blank columns which a student has over a range of nominated columns. It is useful to provide a quick measure of how many results are 'missing' on a student at any particular time.

Calculate places in class

This formula is used in the generation of the more 'traditional' school report which includes each student's 'place in class'.

Conversion of results

We have already dealt with this and the next two processes in Chapter six which dealt with column formulae.

Convert scores to percentages

Linear transformation

This is the 'Multiply and offset' process from grid mode.

Calculate NCEA weighted totals

This formula is used to provide an indication of the degree of success which each student has achieved in their NCEA Achievement Standards.
The first step is to give each of the possible outcomes a numerical value. This is illustrated below.
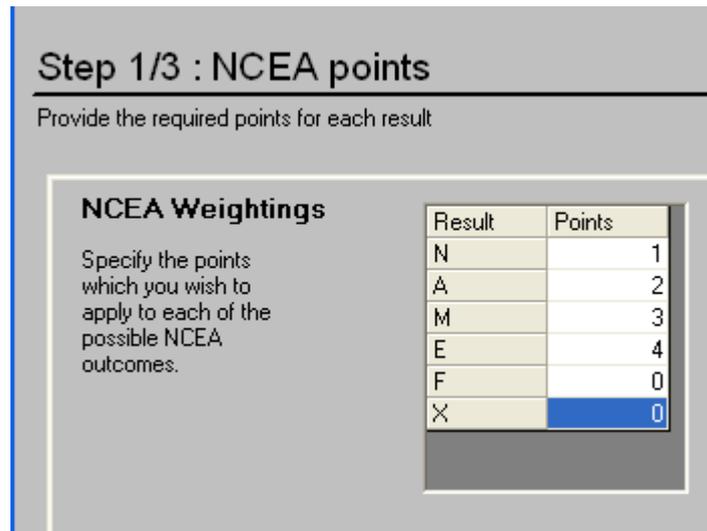
Figure 604: The points for each level

Secondly, identify the standards which you wish to cover.
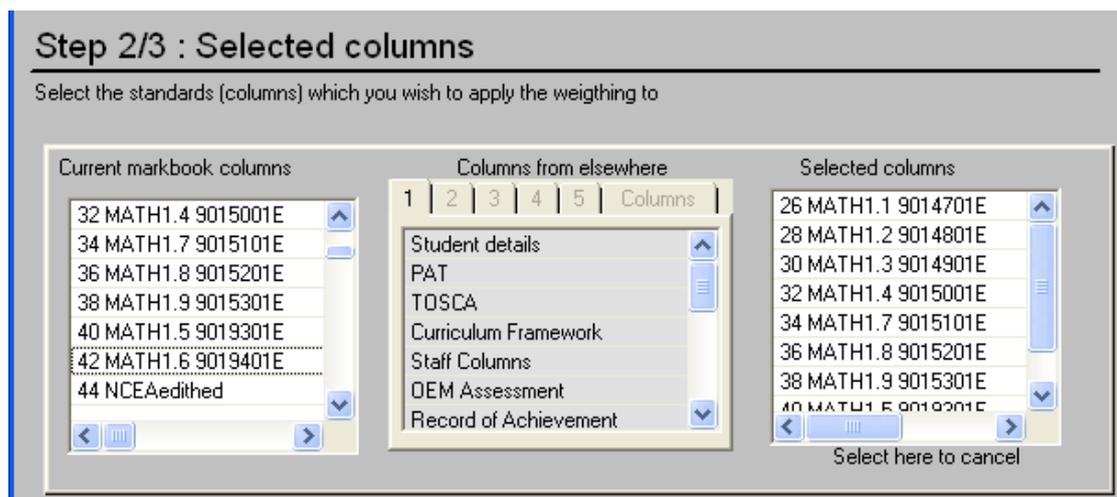
Figure 605: Selecting the standards

Finally, decide on the column which will hold the results of the calculation.
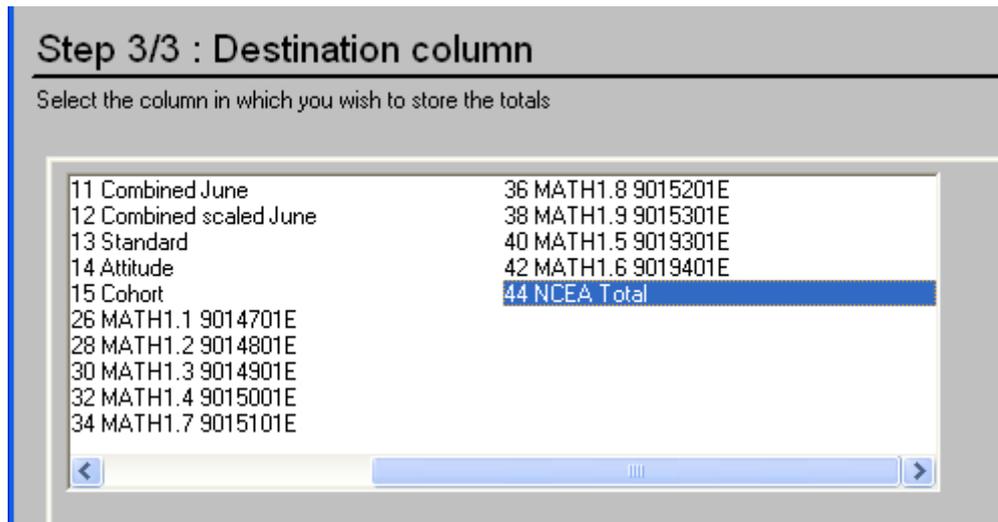
Figure 606: Selecting the destination column

The final results of the process are shown below.

Figure 607: The final results

Re-apply existing formula to this column

This function causes the formula, if any, attached to the currently selected column to be reapplied.

Delete existing formula

This function removes the existing formula, if any, from the currently selected column.

Re-apply ALL formulae to ALL columns

This function causes all of the formulae, if any, attached to any of the markbook columns to be reapplied. This is done, in order, starting with the left-most column.

Combine marks using weightings

We have already dealt with this process earlier in this chapter.

Calculate estimates

You will remember that it is possible to enter '*est' as a student's mark to indicate that you wish to calculate an estimate for this entry. To demonstrate this let's return to the earlier screen full of results and replace two of these with the *est signal.

	Tchr	1	2	3	4	5	6	
		Test 1	Test 1 scale	Test 2	Test 2 scale	Assignment	Ass 1 scaled	
		Feb	Feb	Mar	Mar	Apr	Apr	
		30	30	25	25	20	20	
		0	10	0	15	0	10	
			scale		standarise		scale	
AMUEL	BT	12	8.70	12	10.31	9	8.80	
:LL	BT	14	10.64	14	7.78	7	6.46	
	BT	23	19.38	21	14.10	12	14.79	
JGLAS	BT	21	17.44	13	17.90	15	18.33	
	BT	9	5.78	17	7.78	7	6.46	
'ID	BT	21	17.44	14	17.90	15	*est	
	BT	16	12.58	16	14.10	12	14.79	
ANNE	BT	12	8.70	21	20.43	17	20.15	
IE	BT	18	14.52	23	12.84	11	12.89	
JISE	BT	21	17.44	8	9.04	8	7.50	
IN	BT	24	20.35	15	15.37	13	*est	
3ENATA	BT	20	16.46	6	5.25	5	4.22	

Figure 608: Two estimates are required

When we select the 'Calculate estimates' option there are two choices, allowing us to calculate ALL outstanding estimates or just those for the selected column, as shown below.

9	8.80	26	33.40	Combine marks using weightings	▶	
7				Calculate estimates	▶	
1	Calculate estimates for this column			Display statistics	▶	
8	Calculate estimates for all columns			Configure column long titles		
3	16.08	32	36.20	Hide unnamed columns		
6	19.19	15	20.00			
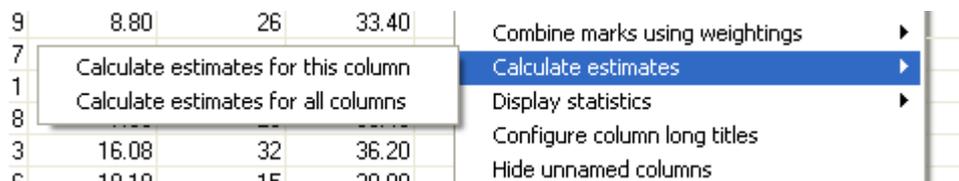
Figure 609: The choice of process

Selecting the first of these, the following screen appears, via which we must select those columns holding results on which we shall calculate the estimates. The basis of the process is to determine the means and standard deviations of the selected columns and the students' (for whom we wish to calculate estimates) z-scores in these columns. These are then averaged and applied to the mean and standard deviation of the target column to generate the estimates.
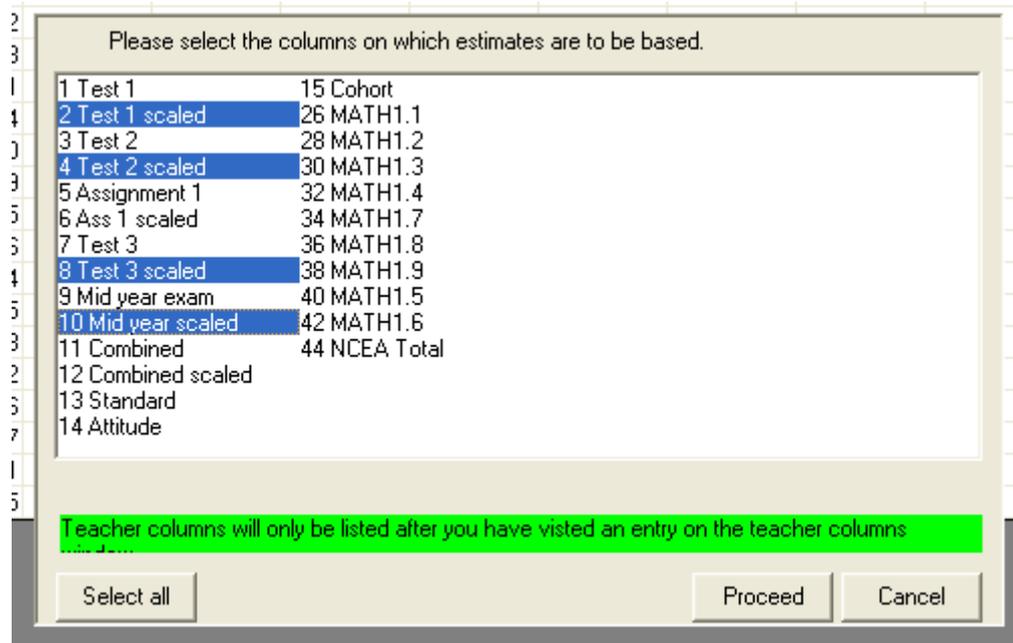
Figure 610: Selecting the columns on which to base estimates

The results of the process are shown below.

Figure 611: The final results

Display statistics

This option allows the basic statistics for the currently visible columns to be displayed in a panel at the bottom of the screen. There are three options open to you and two of these are displayed below.
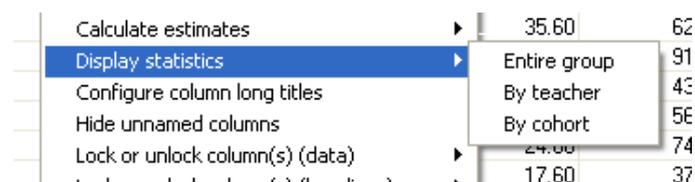
Figure 612: The three options

Number	Tchr	1	2	3	4	5	6	7	8	9	(lock_h) 10
Test		Test 1	Test 1 scale	Test 2	Test 2 scale	Assignment	Ass 1 scaled	Test 3	Test 3 scale	Mid year exa	Mid year sca	Cor
Date		Feb	Feb	Mar	Mar	Apr	Apr	May	May	June	June	Jun
Maximum		30	30	25	25	20	20	40	40	100	100	
Weight		0	10	0	15	0	10	0	18	0	60	
Formula			scale		standarise		scale		scale		scale	
BENTLEY, ANDREW SAMUEL	BT	12	8.70	12	10.31	9	8.80	18	26.00	56	58.18	
BISHOP, ADAM RUSSELL	BT	14	10.64	14	7.78	7	6.46	32	36.20	53	55.07	
BRIND, DAKIN NEIL	BT	23	19.38	21	14.10	12	14.79	15	20.00	47	48.84	
CLEATOR, BRENT DOUGLAS	BT	21	17.44	13	17.90	15	18.33	26	33.40	48	49.87	
COLLINS, SALATIELA	BT	9	5.78	17	7.78	7	6.46	27	33.80	37	38.44	
CORSKIE, SHANE DAVID	BT	21	17.44	14	17.90	15	16.04*		21	30.60	73	74.36
DICK, KRISTINE LEIGH	BT	16	12.58	16	14.10	12	14.79	34	37.40	74	75.31	
EASTHAM, REBECCA ANNE	BT	12	8.70	21	20.43	17	20.15	25	33.00	35	36.36	
ERAMIHA, SARAH JUNE	BT	18	14.52	23	12.84	11	12.89	30	35.00	47	48.84	
FINLAY, HEATHER LOUISE	BT	21	17.44	8	9.04	8	7.50	17	24.00	56	58.18	
HARRIS, DANIEL JASON	BT	24	20.35	15	15.37	13	13.63*	16	22.00	62	63.90	
HODGSON, TRINEZE RENATA	BT	20	16.46	6	5.25	5	4.22	34	37.40	58	60.10	
HULL, BEVAN DESMOND	BT	19	15.49	13	19.16	16	19.19	26	33.40	63	64.86	
LEPPER, CHARLES DAVID	BT	25	21.32	16	16.63	14	17.28	24	32.40	83	83.85	
LOVE, ANDREW GARTH	BT	16	12.58	24	14.10	12	14.79	18	26.00	57	59.15	
MARSHALL, MICHAEL CAMERO	BT	14	10.64	21	10.31	9	8.80	26	33.40	45	46.76	
McHUTCHON, REX	BT	25	21.32	20	7.78	7	6.46	9	12.40	38	39.47	
NORGROVE, DEON JOSEPH	BT	28	24.23	18	12.84	11	12.89	31	35.60	62	63.90	
REID, ADRIAN JOHN	BT	22	18.41	14	9.04	8	7.50	26	33.40	91	91.45	
SUTTON, BRENT GARY	BT	26	22.29	17	15.37	13	16.08	32	36.20	43	44.67	
TAIT, TERRANCE	BT	27	23.26	15	19.16	16	19.19	15	20.00	56	58.18	
WESTERBY, MICHELLE MARIE	BT	21	17.44	18	15.37	13	16.08	17	24.00	74	75.31	
WILKINSON, CINDY ANNE	BT	15	11.61	21	14.10	12	14.79	13	17.60	37	38.44	
All	Number	23	23	23	23	23	23	23	23	23	23	
	Mean	19.52	16.00	16.39	13.33	11.39	12.92	23.13	29.27	56.30	57.98	
	Std.Dev.	5.15	5.00	4.41	4.17	3.29	4.74	7.14	7.03	14.78	14.60	
	Median	21.00	17.44	16.00	14.10	12.00	14.79	25.00	33.00	56.00	58.18	

Figure 613: The statistics for ALL students in the markbook

MARSHALL, MICHAEL CAMERO	BT	14	10.64	21	10.31	9	8.80	26	33.40	45	46.76
McHUTCHON, REX	BT	25	21.32	20	7.78	7	6.46	9	12.40	38	39.47
NORGROVE, DEON JOSEPH	BT	28	24.23	18	12.84	11	12.89	31	35.60	62	63.90
REID, ADRIAN JOHN	BT	22	18.41	14	9.04	8	7.50	26	33.40	91	91.45
SUTTON, BRENT GARY	BT	26	22.29	17	15.37	13	16.08	32	36.20	43	44.67
TAIT, TERRANCE	BT	27	23.26	15	19.16	16	19.19	15	20.00	56	58.18
WESTERBY, MICHELLE MARIE	BT	21	17.44	18	15.37	13	16.08	17	24.00	74	75.31
A	Number	7	7	7	7	7	7	7	7	7	7
	Mean	20.00	16.47	14.71	11.94	10.29	11.44	23.43	28.83	56.14	58.01
	Std.Dev.	4.81	4.67	4.46	3.87	3.06	4.52	8.07	6.95	9.43	9.33
	Median	21.00	17.44	15.00	14.10	12.00	13.63	18.00	26.00	56.00	58.18
B	Number	8	8	8	8	8	8	8	8	8	8
	Mean	19.75	16.22	15.38	13.79	11.75	13.26	24.13	30.85	63.38	64.70
	Std.Dev.	4.92	4.78	2.23	4.55	3.60	5.16	6.66	7.19	19.14	18.82
	Median	21.00	17.44	15.00	15.37	13.00	15.42	26.00	33.40	68.00	69.61
C	Number	8	8	8	8	8	8	8	8	8	8
	Mean	18.88	15.37	18.88	14.10	12.00	13.88	21.88	28.08	49.38	51.23
	Std.Dev.	5.58	5.41	4.88	3.69	2.92	4.15	6.53	6.64	9.29	9.55
	Median	17.00	13.55	21.00	13.47	11.50	13.84	21.50	29.50	51.50	53.51

Figure 614: The statistics for the three cohorts

Configure column long titles

This option produces a screen which allows you to edit the long column titles. We will shortly see how to have these displayed while using the markbook – via the last item on the main popup menu.
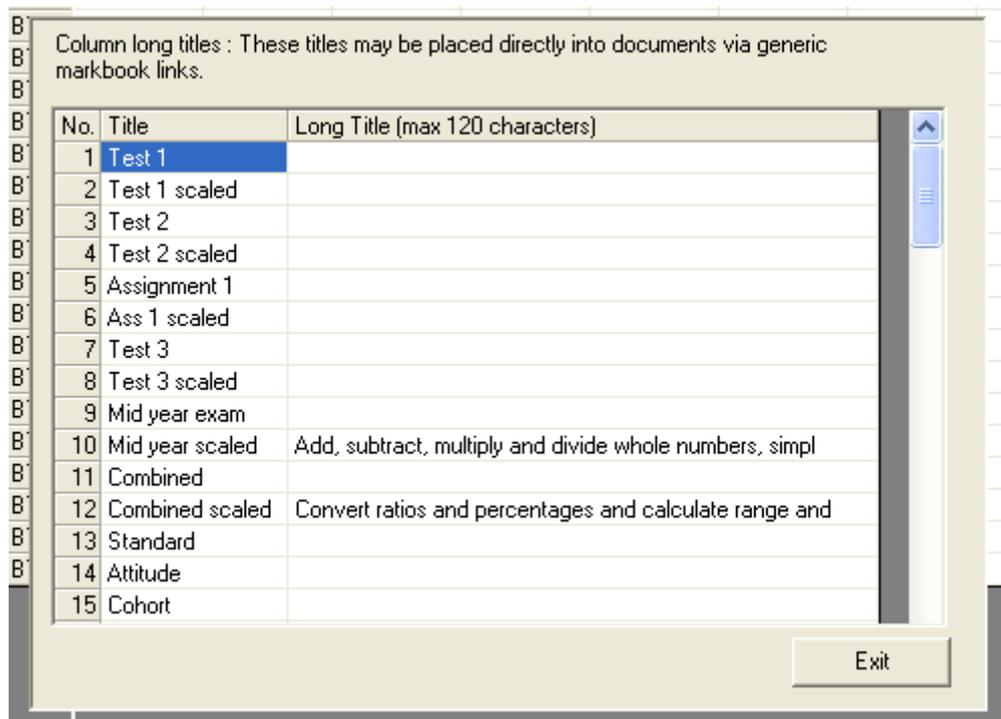
Figure 615: Editing long column titles

Hide unnamed columns

This option does the same as the 'Hide' button in the bottom left hand corner of the markbook screen. It causes columns without titles to be hidden.

Lock or unlock columns (data)

It is possible, provided that you have the right to do so, to lock the data area for one or more columns from here within the markbook.
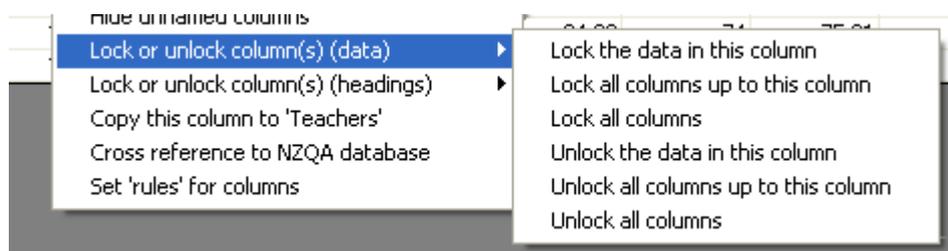
Figure 616: Locking data

Lock or unlock columns (Headings)

It is possible, provided that you have the right to do so, to lock the titles area for one or more columns from here within the markbook.
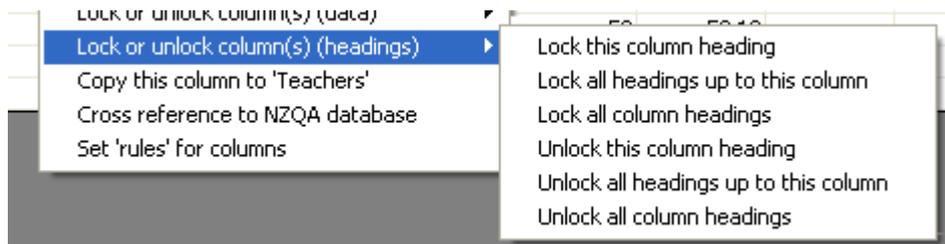
Figure 617: Locking headings

Once you have locked either data or titles, the display in the top line of the markbook – the column numbers – is altered to reflect the locks applied:

- (lock_d) indicates that the data is locked
- (lock_h) indicates that the title is locked
- (lock_hd) indicates that both are locked

Figure 618: The locking messages

Should you attempt to edit data in a locked column then the following message will be displayed.
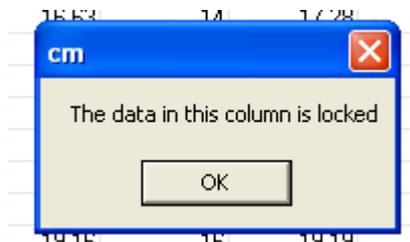
Figure 619: Attempting to edit locked data

Copy this column to 'Teachers'

It is possible to fill a column with teacher codes which may differ from those recorded in the 'Teacher' column in background details. It is possible, having filled a different column, to have them replace the codes in the 'teacher' column. This is, of course, a rather drastic step to take as it effectively alters the students' options. It is not a step to be undertaken lightly, and the following message does provide a warning.
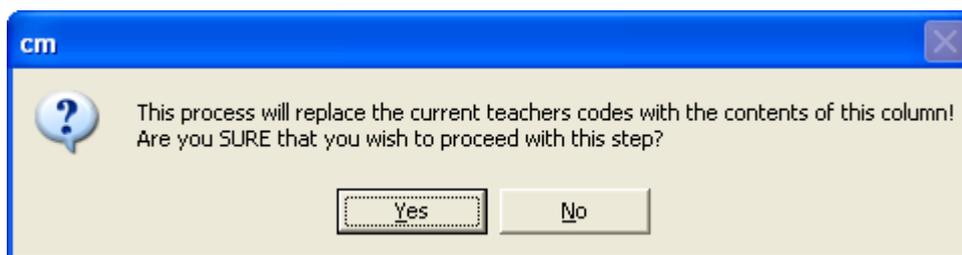
Figure 620: Replace the teacher codes?

Cross reference to NZQA database

This process causes any entries in NZQA columns to be copied to the NZQA area of the ClassRoom Manager database. The following display appears during the process…

Figure 621: Cross checking the NZQA results

… and, at the end of the process, the following is displayed.
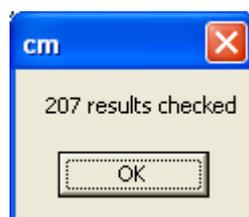
Figure 622: The completed process

Set 'rules' for columns

We have described the process of setting rules for CM columns in a previous chapter, and the same process can be applied to markbooks. The following screen provides access to the process.

In the example the possibilities A, B, and C have been set as the possible entries in the 'Cohort' column. The subsequent display illustrates what happens if you accidentally enter an incorrect entry into the 'Cohort' columns. You are then obliged to select one of the possibilities presented.
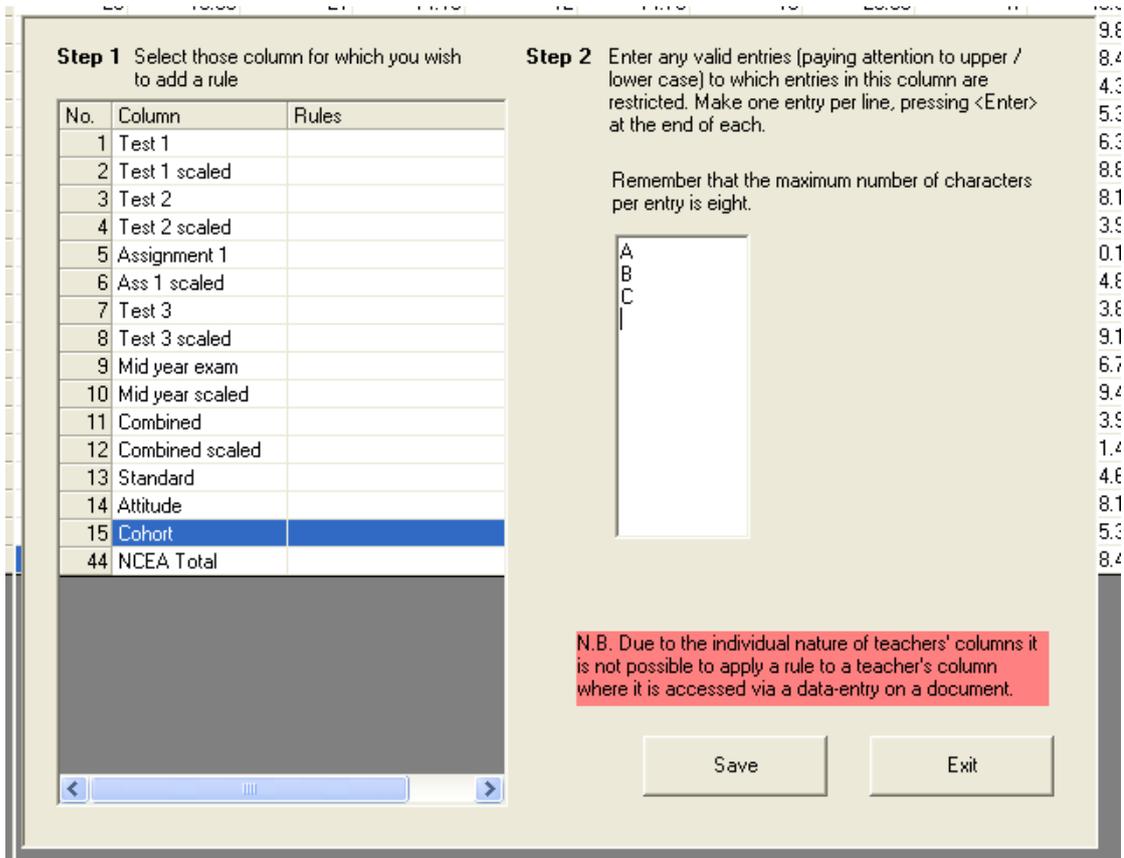
Figure 623: The entry of column rules
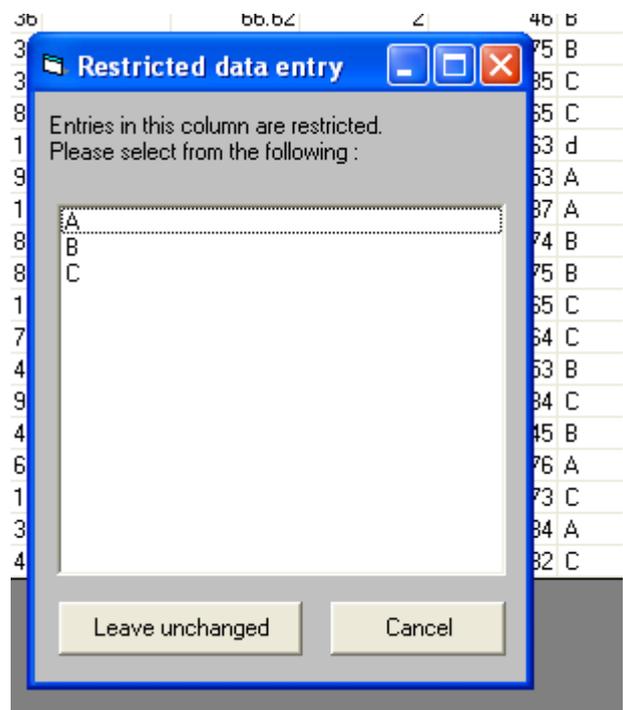
Figure 624: An incorrect entry has been recognised

Well, we've reached the end of the first entry in the popup menu.

26.8.2 Column sorting

We have already met this option during a previous example. The possibilities are shown below.
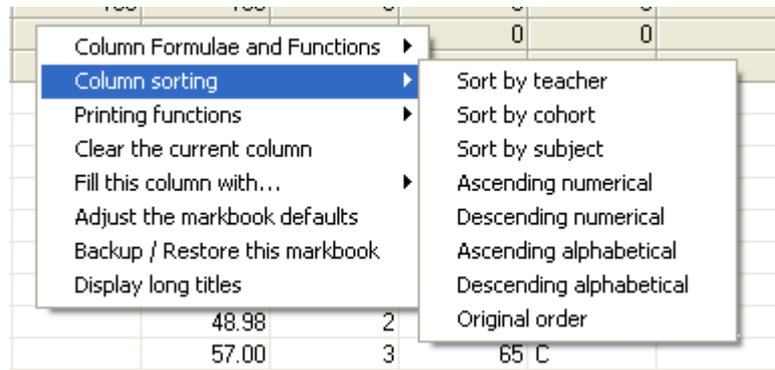
Figure 625: The column sorting possibilities

26.8.3 Printing functions

It is possible to produce a variety of printouts from a markbook. These are accessed via the third option on the popup menu….
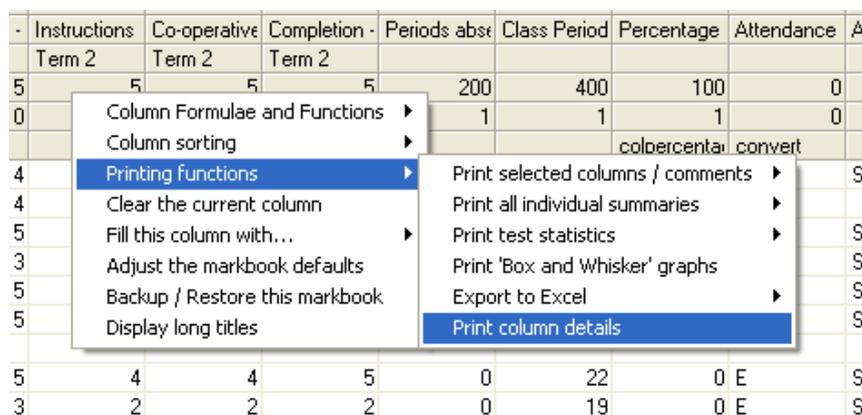
Figure 626: The markbook printing functions

… and four of these (the ones with arrows to the right) allow you to print by three different groupings, as shown below.

Selected columns and comments

For this example we shall select a few columns and print for one teacher.
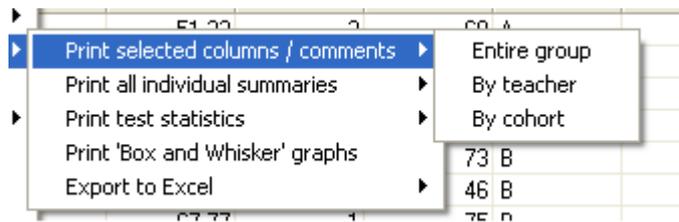
Figure 627: The print grouping options

The column selection process is shown below. This allows you to select those columns (and/or/comments) which you wish to have printed. You can also nominate the maximum number of columns per page. If you exceed eight columns per page the orientation will switch to landscape.
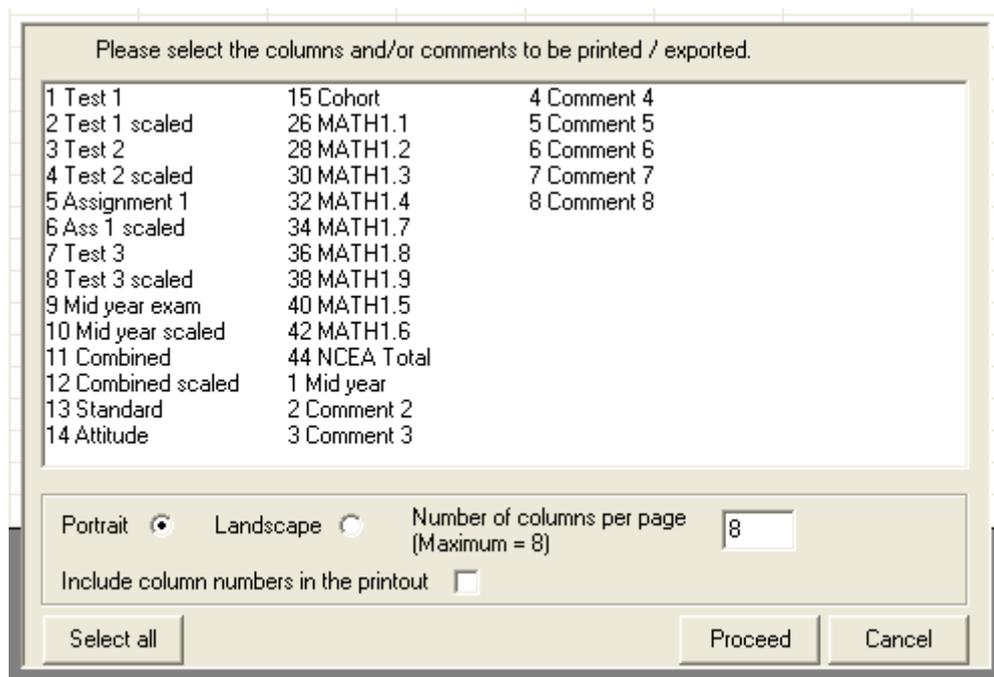
Figure 628: The selection of columns for printing

The result, greatly reduced, is shown below.

Figure 629: The results from selected columns

An individual student's summary

You can print these for individual students by selecting them then right-clicking on their name and selecting the first menu item. Alternatively, via this process you can print them for all students. An example of such a printout is shown below.

Figure 630: A single student's results

Test statistics

This option allows you to print the statistics for selected tests in any of the various groupings. An example of a statistics printout is shown below.

Figure 631: The requested test statistics

Box and Whisker graphs

The fourth printing option allows you to print box and whisker graphs for a variety of possible combinations i.e. several tests for one teacher, or several teachers and one test, several tests and 'all teachers'. In the example below several tests have been selected for one teacher. If a column's maximum score is greater than 100 then the results are temporarily scaled to allow the graph to be drawn to scale.
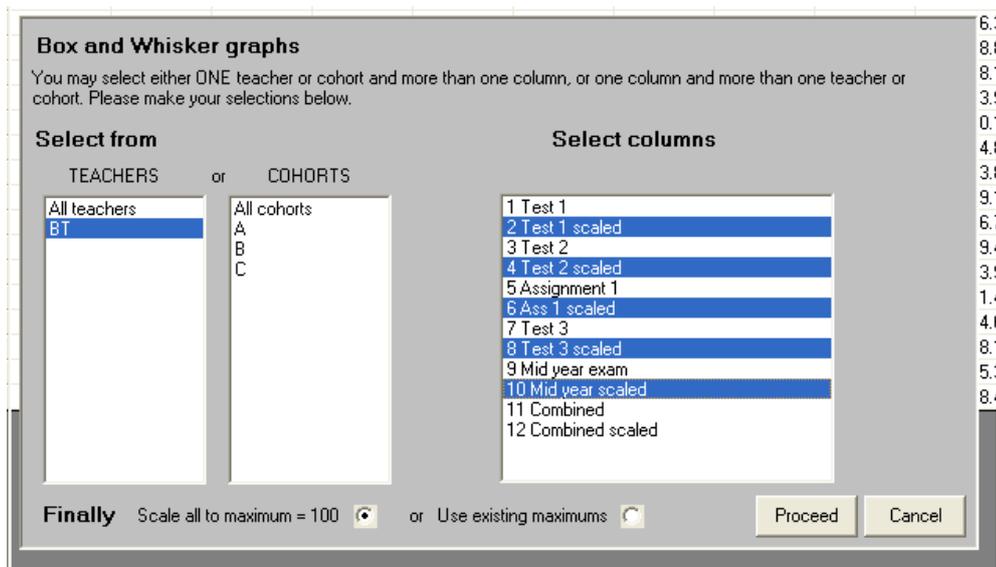
Figure 632: Selecting teachers and columns for box and whisker graphs

The example below, greatly reduced, show the resulting graphs.
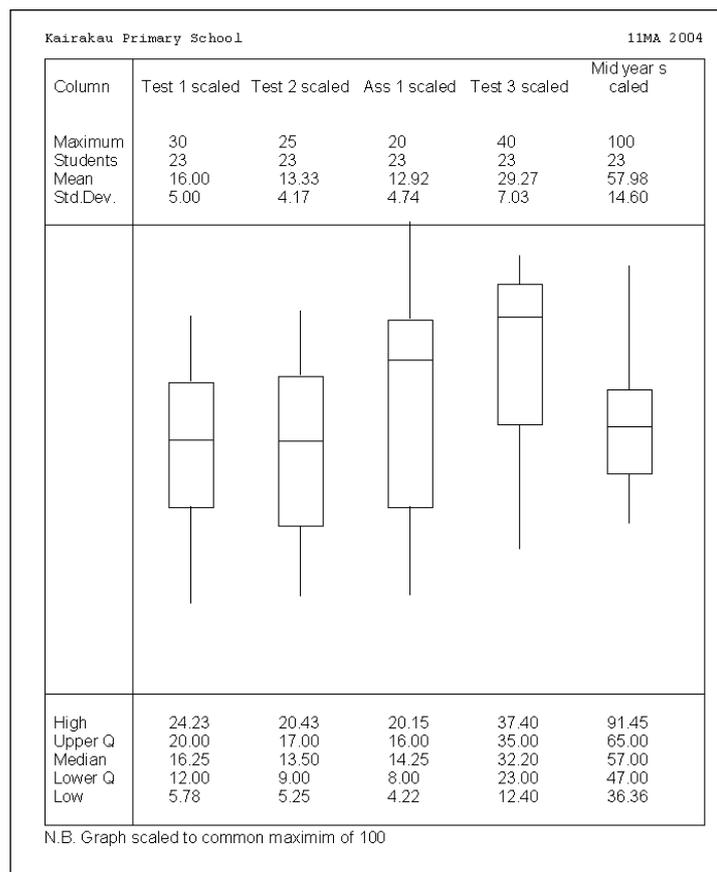
Figure 633: The box and whisker graphs

Export to Excel

The final 'printing' option does not actually print at all. It allows you to send some or all of your markbook to Excel. A corner of the result of the process is shown below.

Figure 634: The markbook exported to Excel

Print column details

This results in a full list of all configured columns, along with the long title, if any, associated with individual columns.

26.8.4 Clear the current column

It is possible to erase the entire contents of a markbook column using this function. The illustration below shows the confirmation screen.
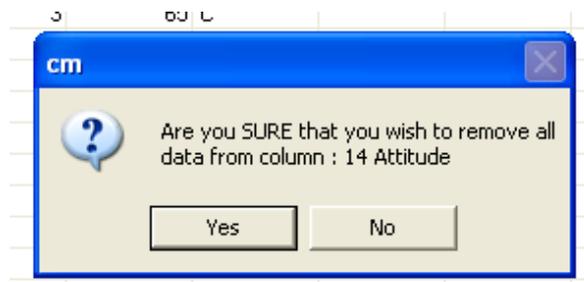
Figure 635: Erasing the contents of a column

26.8.5 Fill this column with ...

There are several things that you can fill a column with.... And the list is shown below.
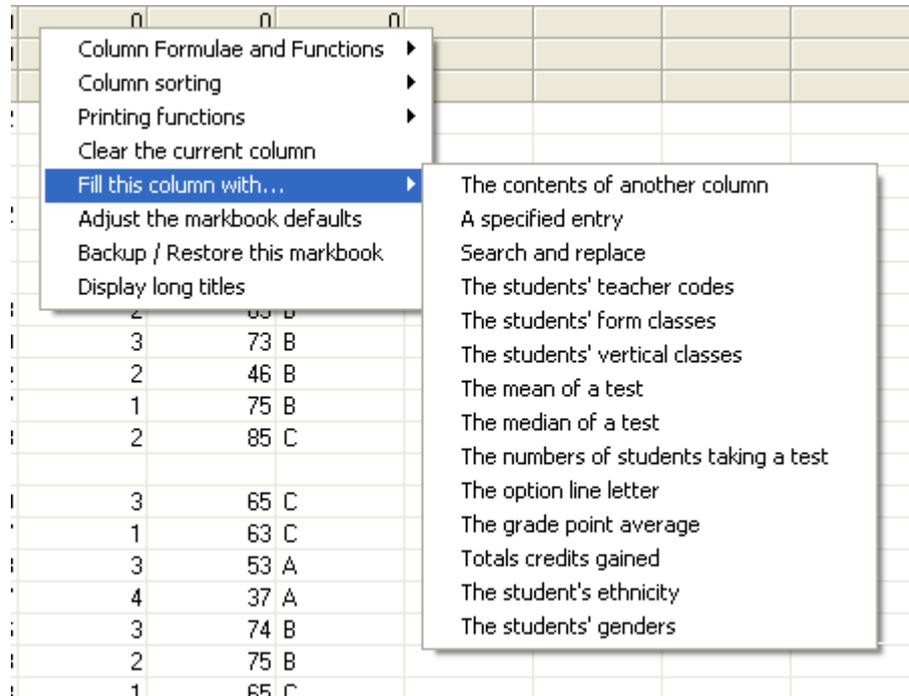
Figure 636: Fill a markbook column with...

Some of these are similar to those available in grid mode and some are peculiar to markbooks.

The contents of another column

You can either select from an existing column in the markbook, as shown below...
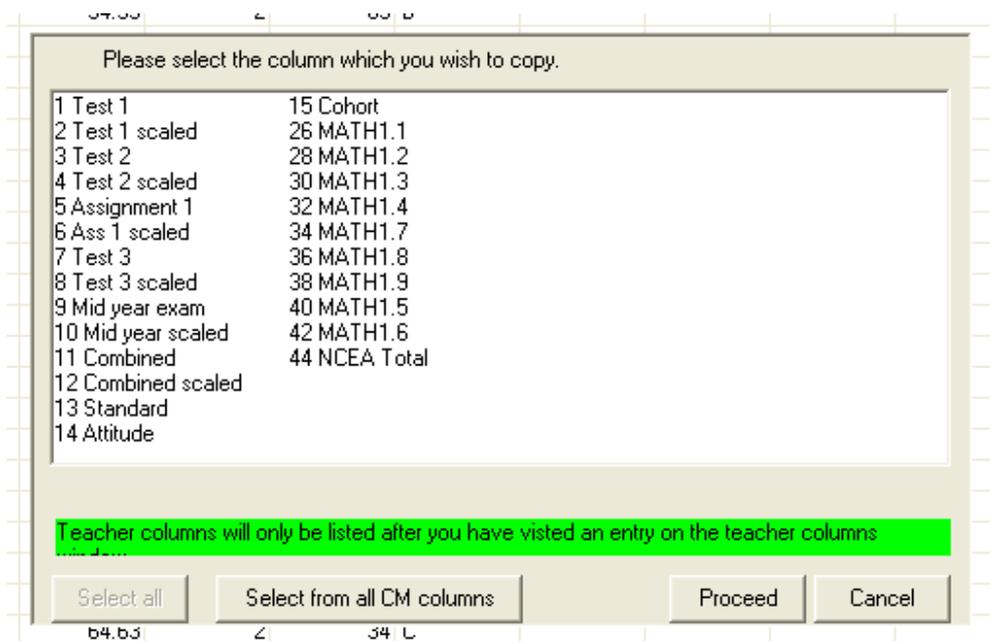
Figure 637: Selecting a column from the current markbook

… or, by clicking on the button at the bottom of the screen, you can fill the column with the contents of any other column in the database, bearing in mind, of course, that only the first eight characters of any column selected will be saved. The screen via which other columns are selected is shown below. It hosts the normal column selection tool.
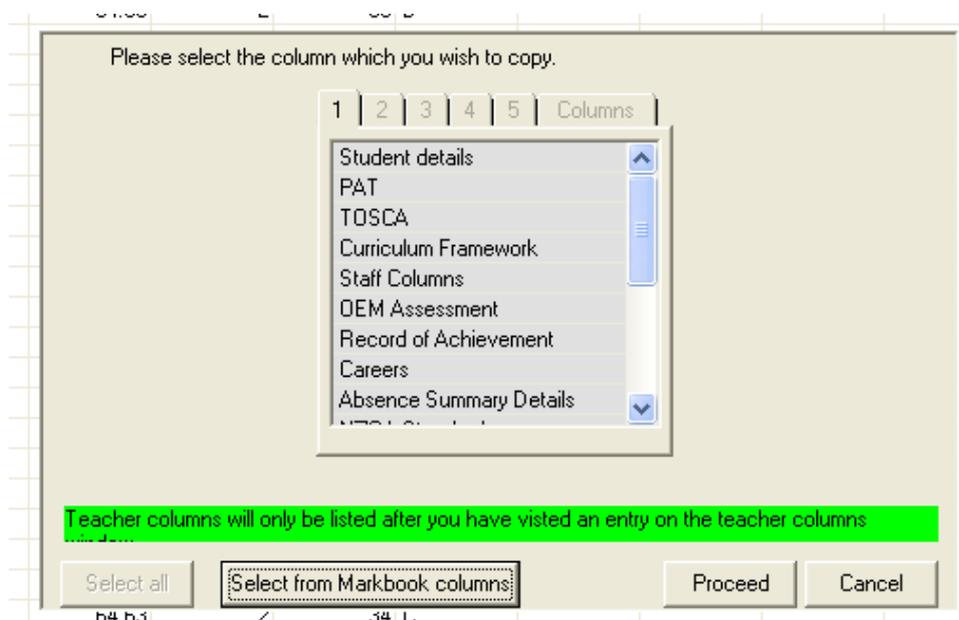
Figure 638: Selecting another CM column

A specified entry

Should you wish to fill an entire column with a small piece of text, or a number, then this is the process to use. Type the required entry into the entry field provided and click 'Proceed'. The screen is shown below.
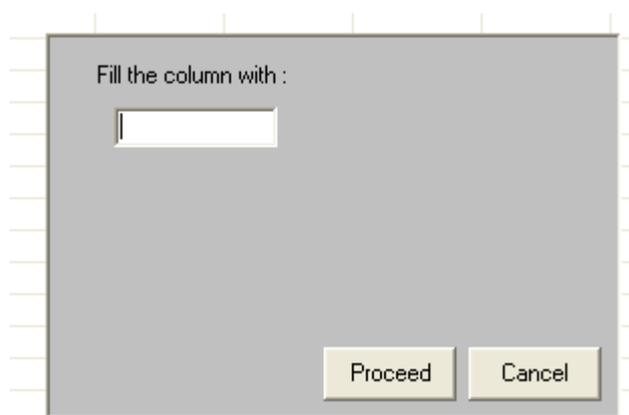
Figure 639: Fill a column with a specified entry

Search and replace

This allows you to replace one particular entry in a column with a specified replacement, as shown below, where any entries of 'AAA' will be replaced by 'BBB'
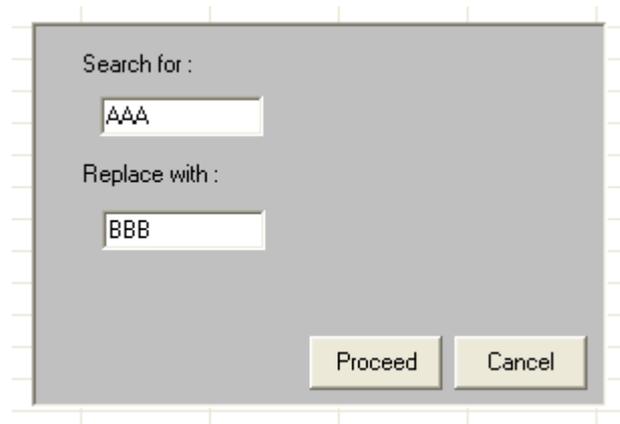
Figure 640: Search and replace

The students' teacher's codes

The students' form classes

The students' vertical classes

The three possibilities listed above have all been requested, at one time or another, by schools requiring them.

The mean of a test
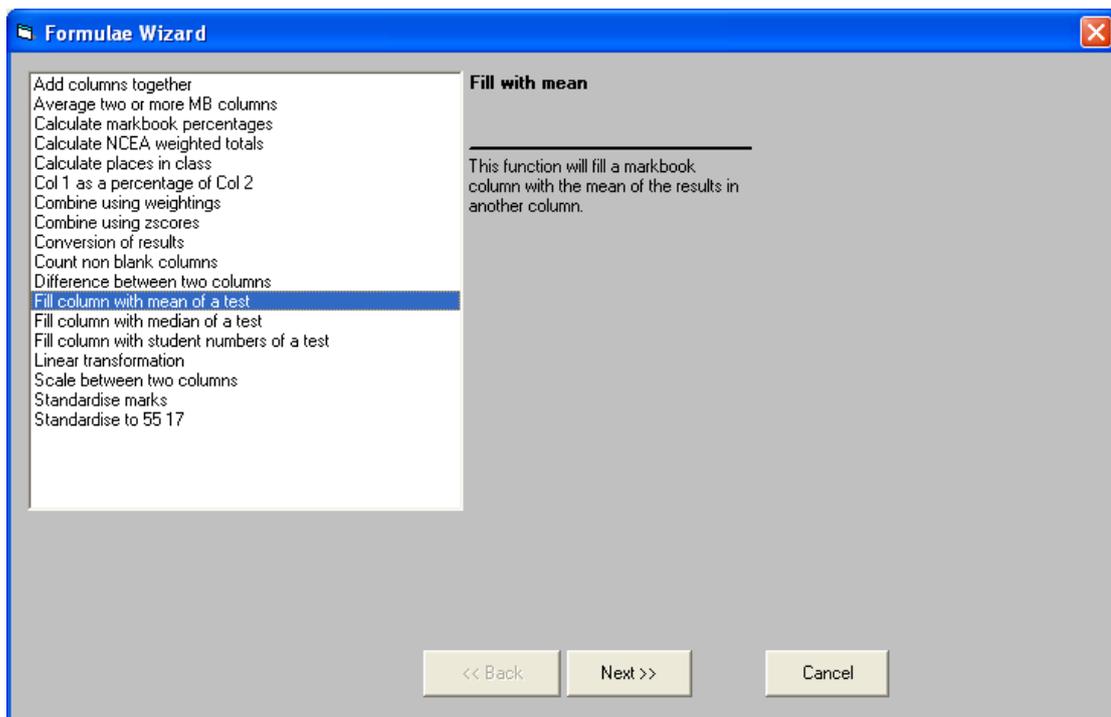
Figure 641: Filling a column with the mean of a test

This is useful if you are, on a generic subject report, presenting the class mean against each student. This can vary from student to student so it is easiest to simply fill a column with the relevant piece of data.

This process has been covered early in this chapter, under 'Formulae and Functions' but we shall review it here, rather than have you dive away looking for other pages.

The first step is the selection of the group and, this time, we shall have the mean for each separate class group calculated, by selecting 'By each teacher' as shown below.

Please note: It is not necessary to actually select the teachers as 'Selecting NO groups will cause ALL to be selected', as shown on the screen.

Figure 642: Selection of the group

Next you must select the column which holds the test, the means of which you wish to have recorded, as shown below.
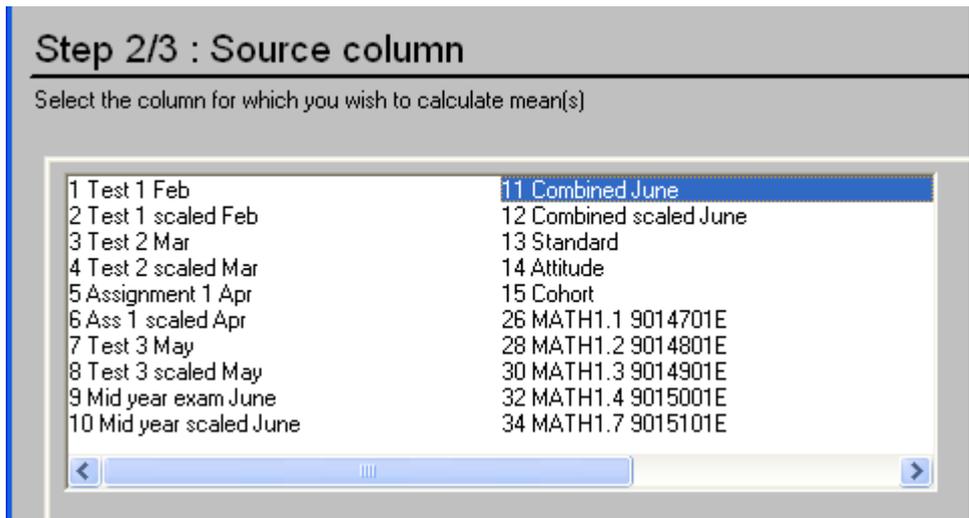
Figure 643: Selecting the 'source' column

Then you must select the column into which you wish the means to be recorded.
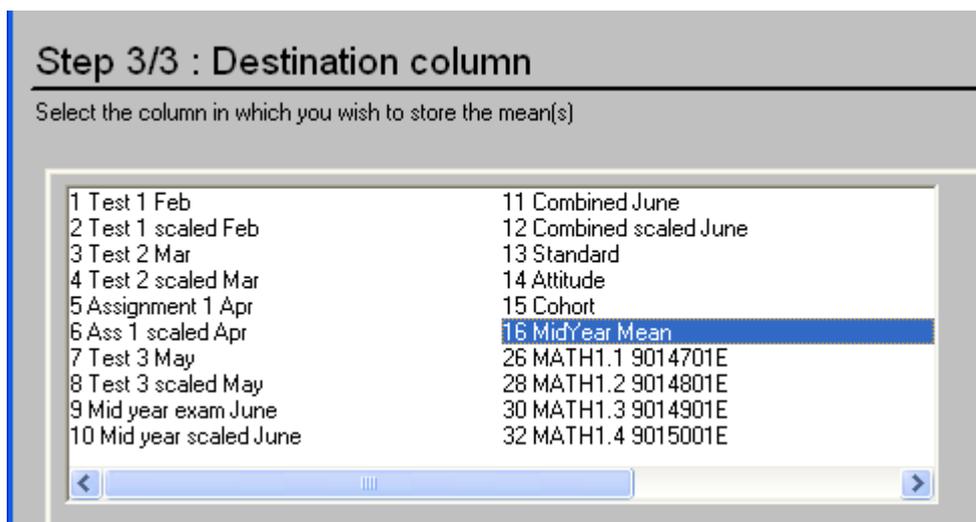
Figure 644: Selecting the 'Destination' column

Once you have completed these steps the calculations can occur and the column will be filled. It is displayed below, along with the results of several other 'fill column withs...'.

The median of a test

This is almost exactly the same as filling the column with the mean of a test, described above.

The number of students taking a test

This is the 'Number in class' which can be used to appear on traditional subject reports.

The student's option line letter

Some schools have found this a useful reference point, particularly in a subject markbook where a teacher has more than one option class.

The student's grade point average

Each student's total credits

The two possibilities above refer to the results of NZQA standards. The calculation of each student's grade point average is performed according to the specifications laid down by the NZQA. The relevant excerpt from their web site page at http://www.nzqa.govt.nz/ncea/results/gradeaverages.html is reprinted below.

26.9 Process used to calculate grade averages

The result that a student earns for each achievement standard is assigned a numerical grade value.

Results	Grade value
Excellence	4
Merit	3
Achieved the standard	2
Not achieved the standard	0

For each standard, the student's grade value is multiplied by the number of credits set for that standard. This generates a raw score for each achievement standard.

The raw scores for individual achievement standards are added together to obtain a total raw score for a group of standards (e.g. English or research or practical science skills).

NZQA calculates the maximum possible score for that group of standards. (The maximum possible score is all excellence results.)

The raw score for the individual student is divided by the maximum possible score.

This number is then multiplied by 100 to make a score on a 0 - 100 point scale.

The calculation of grade point averages now obey the user-specific settings specified via the 'Options' button at the top of the main program screen. Under 'Various options' the following display allows you to access the GPA settings.
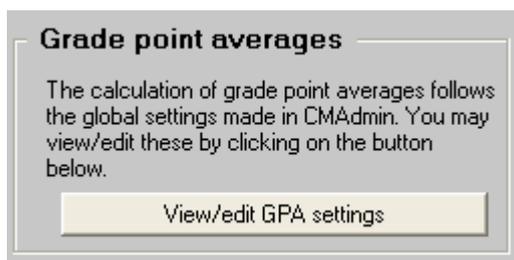
Figure 645: Accessing the G.P.A. settings screen.

The Grade Point Average settings, which are self explanatory, are set via the screen shown below.

Figure 646: The G.P.A. settings screen.

Once you have specified your requests, click on the 'Save settings' button and your requests will be recorded. These settings will then be obeyed when YOU calculate G.P.A.s from anywhere within ClassRoom Manager. (e.g. via markbooks, via documents, or via NZQA Printing and Analysis utilities.)

Please note: Some unit standards allow a 'Merit' result. For the purposes of GPA calculations, these are treated the same as 'Achieved.

26.9.1 Each student's gender

26.9.2 Each student's ethnicity

These, too, have been requested by a school wishing to cross check and sort and compare….

The results of several of the previous options are shown below.

Number	Tchr	16	17	18	19	20
Test		MidYear Me	Ethnicity	Gender	GPA	Total credits
Date						
Maximum		100				
Weight						
Column 16 Long title : Long title not specified						
BENTLEY, ANDREW SAMUEL	BT	55.35	NZ Europ	M	32	12
BISHOP, ADAM RUSSELL	BT	55.35	NZ Europ	M	44	12
BOWATER, ANGELA KAREN	CL	62.50	NZ Europ	F		
BRIND, DAKIN NEIL	BT	55.35	NZ Europ	M	18	7
BURNHAM, SOPHIA HEATHER	SM	56.27	NZ Europ	F		
CHRISTIE, KAREN	RA	47.43	NZ Europ	F		
CLEATOR, BRENT DOUGLAS	BT	55.35	NZ Europ	M	42	12
COLLINS, SALATIELA	BT	55.35	NZ Europ	M	12	3
CORSKIE, SHANE DAVID	BT	55.35	NZ Europ	M	31	10
DICK, KRISTINE LEIGH	BT	55.35	NZ Europ	F	23	6
EASTHAM, REBECCA ANNE	BT	55.35	NZ Europ	F	32	10
ELLIS, ANDREW WARREN	NU	53.14	NZ Europ	M		
ERAMIHA, SARAH JUNE	BT	55.35	New Zeal	F	15	5
FINLAY, HEATHER LOUISE	BT	55.35	New Zeal	F	30	9
HARRIS, DANIEL JASON	BT	55.35	NZ Europ	M	30	9
HODGSON, TRINEZE RENATA	BT	55.35	NZ Europ	F	33	9
HULL, BEVAN DESMOND	BT	55.35	NZ Europ	M	35	12
LEPPER, CHARLES DAVID	BT	55.35	NZ Europ	M	17	4
LOVE, ANDREW GARTH	BT	55.35	NZ Europ	M	16	5

Figure 647: The results of several fillings

26.9.3 Adjust the markbook defaults

In CMAdmin the coordinator can adjust the default settings for markbooks. Provided that an individual teacher has been given the right to do so, he or she can do the same here, from within the markbook. There are several tabs, each providing access to separate settings for the markbook.

26.9.4 The number of decimal places
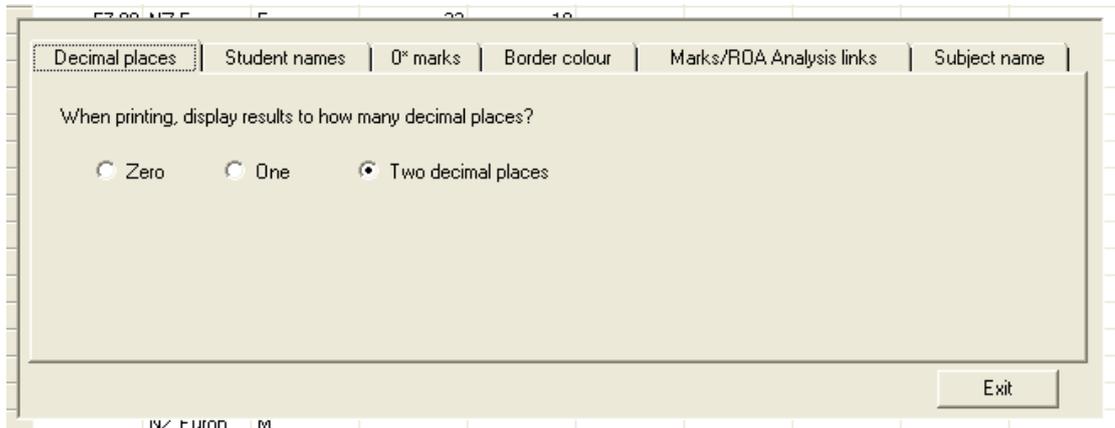
Figure 648: Setting the number of decimal places

The decimal places setting is also used when applying scaling and other functions to the marks held in columns. It can be overwritten from within the document printing routine at the time of printing.

26.9.5 The appearance of students' names
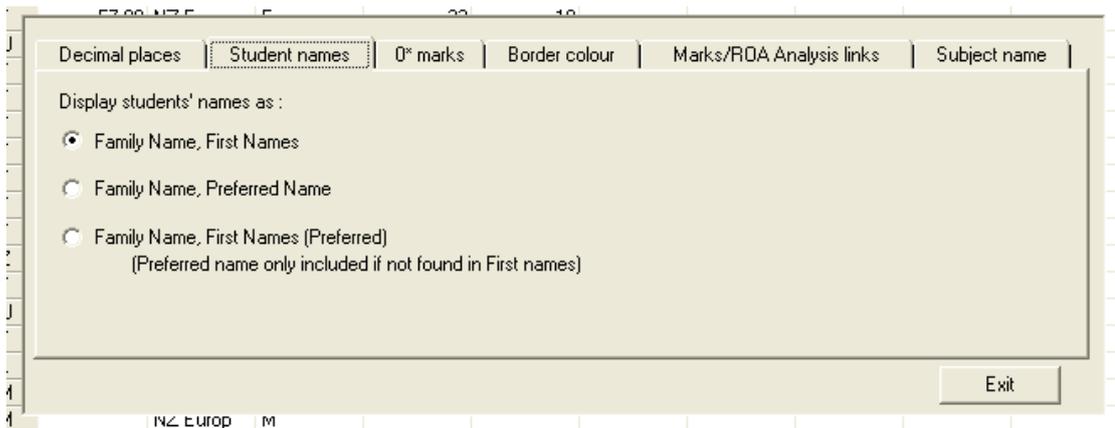
Figure 649: Student names format

26.9.6 0* marks

It was mentioned earlier that entering a mark of 0* can be used to indicate that a student has scored a mark of zero which can be then either excluded or included in the class statistics depending on your wishes, via the screen below.
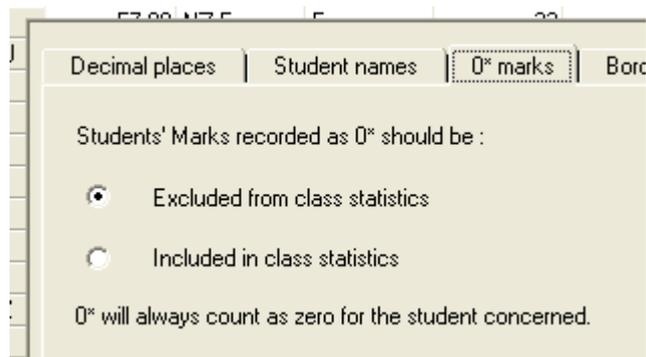
Figure 650: How to treat a score of 0*

26.9.7 The markbook border colour

This can be chosen from a wide range of colours selected from the palette shown below.
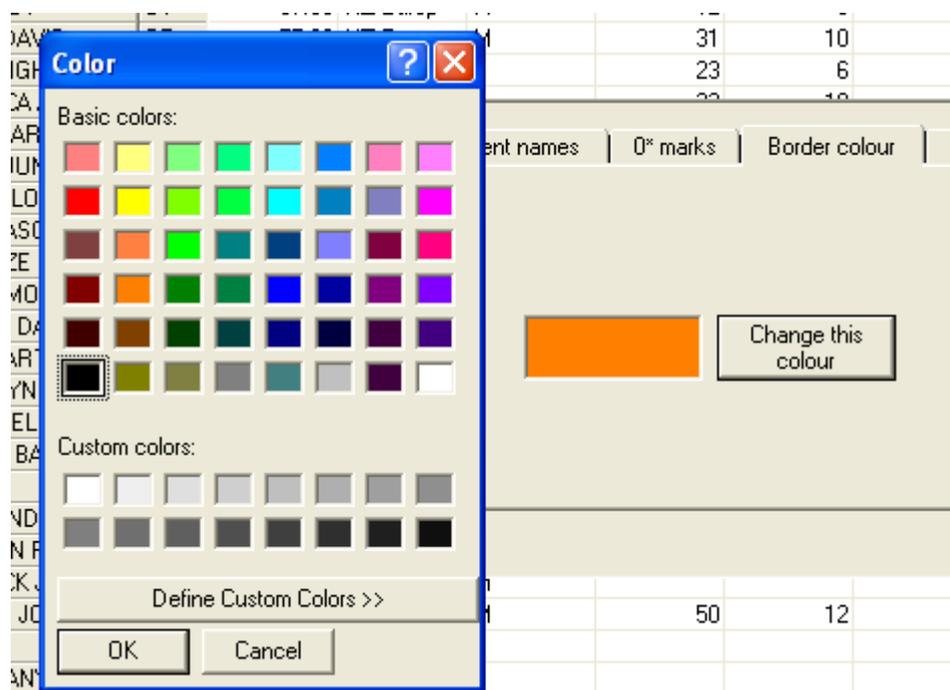
Figure 651: Selection of the border colour

26.9.8 Marks Analysis and Record of Achievement

The settings for these two details are entered via the screen below.
Marks Analysis can be performed up to twice each year and is used to take the scores from each students' subjects and to rescale them using Percentiles Analysis to generate a ranked listing of students total scores. A full chapter is devoted to this topic in the CMAdmin section.

Record of Achievement process allows you to import the contents of up to four columns from each markbook into a student's personal record of Achievement, via an ROA object built into the design of a document. This will be dealt with in full in the chapter on document design.
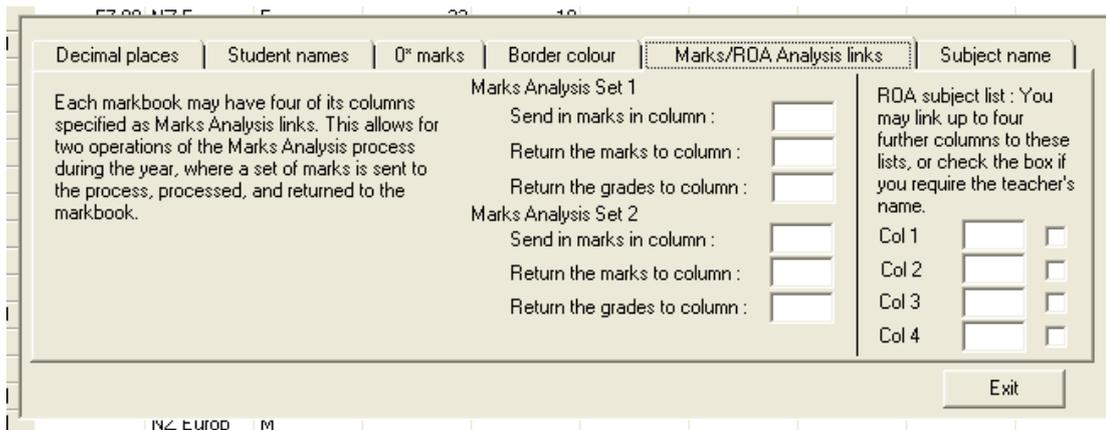
Figure 652: Marks Analysis and Record of Achievement

26.9.9 Subject name

As each markbook is created, the subject name is entered as the markbook name e.g. 12MA 2004. This may well not be the name which you wish to appear on a student's report and can be altered, via the screen below, to e.g. Year 12 Mathematics.
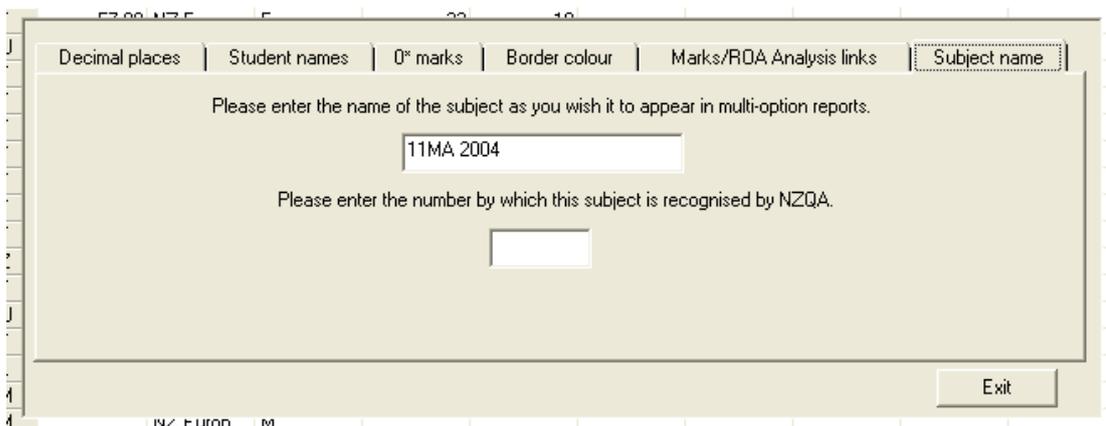
Figure 653: The subject name

The second item on this screen, the number by which this subject is recognised by the NZQA, is now obsolete.

26.9.10   Backup or restore the current markbook

The MUSAC backup utility makes a safe copy of the entire database. Some schools have requested the ability to make a quick backup of just a single markbook. This utility allows you to select the destination directory (or floppy disk) and to have a backup either created....
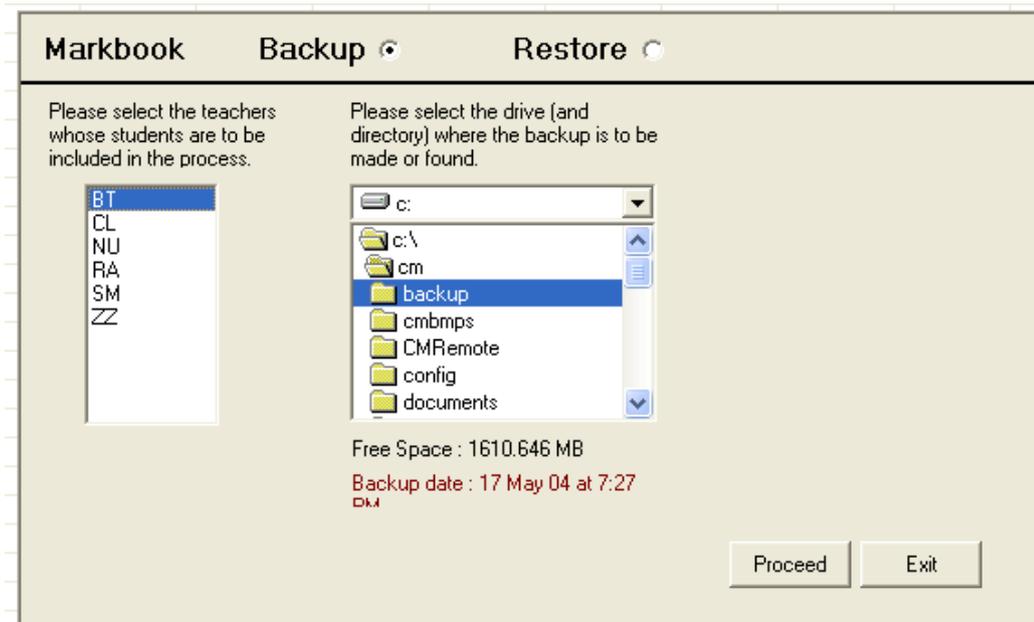
Figure 654: The backup process for a single markbook

… or restored.
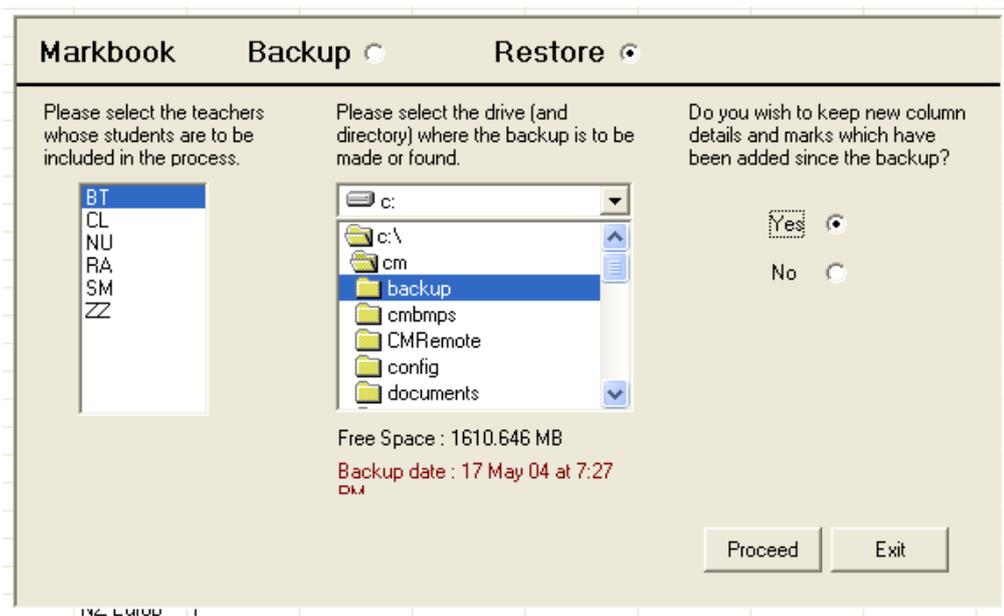
Figure 655: The restoration process

26.9.11 Displaying the column long titles

The display of column long titles is toggled on or off via this menu item. If the long title display is switched on then the long title will appear in a band above the first student, as shown below. To view a different column's long title then click in the very top row which contains the column numbers.

Figure 656: Viewing columns' long titles

If the display is turned ON then this will be signalled in the menu by a tick to the left of the menu item, as shown below.
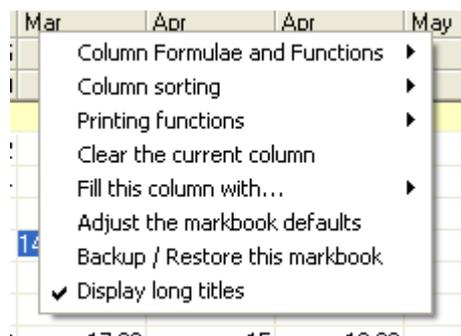
Figure 657: Long titles display is turned on

This brings us to the end of a rather long chapter. We shall now turn our attention to another fundamental part of ClassRoom Manager, the design of documents.

27   Document Design

What's in this chapter?
1   Overview
2   Choosing your document size/type
3   The objects which can be placed on documents
4   The Data Assistant, the top row buttons and menus
5   Coloured Buttons

27.1 Overview of document design

Documents are at the heart of ClassRoom Manager. They are used as the basis of viewing the majority of student information – i.e. all of the data which is stored in the ClassRoom Manager columns.

The design of documents is, at one level, a very easy task. All you have to do is to select a page size, put on a few headings, and connect up to the columns which you wish to display.

However, to produce a document worthy of being sent home to parents does require the skills of someone with a flair for layout and design. Over the years, many people in many schools have designed some rather splendid documents and a few of these are displayed in an appendix at the end of the user guide.

MUSAC agents have also been heavily involved in document design and can certainly help you with this task, incorporating all of the aspects of student monitoring and reporting which you wish to achieve in your school.

This manual does not include a section of what makes a good design as this is a very subjective topic (and one which the author has little knowledge of). Instead, the aim of the chapter is to show the objects which can be placed on documents in a variety of ways and to give you some suggestions as to how they might best be used.

The heart of this chapter is the section which deals, in some detail, with each of the objects which you can put on a document. Take your time to work through this section carefully, as a range of other facilities and options are covered as we move through this section. Many background techniques are covered in the examples.

27.2 Choosing your document's size and type

To create a new document, click on the button labelled 'Add document' in the bottom left corner of the main screen, shown below.
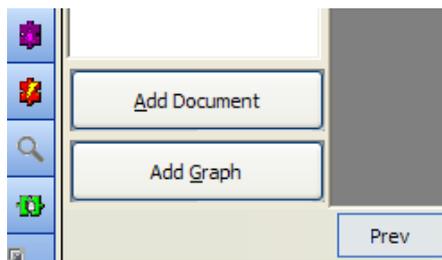
Figure 658: the 'Add document' button (and its friend)

Clicking this button will cause the following window to appear near the top of the screen.
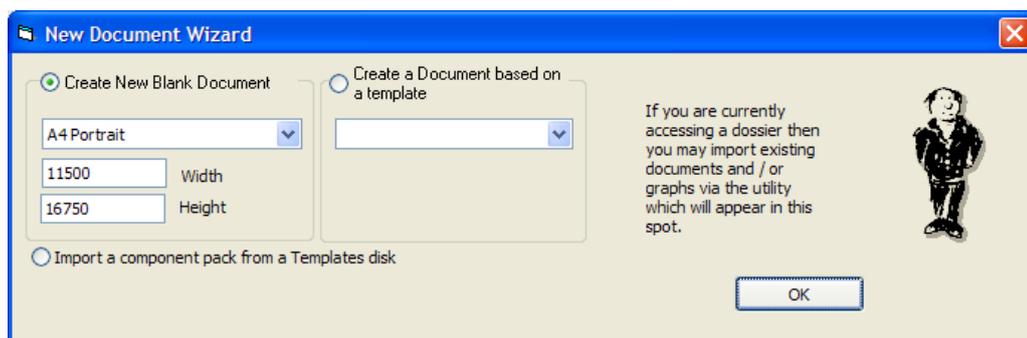
Figure 659: The 'add document' window

If you have NOT loaded a dossier, then this screen will have three option areas available. These are :

1. Create a new blank document
2. Create a document based on a template
3. Import a component pack from a templates disk
If you HAVE loaded a dossier then a fourth option will appear :
4. Select an existing document or graph
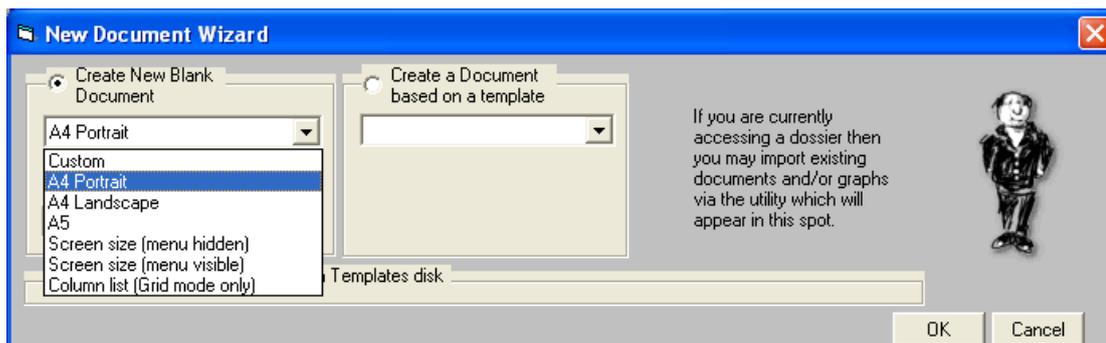
Figure 660: Three options for documents

The first allows you to create a new document. To create a document based on a template, is almost obsolete. MUSAC provided a number of templates but everyone had their own design requirements.
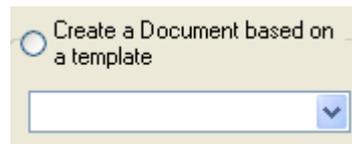
Figure 661: Create a document based on a template

The third option is to import a component pack from a template disk. This was used quite frequently in the early days of ClassRoom Manager and is still used by some MUSAC agents, who prepare a series of documents and columns for a school and distribute them via a component pack. Packs are generally imported using CMAdmin but you can, if you have a disk import them here too.

In the diagram below, a pen drive with two component packs has been loaded into drive T:
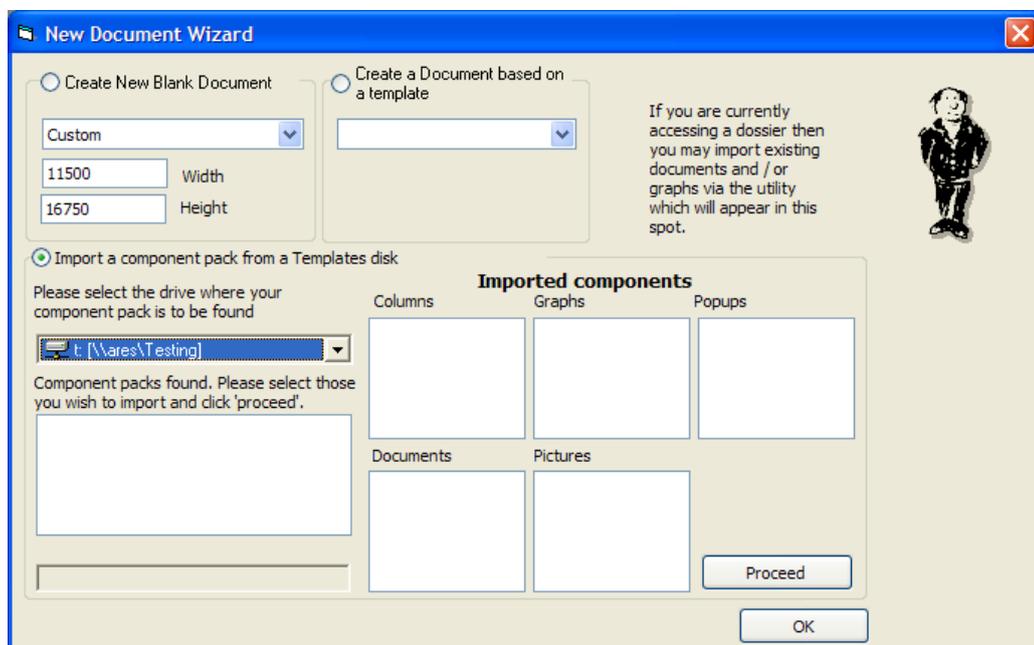
Figure 662: Two component packs on a pen drive

In the following illustration the second of these has been imported.
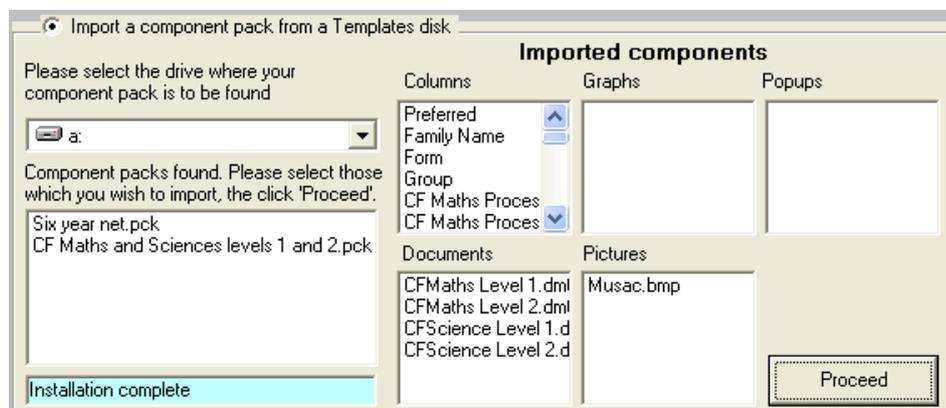
Figure 663: The importation from a component pack

The final option, which is only available if you had loaded a dossier, is to use the right hand panel to select an existing document into your dossier. The screen for this is shown below.
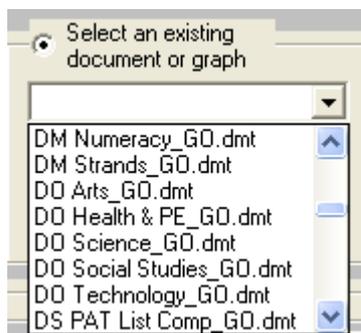
Figure 664: Selecting further documents for your dossier

However, lets return to the first, and favoured option, which lets you design a new document. The first illustration listed the possibilities and these are shown again below.
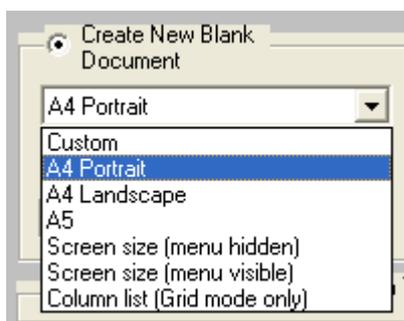
Figure 665: The document possibilities

Most of these will make sense to you. They are :
- **Custom** : where you specify the dimensions of your document
- **A4 portrait** : by far the most common size
- **A4 Landscape** : A4 on its side
- **A5** : which is half the size of A4 and is portrait in orientation
- **Screen size** (menu hidden) : This fills the screen while the menu is visible
- **Screen size** (menu visible) : A somewhat smaller version.
- **Column list** (Grid mode only) : This type of document is not intended to be viewed as a document and enters grid mode immediately whenever it is selected. This is a very useful format when data entry is required via grid mode.

For this section use A4 portrait size and, having selected it, and clicked 'OK' the following screen appears. There is a large empty document displayed.
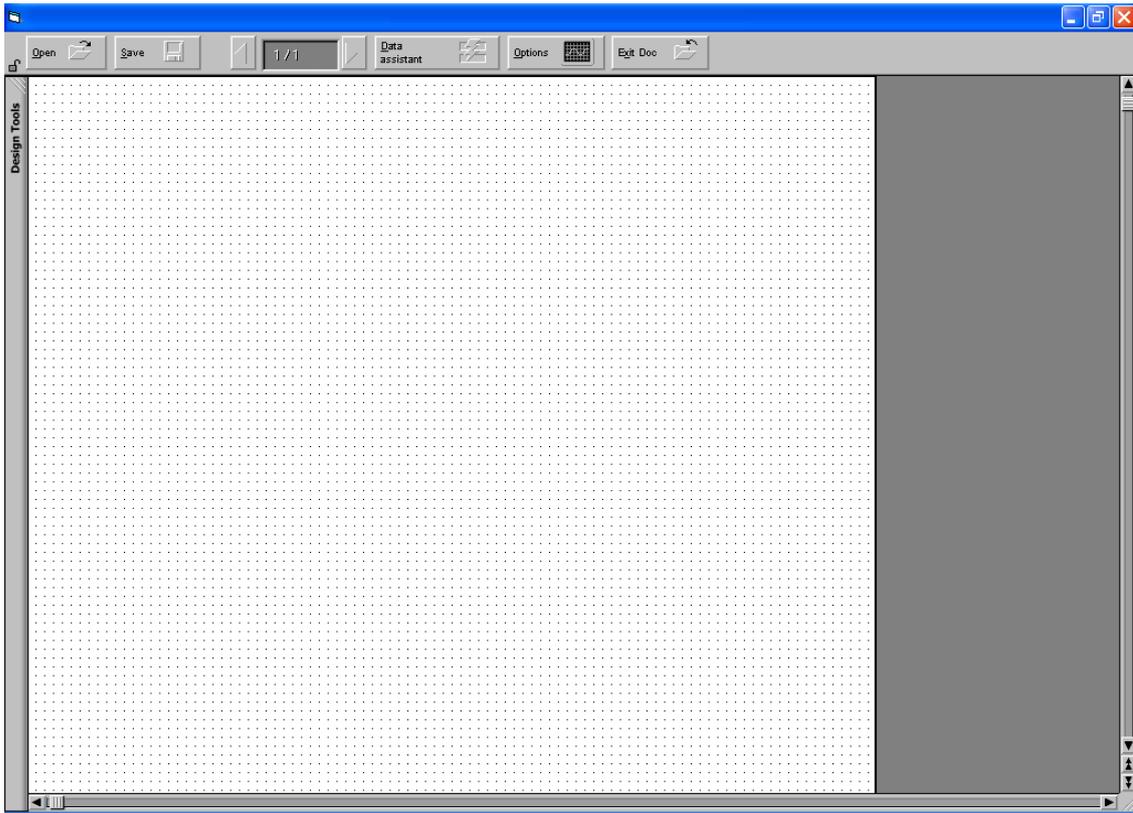
Figure 666: A blank A4 document

At the top of this screen are several buttons and we will deal with these during the next few pages as we progress through the object which we shall place on the document.

27.3 The objects which can be placed on documents

In the top left hand corner of the display is a vertical label, 'Design Tools', which is shown below.
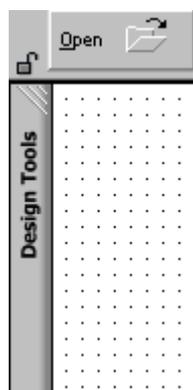
Figure 667: The 'Design tools' label

If you move your mouse over this grey area on the left hand side of the screen, the 'tool tray' will slide out, revealing the display of objects which can be placed on a document. Some refer to these as tools while others refer to them as objects.
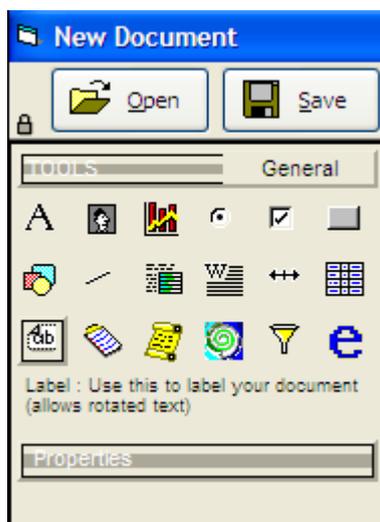
Figure 668: The display of tools / objects

If you move your mouse off the tray, back on to the document, then a moment later the tool tray will slide back out of the way, leaving just the label visible again. Frequently, however, it is good to have the tray 'locked out' so that it is visible all of the time. Just above the tool tray is a small lock and, if you click on it, it will close, and the tool tray will be locked out, until you 'unlock' it by re-clicking on the small lock, which is shown below in its 'locked' position.
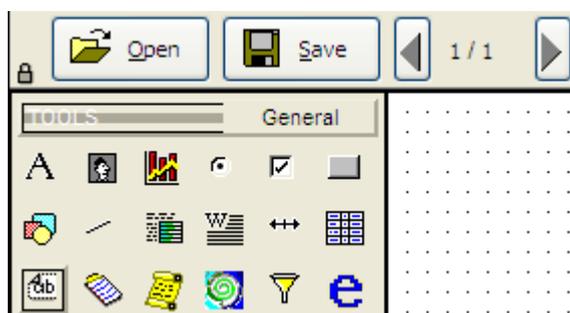
Figure 669: The tool tray is 'locked' out

On the tool tray are the tools, or objects, which you can place on documents. Firstly, we shall simply list them. Then we shall take them one at a time and examine their properties and purpose. They are :

A data box – used for entering data on a student

A picture – can either be a fixed picture or a student media file

A graph

An option button – they come in sets and you click one

A tick box – used to signal a 'Yes'

A button – used to jump to another document

A shape – used to provide outlines etc

A line

A Curriculum Framework analysis / graph

A 'Rich Text Box' – i.e. a word processor box

A number line – click to indicate a student's position on a range

A multi-option report – used to report on students' subjects

A label – which can even be rotated

A list –financial transactions, timetable, pastoral transactions etc

A 'record of Achievement' list

An NCEA report – available in several formats

Each of these objects can be clicked, then 'dragged out' across the space which you wish them to occupy on the document. Be careful not to simply select one then click on the document. That would place an EXTREMELY small object on the document which you would probably never be able to see and be rather difficult to get rid of.

In the example below, a 'Data box' has been placed on the document.
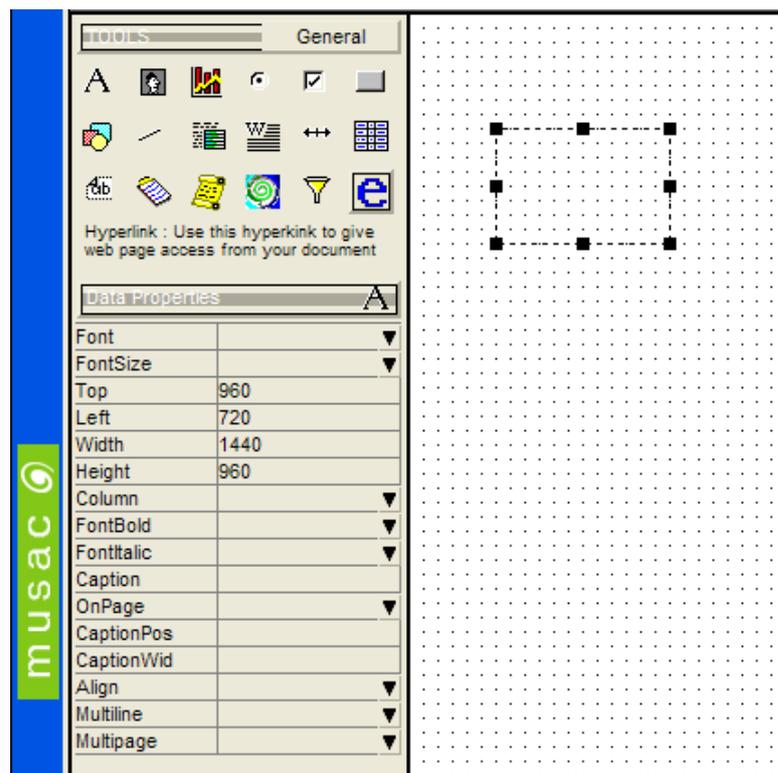
Figure 670: The properties of a data box

To place an object on the document, click on the required object to select it, then move your mouse over to the document to where you wish to place the object. Hold your left-mouse button down and drag over the area which you wish the object to fill. Once you have reached the extreme of its desired position, release the mouse button and the shape will be displayed.

Click again on the object and it will be 'selected' on the document, as shown above, and its properties will be displayed in the lower half of the tool tray. In the example above the data box has minimal properties as we have only just begun work on it.

The illustration below shows an unselected object alongside a selected one.
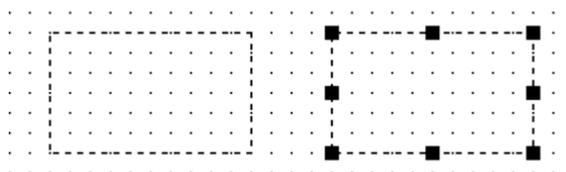
Figure 671: One unselected and one selected

When you have multiple objects on a document, it is possible to select more than one at a time (e.g. in order to reposition them as a group). You can select more than one by either dragging the mouse over them (as a rectangle which includes them) or by holding down the Ctrl key as you click to select the ones which you wish to multi-select. Two selected objects are shown below.
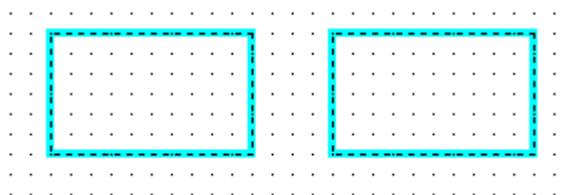
Figure 672: A pair of selected objects

Let's now take the objects one at a time and examine them in more detail. As we go, we'll be designing a document which includes several of them. Some, we'll not put on our document as they are only useful if they are relatively large. We'll look at them on their own documents in turn.
The document which we shall now design will not be a particularly useful one, but it will serve our purpose, which is to demonstrate their uses and properties.

A data box

Though not necessarily the first thing you would put on a document, clicking the 'A' icon for data box, drag out a small databox on to the screen. Its initial properties are shown below.
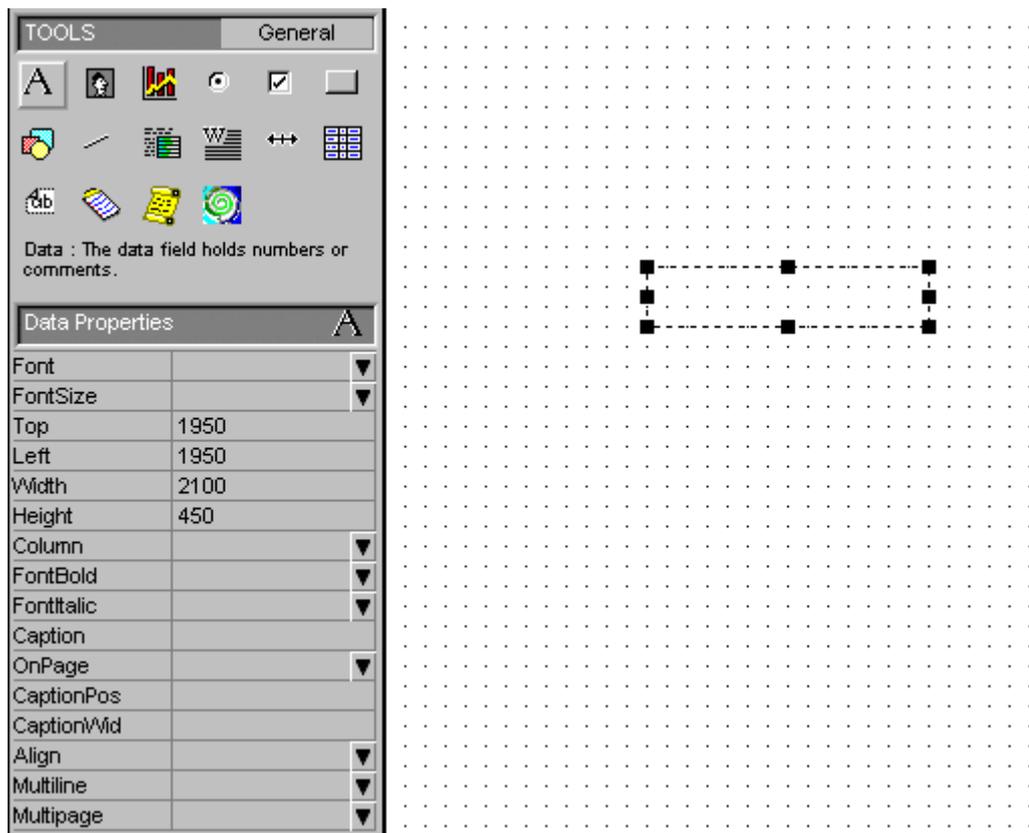
Figure 673: A databox and its initial properties

The first thing is to connect the databox to a column so that the data held in that column will appear in the databox when we view the document for a particular student. Click on the small 'down arrow' after the heading 'Column' and the column selector will appear, as shown below. The button at the bottom of this window allows you, if you have the right to do so, to create new columns as you go.
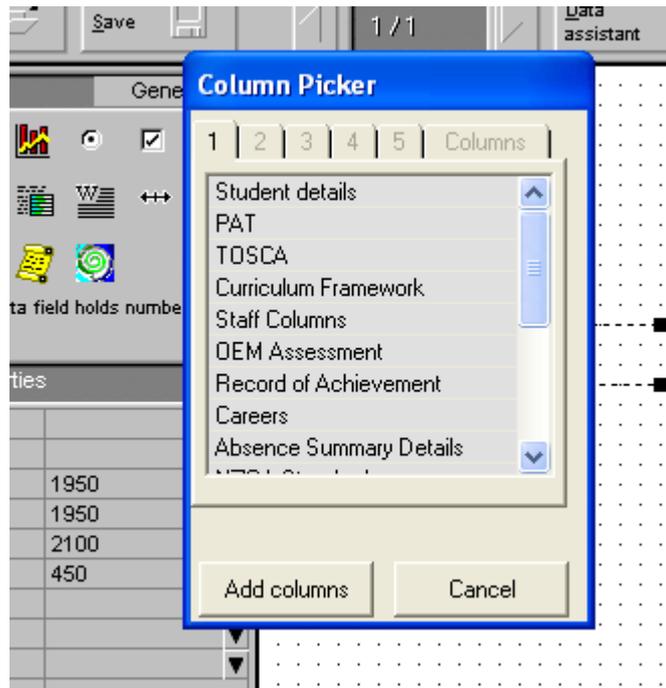
Figure 674: The column selector

The use of this tool is described in an appendix to this user guide. The three views below show how to navigate to the Tennis racquet size column which we created in the CMAdmin section. The process of adding a new column, accessed via the 'Add column' button, is dealt with in an appendix to this user guide.
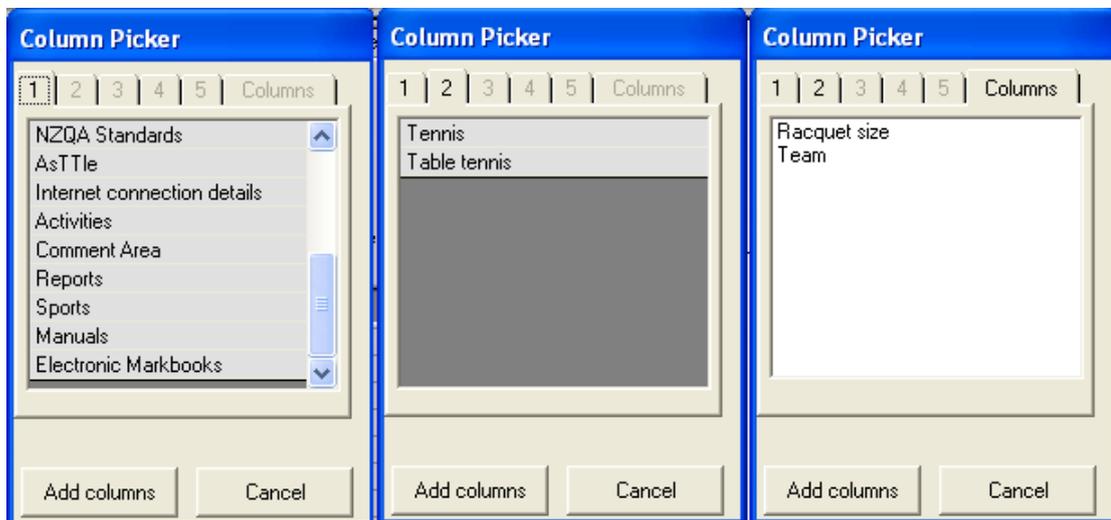
Figure 675: Three steps in selecting a column

Select the column 'Racquet size' and the number of this column will be stored against the column property of the databox, as shown below.
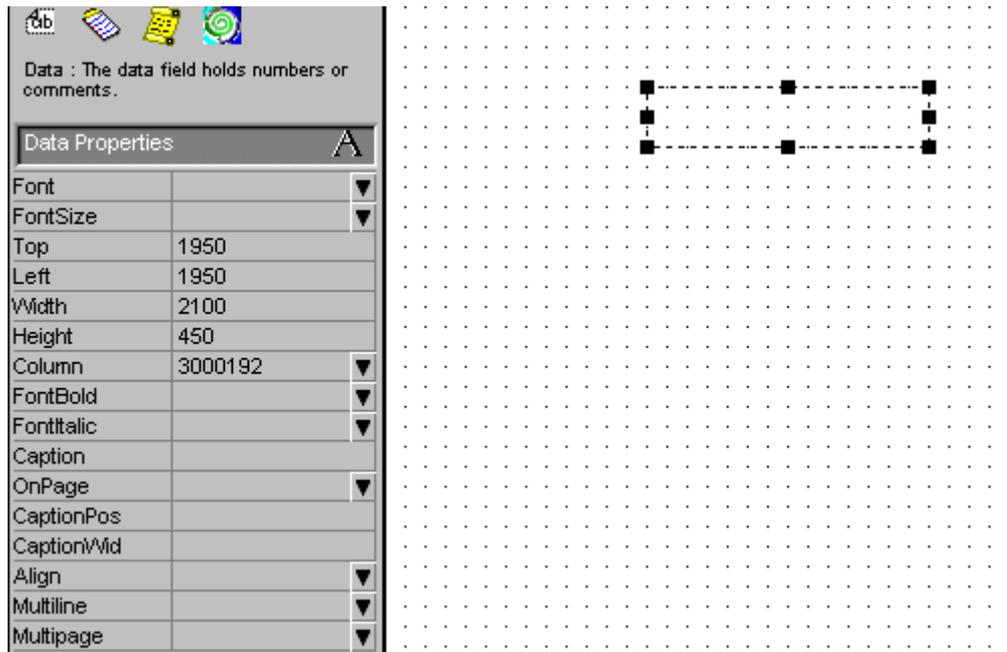
Figure 676: The column is now attached

Next we want to give the databox a caption. This is done by typing the required words into the 'Caption' area of the tool tray, as shown below.
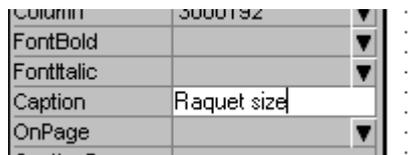
Figure 677: Entering a caption

As a result, the caption appears alongside the databox on the document.
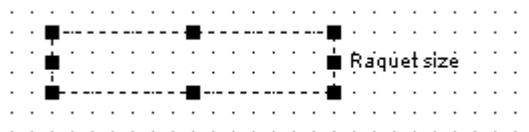
Figure 678: The caption appears

However, we would prefer the caption to be to the left hand side of the box. This can be done by giving the 'Caption position' a suitable negative value. (Positive values are to the right of the box, and negative values are to the left.)
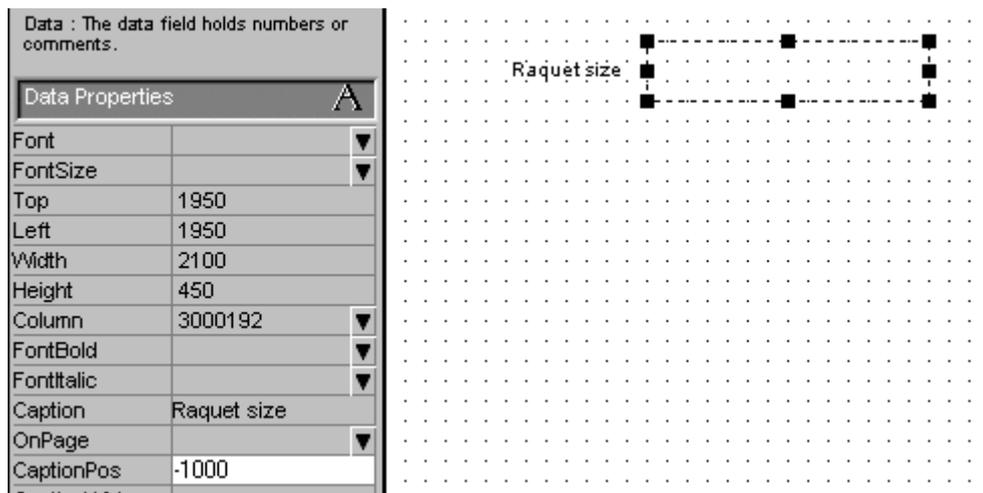
Figure 679: Altering the caption's position

Next let's adjust the font which will apply to the contents and caption when the document is printed. Click on the small down-arrow against one of the four font properties and the font dialogue, shown below, will appear.
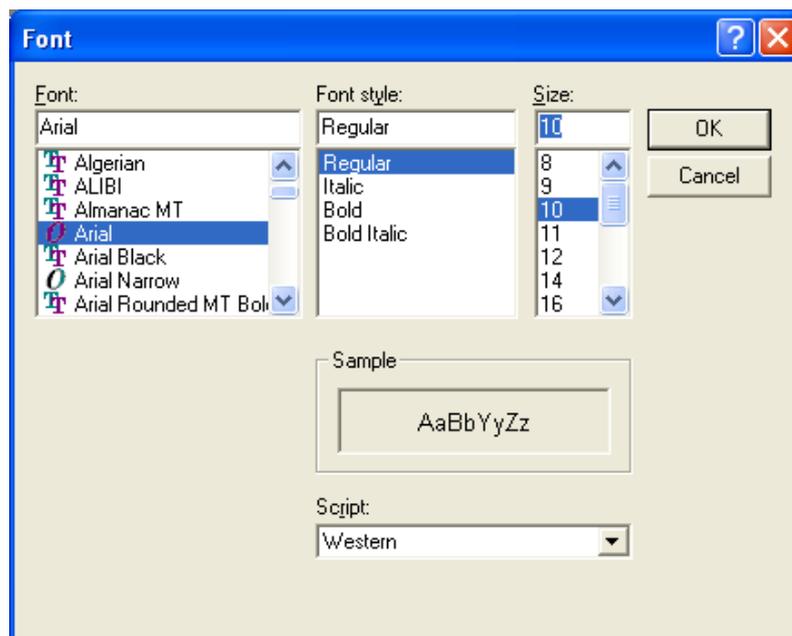
Figure 680: Setting the font properties

This done, our tooltray properties display appears as shown below.
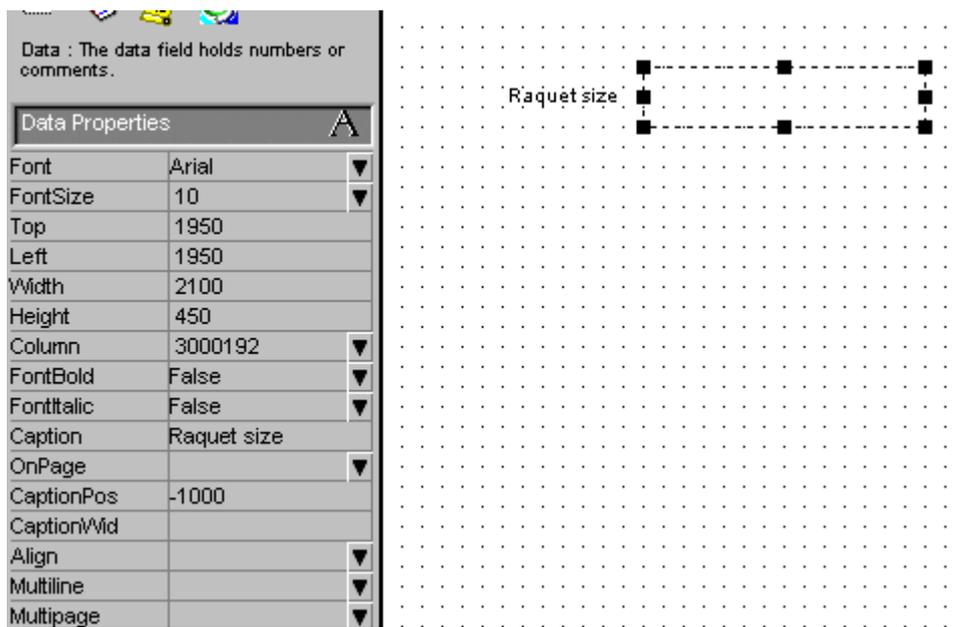
Figure 681: The font properties have been set

The next property to be considered is the 'On page' property. This has the possibilities shown below.
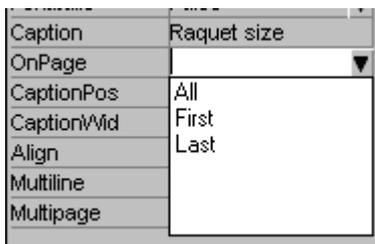
Figure 682: On page …

If we were designing, for example, an invoice document, which might be several pages long, then we would wish to include some items on the FIRST page (e.g. the document main heading and the student's name and address), some on ALL pages (the item listing), and some on the LAST page (e.g. the remittance advice).

Generally, however, in the normal course of events we are not interested in this setting and it can be left at its unselected default setting – ALL. It is only when we expect the document, when printed, to overflow to more than one page, that we are interested in this property.

The same applies to the final four properties :
1 **'Caption wid'** The caption width determines the amount of document width which is devoted to the caption but, as it will simply print over the end of this area, you can safely ignore it.
2 **Align** This setting determines the alignment of the contents of the box when the document is printed. An example is shown shortly
3 **Multiline** If you created a deep databox and attached it to a column of type 'Rich text box) then, naturally, you would wish the entry to be multiline. An example of this would be a report column.
4 **Multipage** If you wished the document to flow over on to a second page if so much information was placed into a databox that it would necessitate a second page then click

this setting to 'Yes'
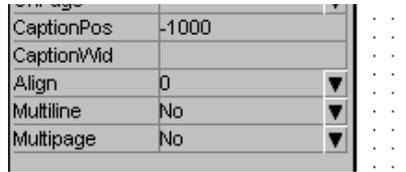
Figure 683: The alignment and page properties

Once all of the entries are complete, the finished product appears, as shown below.
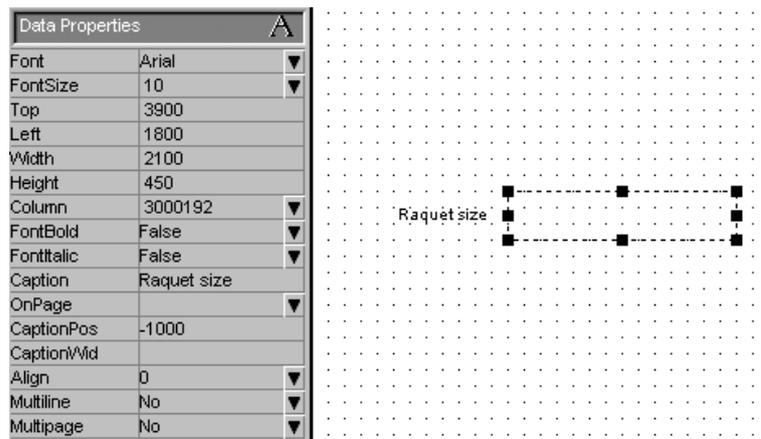
Figure 684: The finished product

At the top of the screen is the "Save" button, which is used to save the changes made to the document design.
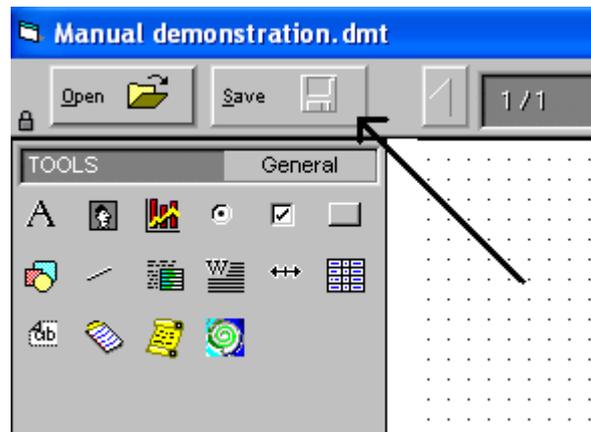
Figure 685: The 'Save' button

Click 'Save' and the following dialogue will appear.
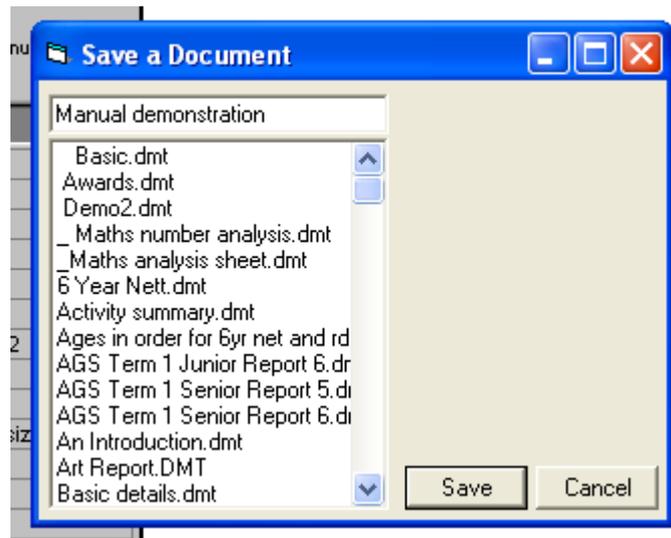
Figure 686: Saving the document

Now the document is displayed in the menu list and can be selected.

It does not have a lot to display, but what there is is the caption and the contents of the racquet size column for the first student in the current filter.
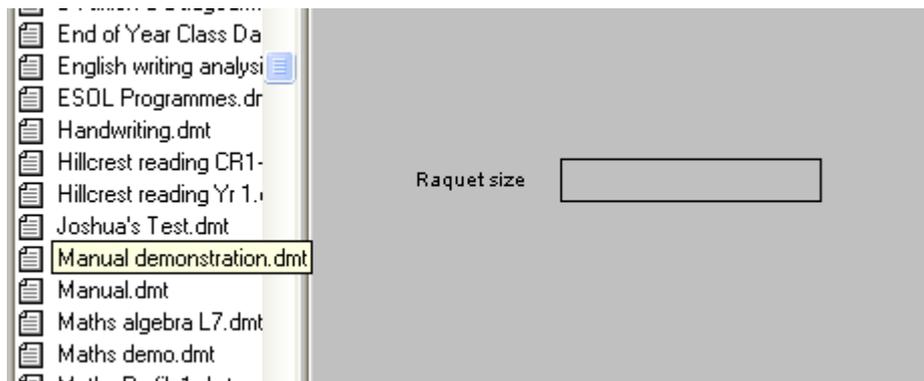
Figure 687: Document mode

If you proceed to grid mode then you will see the column appear as the left most column of the document (it is, in fact, the ONLY column of the document).

Figure 688: Grid mode

Type an entry into the grid mode column:

Figure 689: A Grid mode entry...

double-click on the name of the student concerned, or return to document mode, and the same data now appears in the document:

Figure 690: .. appears on the document ...

and also appears when the document is printed.
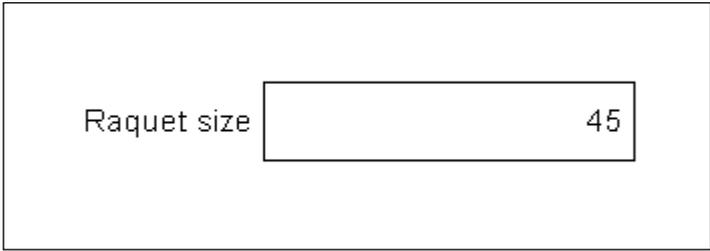
Figure 691: .. and when printed

You will notice the data is aligned to the RIGHT when the document was printed. This is because in the databox properties I set the alignment, shown below.
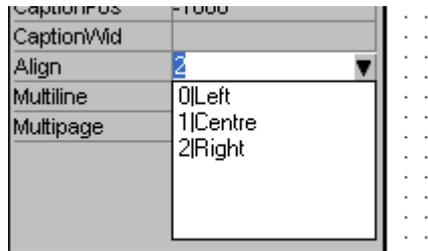
Figure 692: Alignment to the right was set

In addition to entering data in grid mode, you can also edit the data directly on the document.

Figure 693: Editing the data on the document

27.3.1 The Option button in document design

Click the 'Options' button on the top row for the window shown below. It offers ways in which you can affect the document design.

Snap to grid

If this is turned on, when you move one or more objects around the document, as you release them they will jump to positions which align them with the dots displayed on the grid. This makes it very easy to have a variety of objects neatly aligned.

Grid visible

You may have the grid either visible or hidden.

Grid size

This is measured in twips and allows you to adjust the spacing of the dots which cover the document when in design mode. (Twips are the smallest unit of measurement on a computer screen – there are usually about fifteen twips per pixel – and pixels are fairly small!)
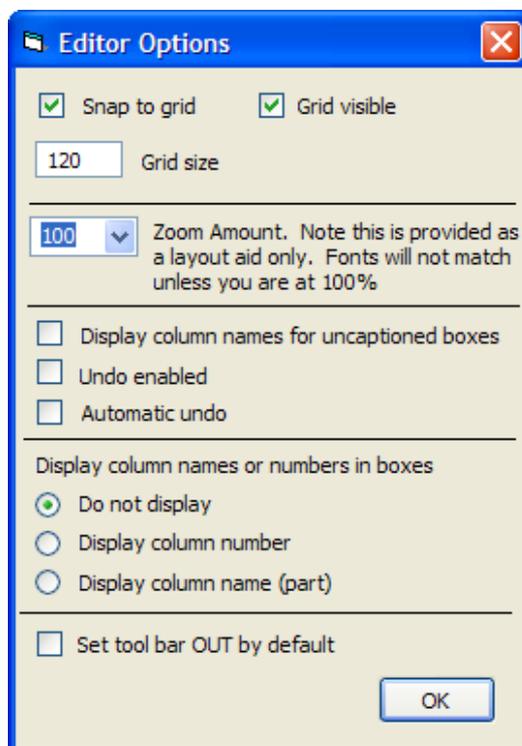
Figure 694: Editing the data on the document

Zoom amount

If you have a large document, and you wish to see the entire page, then by setting the zoom amount to, e.g., 50 then you will see all on the screen at once. You can easily 'grab' a large selection of the objects and move them simultaneously to a new position on the document.

Display column names for uncaptioned boxes

This enables you to see the names of columns to which boxes are attached but for which you have not included a caption.

Undo enabled

When editing a document you can 'undo'. If you have this switched 'On' then you can use the popup menu which appears when you right-click in the editing area to undo the last change. 'Undo' can remember the last three changes made.
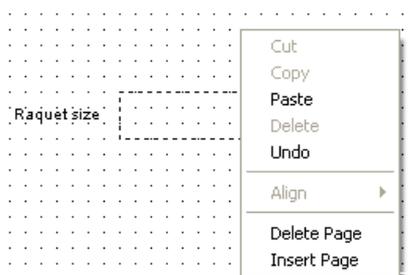
Figure 695: The popup menu

Automatic Undo

This setting will be remembered under your name and, if set 'On' then, each time you enter the editing process the 'undo' feature will be turned on. Otherwise, 'Undo' will be turned off by default each time you enter editing.

Display column names or numbers in boxes

You have three options here. You may :
1 Have these NOT displayed
2 Have the column number displayed in each box
3 Have the column title (or as much as will fit thereof) displayed in each box

Set tool bar out by default

This setting allows you to automatically have the toolbar automatically slide out into its locked position each time you enter editing mode. You may prefer to have it locked in the 'out' position.

In the illustration below three of the settings are changed.
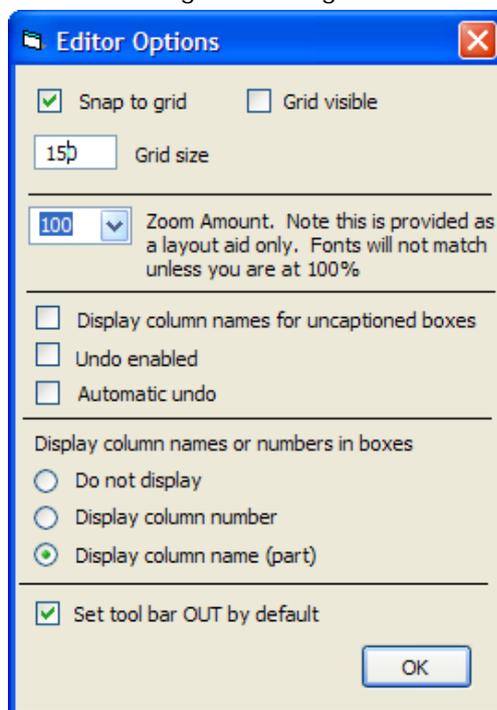
Figure 696: Some settings have been changed

Grid display has been turned off, the column name is to be displayed in boxes, and I've elected to have the toolbar slide out automatically on entry to editing.
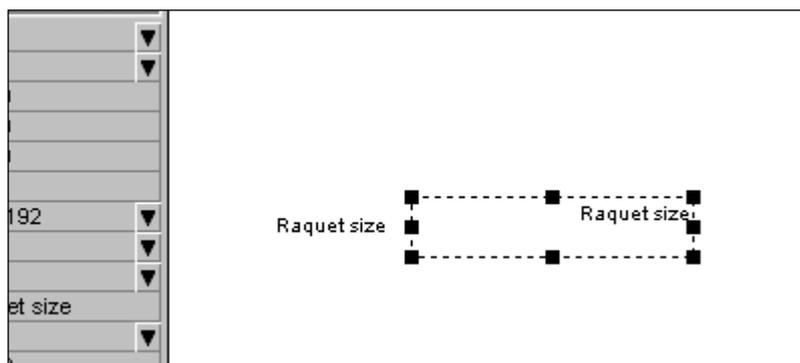
Figure 697: No grid, and the column title is displayed

You may prefer to have the dots visible, so have changed the display to reveal the column number in the example below.
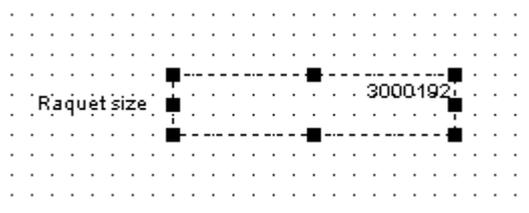
Figure 698: The grid is visible again and the column number is displayed

A picture

Pictures can be placed on documents and can be of two types :

1 **'Fixed'** where the same picture appears on each document, eg. a school logo.
2 **'Student-specific'** where the picture displays a photograph, a scanned image, a video clip, a sound byte or other media file.

Pictures are placed on documents in the same way that databoxes were in the previous section – by selecting the object from the tooltray and dragging it out across the area of the document which you wish it to occupy. In the example below a picture has been placed on the document, ready for further connections and the setting of properties.
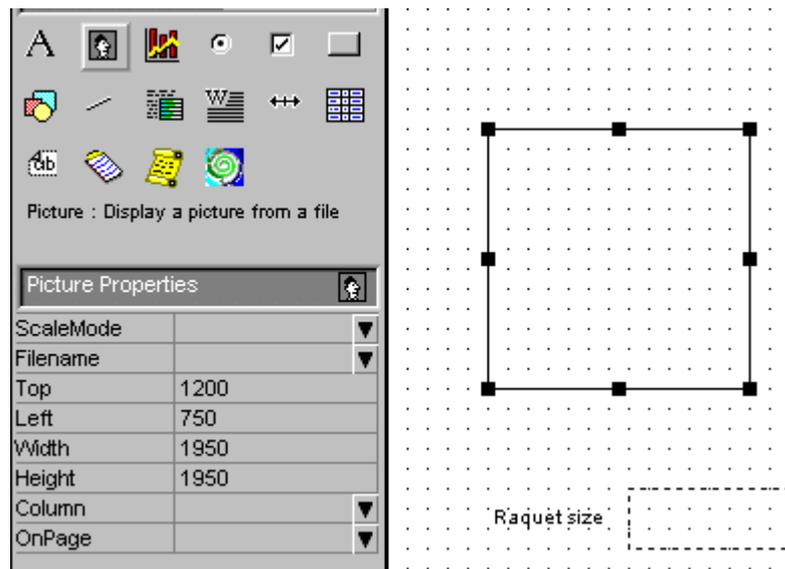
Figure 699: A picture is placed on a document

The first property is the 'Scalemode' and there are two possibilities.
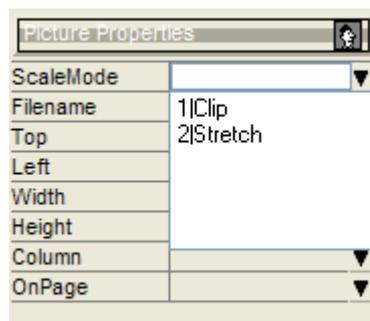
Figure 700: Clipped or Stretched

If a picture is 'clipped' then, when it is rendered on to the document, it is clipped to fit – if it is too big. If it is too small then it will not fill the entire picture area. If a picture is 'stretched' then it will automatically be rescaled to fit the picture area exactly. Depending on the original shape of both the picture and its display area, this might or might not produce a pleasing result.

The next property is the Filename. If you do wish to apply a fixed image to the picture (eg. a logo) then click on the filename area and the browse dialogue shown below will appear, allowing you to select the required image.
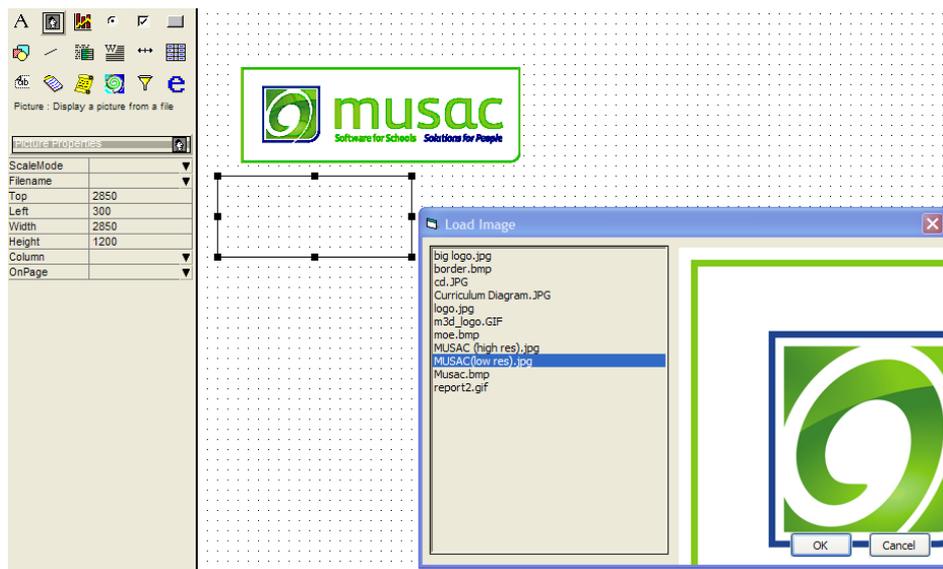
Figure 701: Selection of a fixed picture

In this example I have selected MUSAC's logo and, after being selected, it is immediately displayed on the document, even in edit mode....

Figure 702: The logo on screen

... where, if you stretch it, it will reshape to fit the new image area.

Figure 703: Stretching the logo

In the illustration below, the logo has been reshaped to more sensible proportions and moved to the right hand side of the document. Below it has been placed a second picture box.
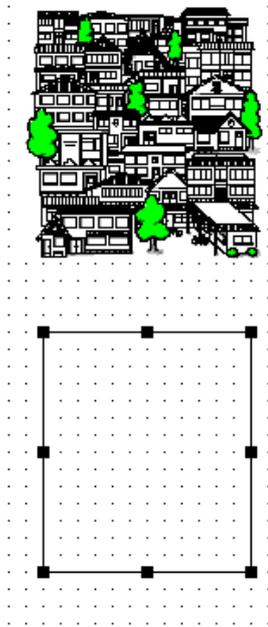
Figure 704: A second picture

This time we will NOT specify a filename, as we wish the picture to display a photograph of each student. This time, we click on the 'Column' property and the column selection tool is displayed.
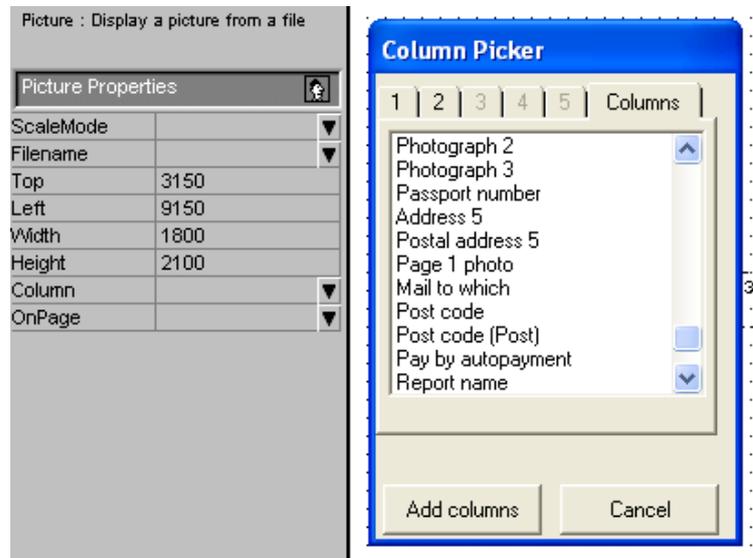
Figure 705: Connecting a picture to a column

Under 'Student details' is the column titled 'Page 1 photo' and it is this column (number 739) to which the picture is now connected.
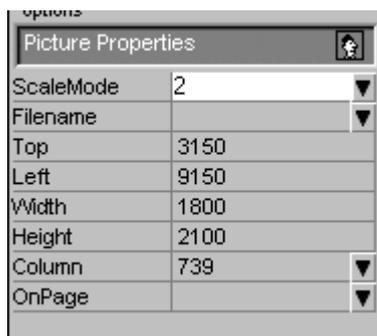
Figure 706: The column is connected

That completes the specifications, so let's save the document and view it for a student. When you click on the 'Save' button, the following question is asked.
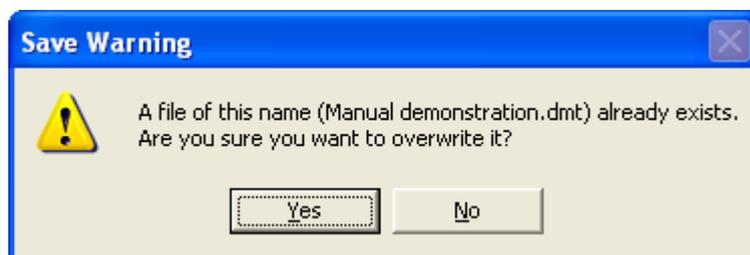
Figure 707: Saving an existing document

It is here that you can make a copy of a document having made changes which you wish to keep under a new document name. This is a relatively common process. Many schools produce a basic template design which they then use, saving under a new name each time, as they design more documents.

However, having decided that we DO wish to save using the same document name as before, we next click on the third button to be examined from the top line – the 'Exit document' button.

This returns us to document mode and when we display the document we see, on the right, the two picture areas. The first is 'already occupied' by the logo, but the second has yet to be attached to the photograph for the current student.

Figure 708: The picture on the document

Right-click in the empty photo area and the Media form, shown below, will appear.
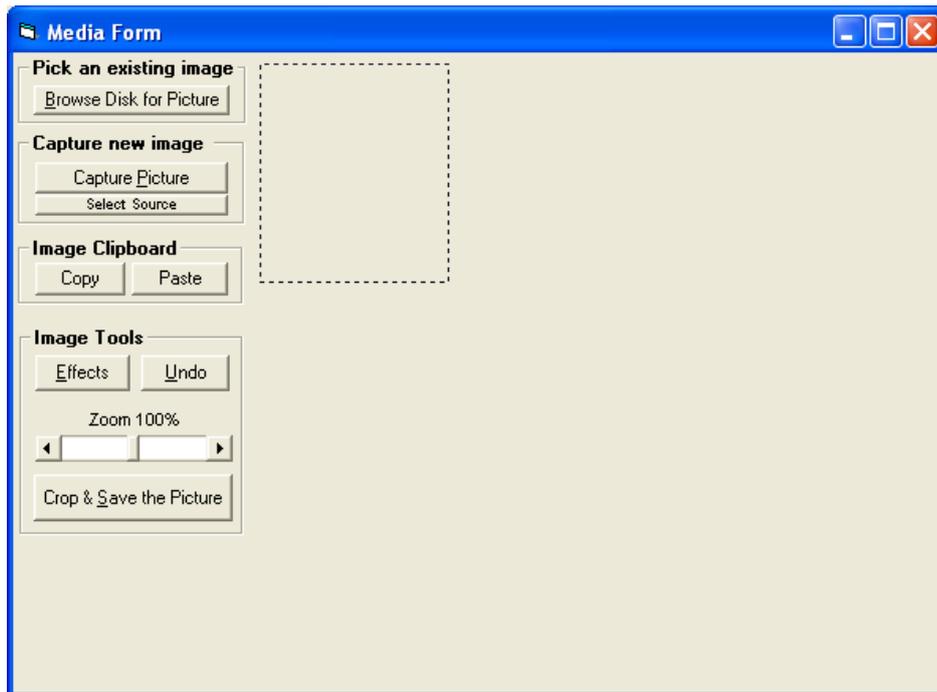
Figure 709: The picture capture screen

This form offers a variety of possibilities, including the ability to be connected to a live video or still digital camera which displays whatever it is pointing at. Some schools use this to sit each student in front of the camera then 'capture' their photograph directly.

In this case, let's browse until we find the photograph of the young man shown. Click 'Open' , and you will return to the Media screen.
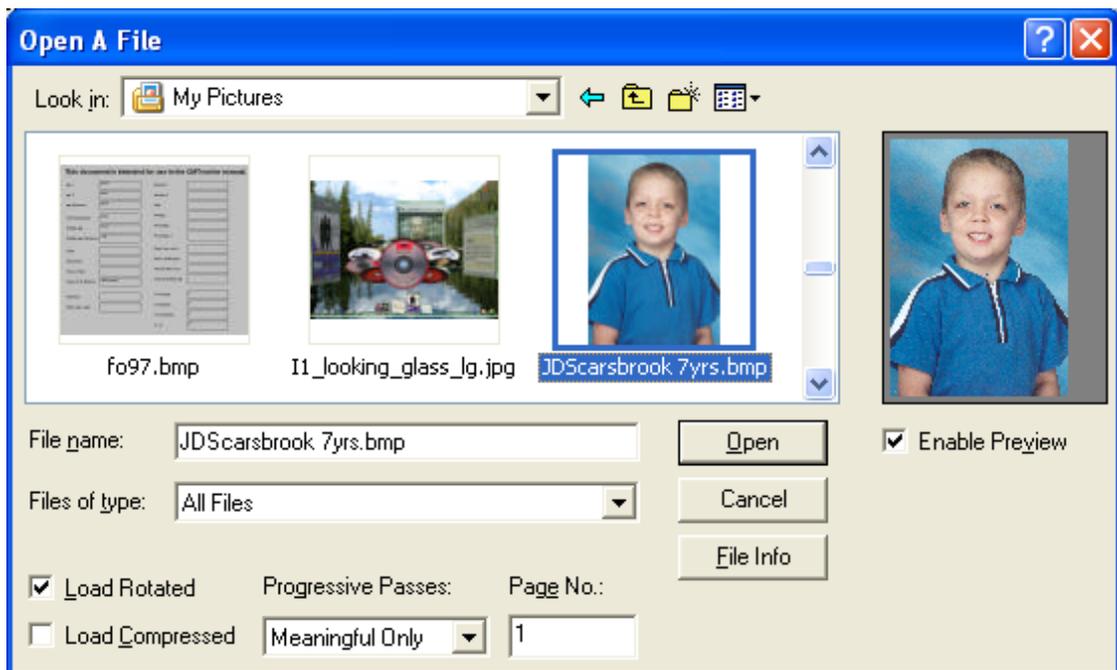
Figure 710: Browsing for the required picture

The screen above has a number of features which allow you to manage the capture of your photograph. Select the photograph and return to the Media screen. You can use the 'Zoom' feature to adjust the size of the image, relative to the size of the screen area – which is shown as a dotted frame over the image.

If you click on the 'Capture picture' button your computer will offer you a connection to any 'Twain' devices which it finds available, as shown below.
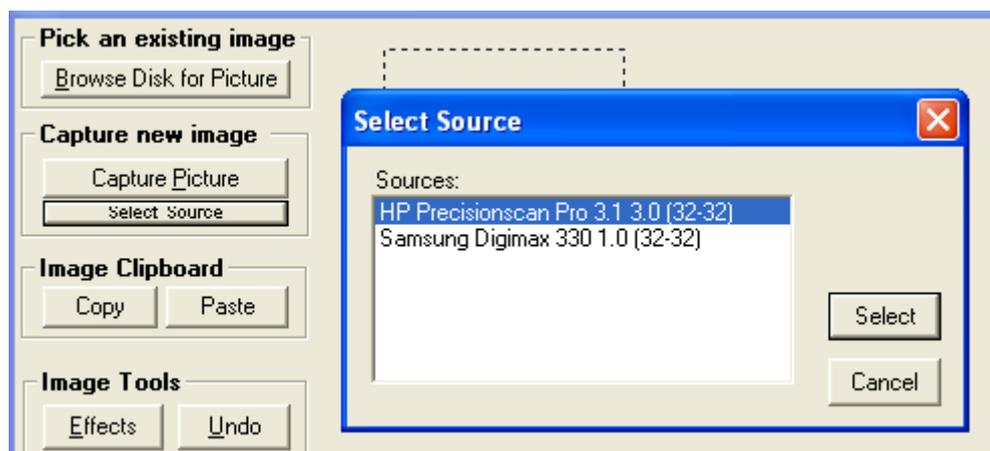
Figure 711: Two sources of pictures are available

The "Effects' menu, shown below, offers a range of image adjustment facilities.

You can adjust the brightness, the contrast, the hue and the saturation of images, and you can rotate them (in case a student is leaning), invert them (hanging from a jungle gym), and can sharpen and smooth the images.
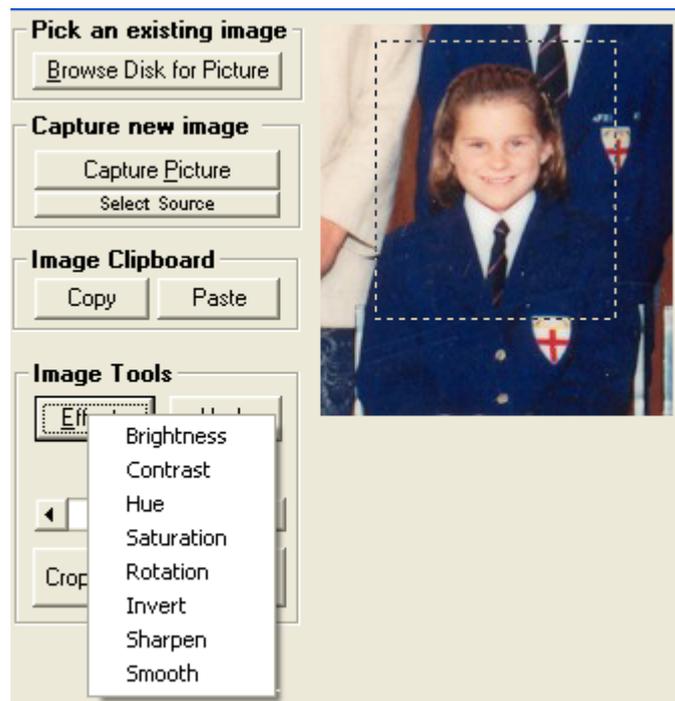
Figure 712: The 'Effects' menu

As an example, the following illustration shows the brightness of an image being adjusted by sliding the horizontal scroll until the image meets you satisfaction.
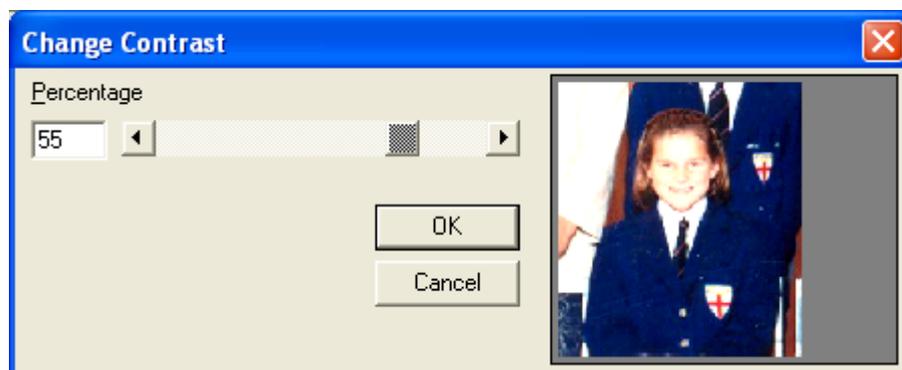
Figure 713: Adjusting the brightness of an image

Once you are satisfied, click on the 'Crop & Save' button at the bottom of the window....
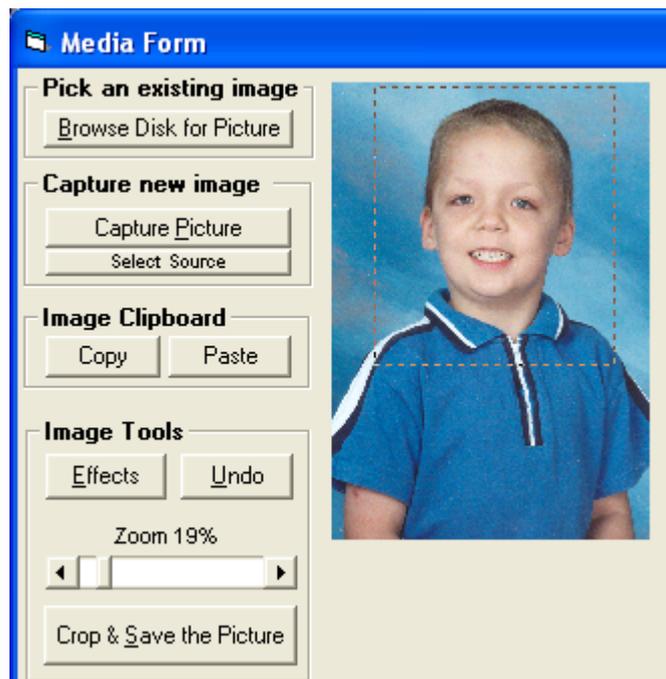
Figure 714: Adjusted and ready

… and the image will appear on the document, as shown below.

Remember that this image is student-specific. Each student will have their own image. Several schools have images ready-prepared and named for them supplied by their school photographer. All that remains is for them to transfer the images to the relevant directory (Page 1 photo lives in the \cm\media directory, Year 1 photo lives in the \cm\media\Year 1\ subdirectory…) and fill the relevant column with the names of the photographs. This can be done via a photo-utility in CMAdmin and Student Manager.

Figure 715: The picture appears on the document
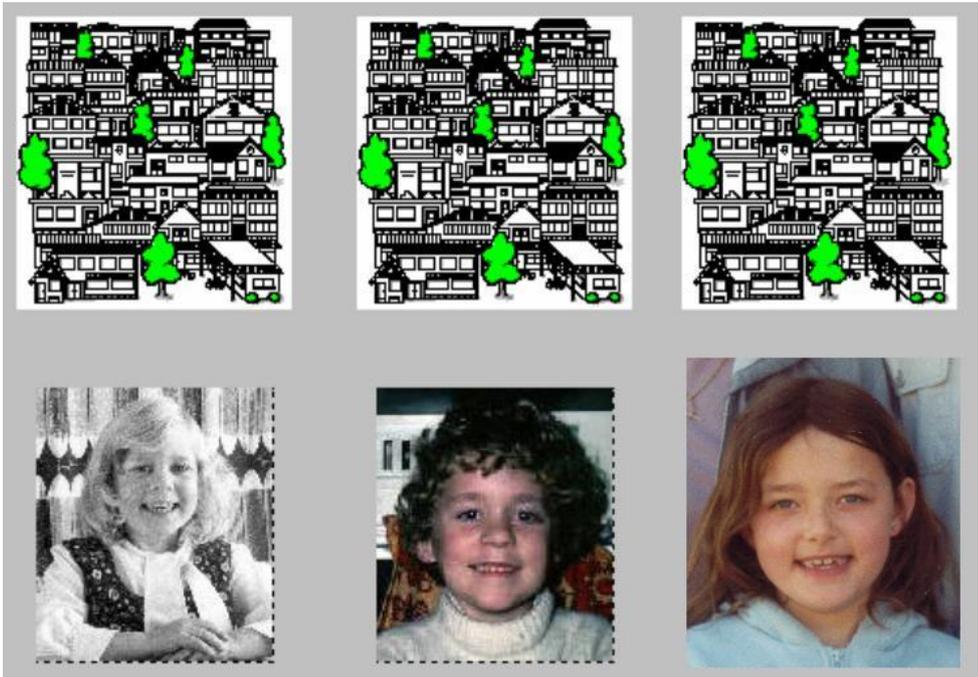
Figure 716: Other students have their own pictures

The picture can also hold a scanned image..
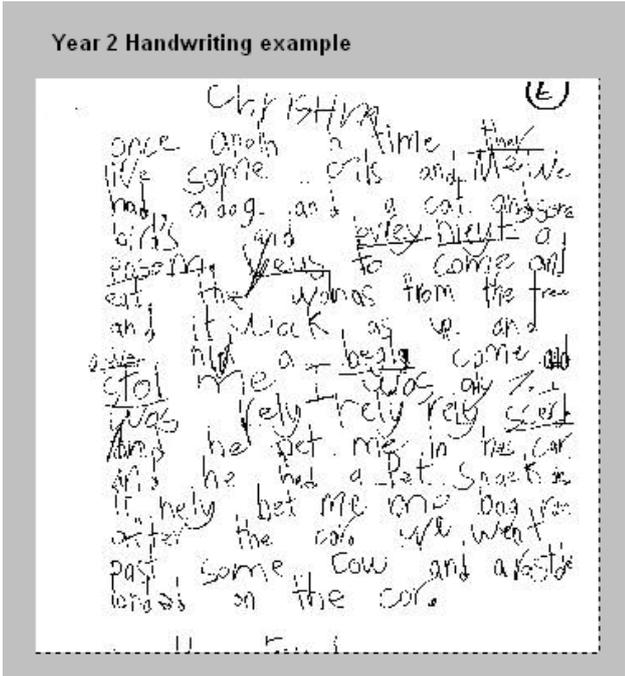
Figure 717: A 'picture' can be an example of work …

.. or a movie clip….
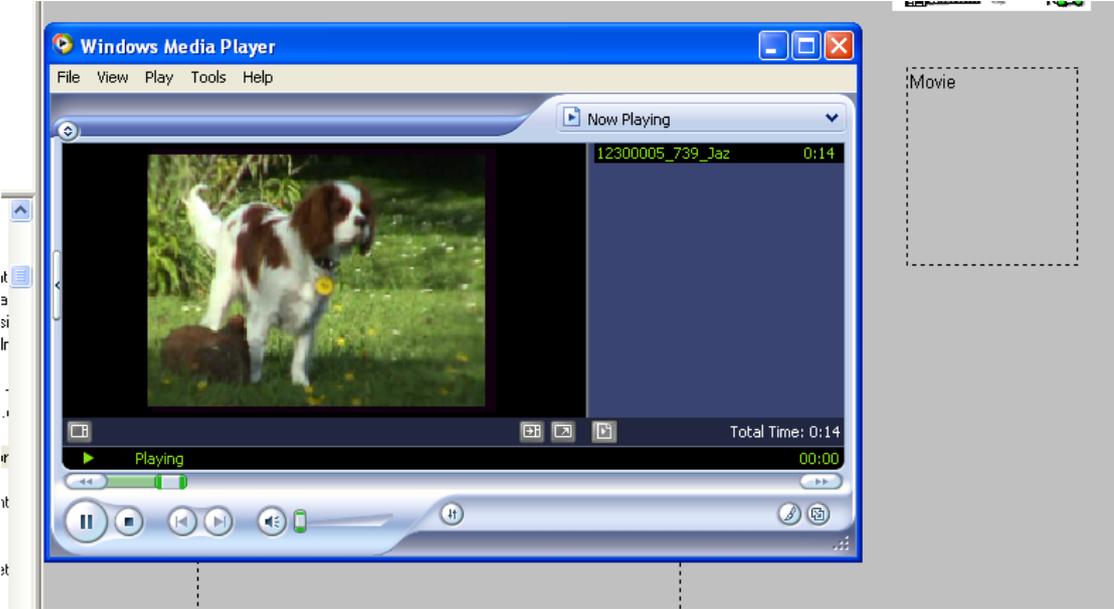
Figure 718: .. or a video clip

… or even a sound recording. These are played by viewing the document for the student concerned and left-clicking in the picture area on the document. In the example above you can see the word 'Movie' displayed in the picture area.

A graph

We shall deal with the design of graphs in the next chapter. Here, we shall simply look at the connection of a graph to a document.

In the meantime, a graph has been selected which we wish to embed into our document.
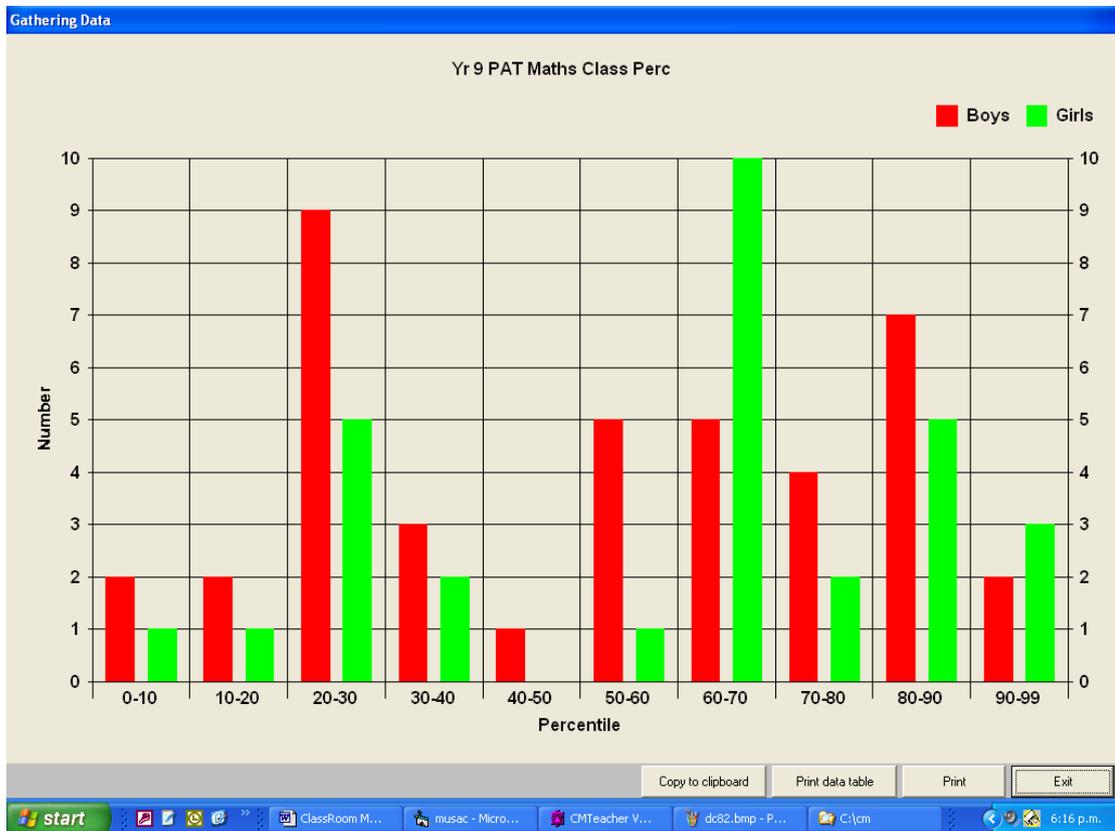
Figure 719: Our graph of choice

Graphs are a little larger than most objects placed on a document so we shall have to allow for its larger size. This is shown in the illustration below, where the graph object has been selected and dragged out across the lower half of the document.
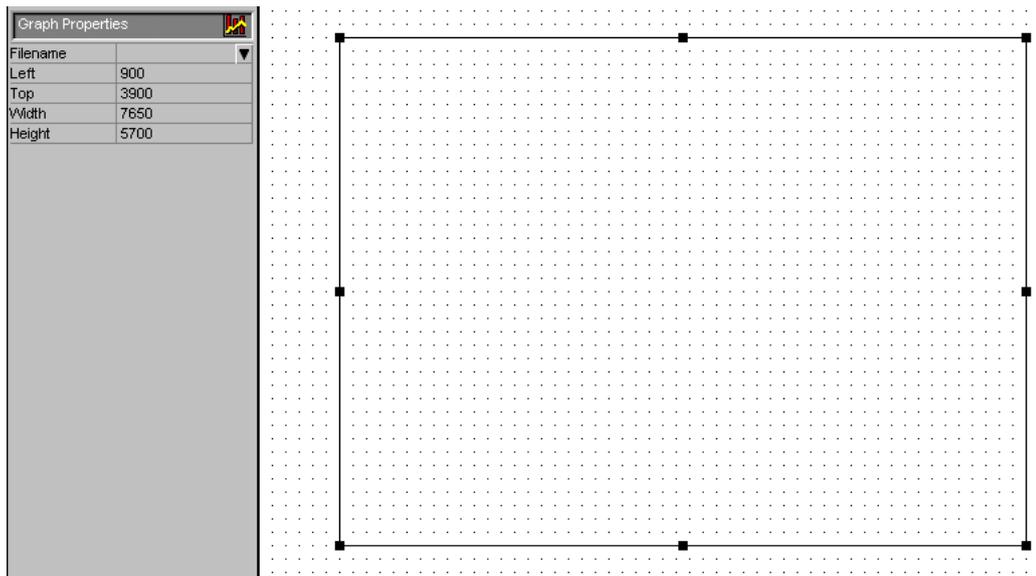
Figure 720: The graph object in place

The final step is to select the graph itself. This is done by clicking on the 'Filename' property. This causes the following browser to be displayed and our graph has been identified.
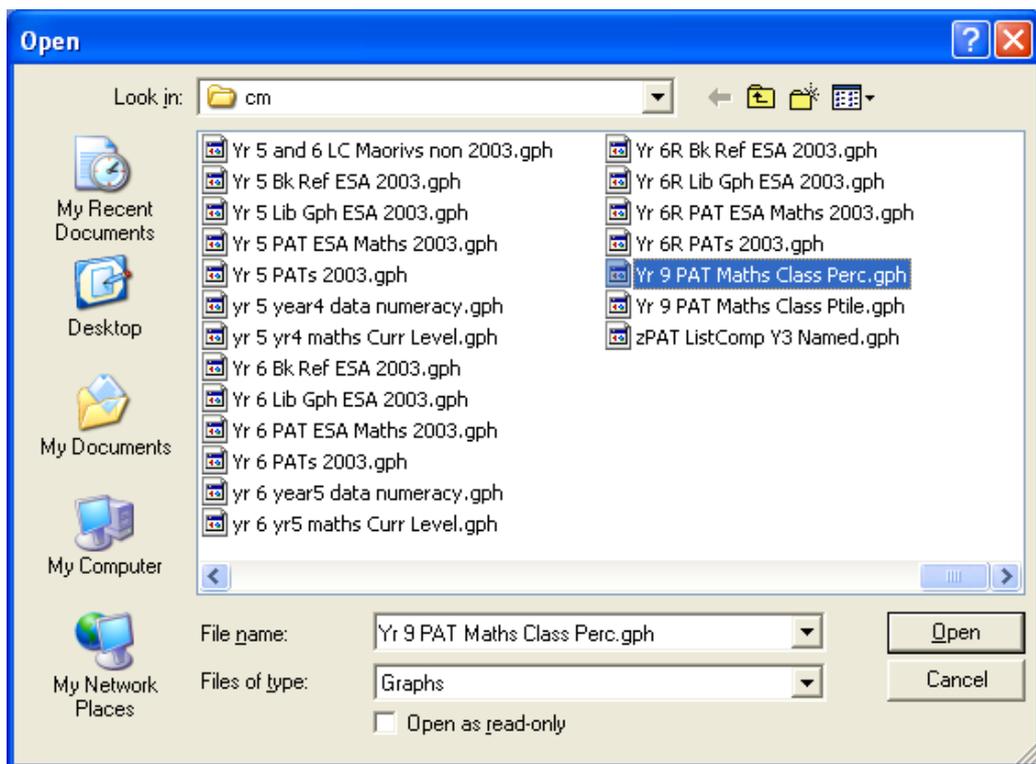
Figure 721: Selection of the graph

Select the graph, and its title will be recorded against the 'Filename' property.
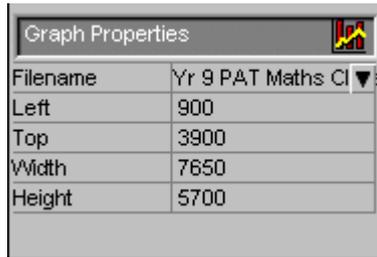
Figure 722: The graph is connected

Now, when we save our graph and call up our document for display, it now includes the graph, as shown below.
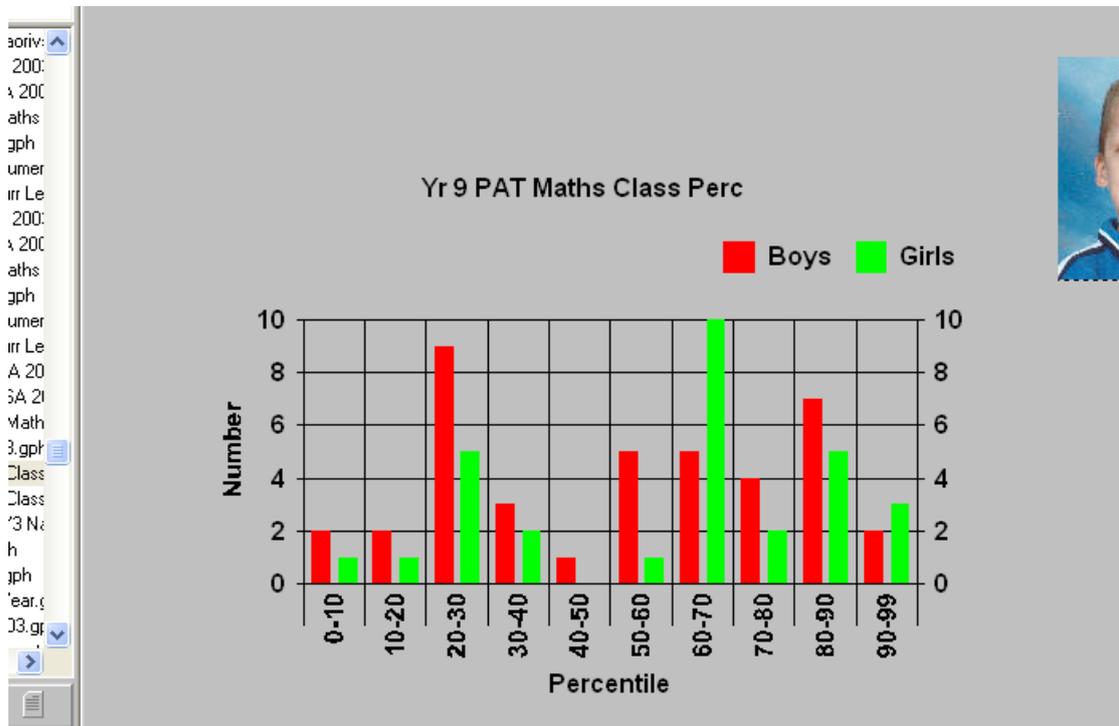
Figure 723: The graph displayed on the document

The final illustration of this section is shown below. It shows the graph as it appears on the printed version of the document.
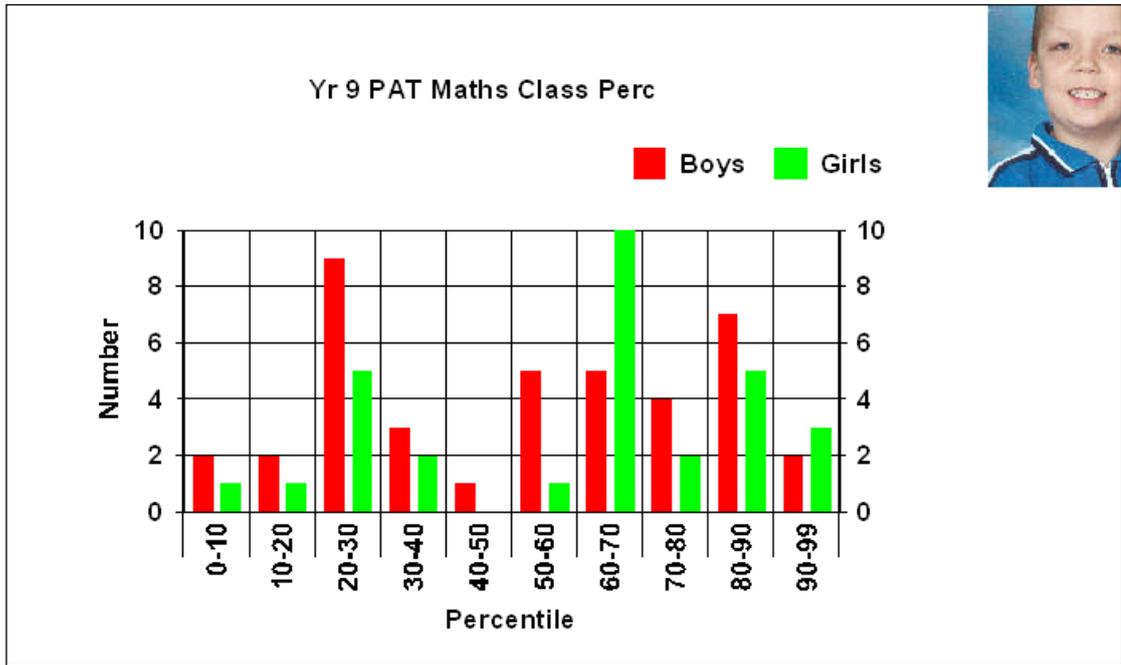
Figure 724: The graph on the printed document

An option button

Option buttons normally come in sets of two, three, or four or so, and allow you to select one of several possibilities by clicking on the relevant button.
Option buttons respond to numeric values e.g. 1, 2, 3, … and therefore must be linked to numeric columns.

For the purpose of the demonstration, which began with the Tennis racquet size, lets return (briefly) to CMAdmin and add a new column under the heading of Tennis, called 'Skill level' and we'll make it a numeric column.
This has been done in the following illustration.

We shall add a single option button and set its properties, then we shall remove it and add all five buttons at once using a much faster method. This will be done using the Data Assistant button at the top of the screen, but more of that once we've demonstrated the addition of a button – manually.
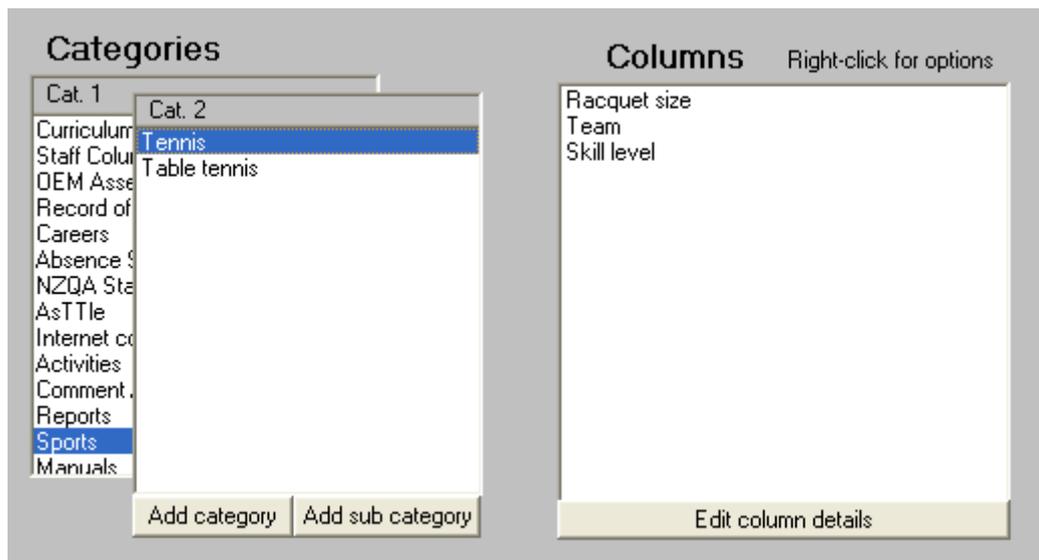
Figure 725: The new 'Skill level' column

Next, returning to our document design in CMTeacher, click on the Option button and drag one on to the document.
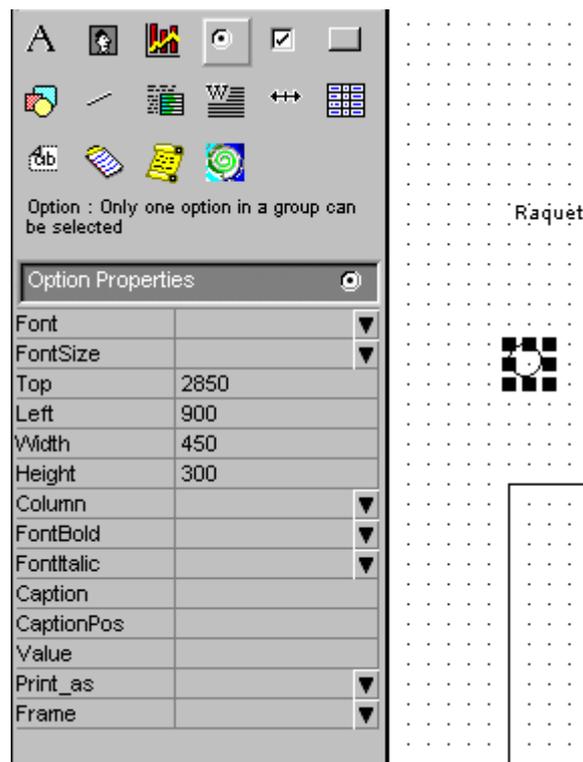
Figure 726: An option button is created

To connect the button to the correct column, click in the 'Column' property area of the button, and the column selector will appear, as shown below.
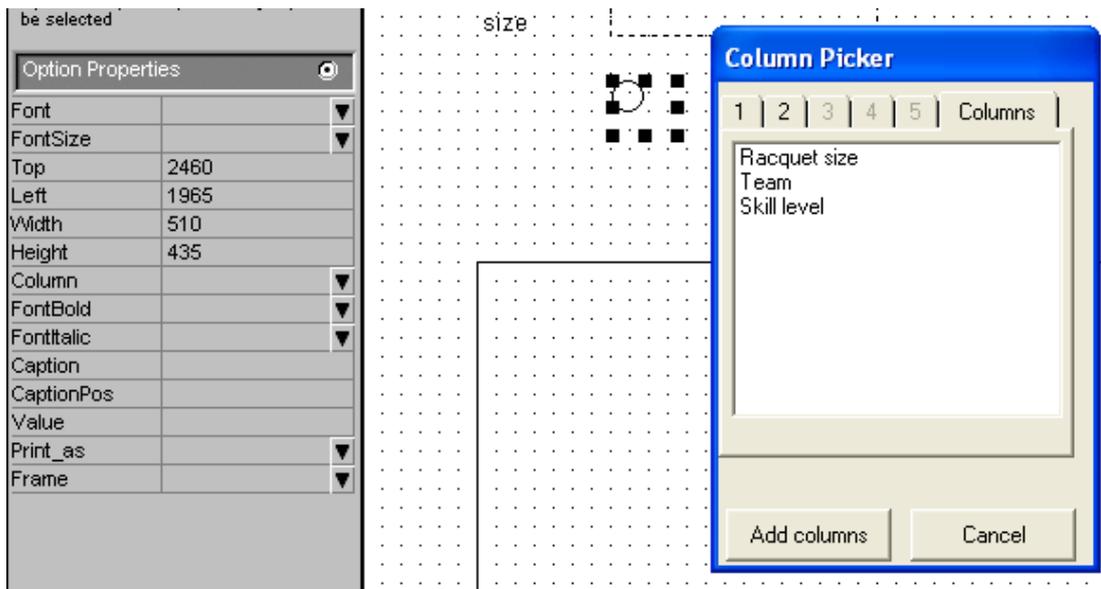
Figure 727: Connecting to the right column

Once the column has been connected, we can set the caption and the value properties. The 'Value' property is the numeric value which will result in this button being turned 'On' in the document if a student has a skill level of that value. Further, the student can be allocated that value by clicking on this button on the document.
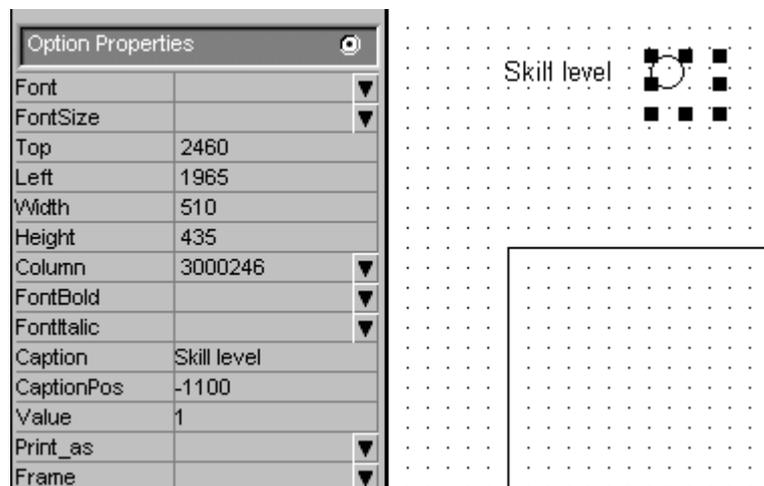
Figure 728: The caption and value are set

Next we set the 'Print as' property. This defaults to a value of zero which results in a circle (and a dot – if selected) appearing on the printed document. The alternative, a 'Box and Tick' can be selected. The document will appear on screen with circles and dots but, when printed, these will be replaced by 'Boxes and a tick'. If they click on a second then the first will be 'unclicked' – the dot inside will be removed.
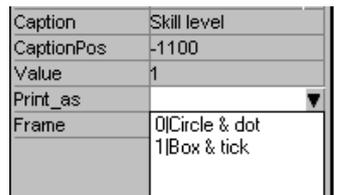
Figure 729: The printing options

The final property – 'Frames' – applies only when 'Box and Tick' is selected and will be demonstrated at the end of this section.

Now that this button is all set up and ready to go, let's remove it! This is done by selecting the button and pressing the Delete key, or the Ctrl-X combination.

Then we shall turn to the 'Data Assistant'button at the top of the screen.
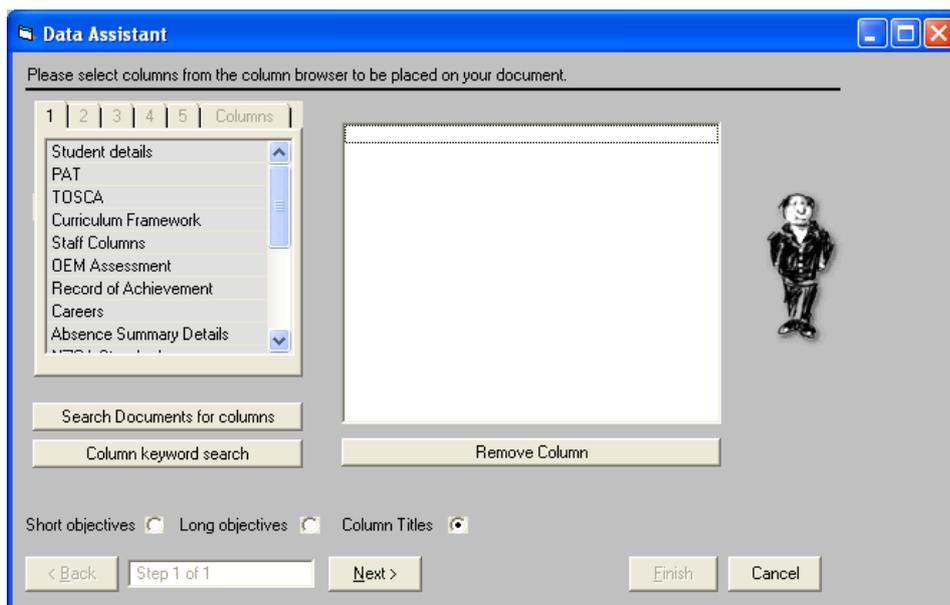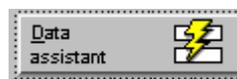
Figure 730: The Data Assistant

The Data Assistant allows us to generate databoxes or buttons or number lines very quickly and have them automatically connected to the correct columns.

The first step is to select the required column, in this case its our new 'Skill level' column under 'Tennis'. We can, if we wish, select a whole bunch of columns at this point and have them all handled in one go. This certainly aids rapid document design. Select 'Skill level' and click on the 'Next' button taking us to …
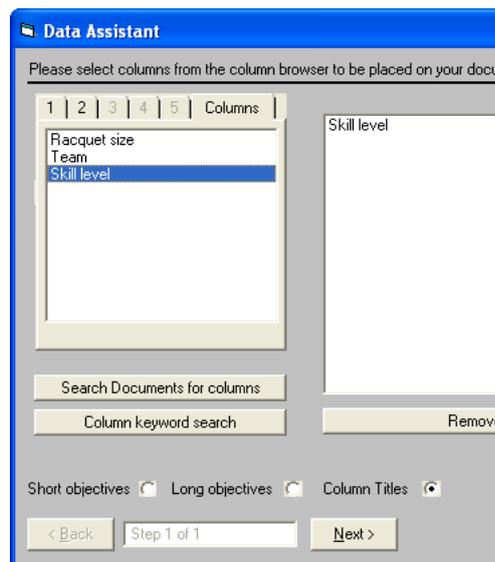
Figure 731: Skill level is selected

… the final step, shown below.
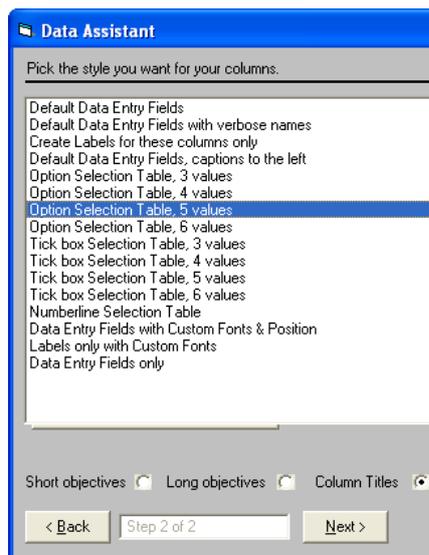
Figure 732: Requesting five option buttons

At the end of this chapter we shall return to look at the other possibilities on the first step screen – the 'Search documents for columns' and 'Column keyword search' buttons.

On the final step screen you will see a considerable list of possibilities. The one we are interested in is labelled 'Option selection table – five values'. We shall also return to this screen at the end of this chapter to go over the other possibilities. Once we have selected the 'Five options' choice, click 'Finish' to return to our document.
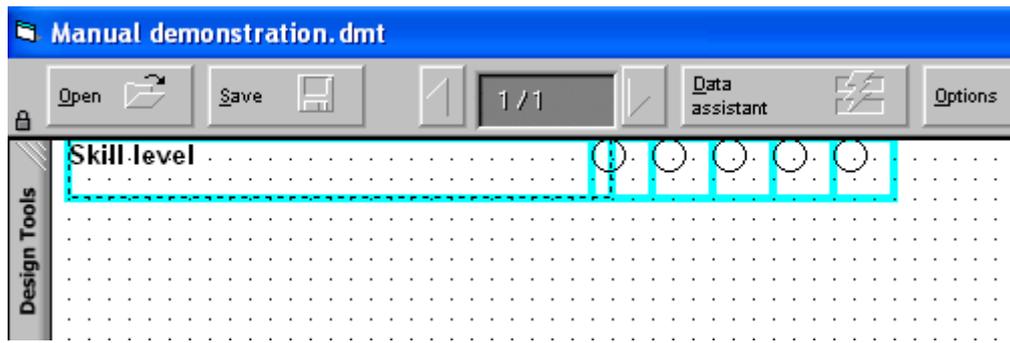
Figure 733: Five new buttons and a heading

The five option buttons and a label have been added to the document. (Actually, its not a label. Its an RTF box, but we shall not worry about that at this stage.)

Of course, these are in the wrong place but, as they are all selected, as is indicated by the blue-green frames around them, we can drag the whole bunch to the required position, down below the first databox we created.
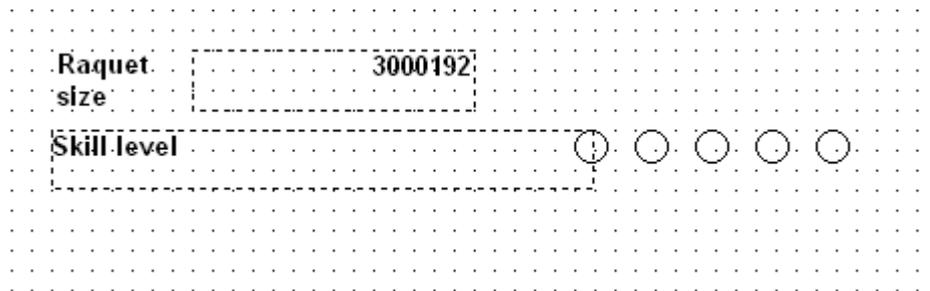
Figure 734: The label is too long

We now note that the 'label' is too long so, having selected it, we shorten it by dragging inwards the black selection dot half way up the right hand end.
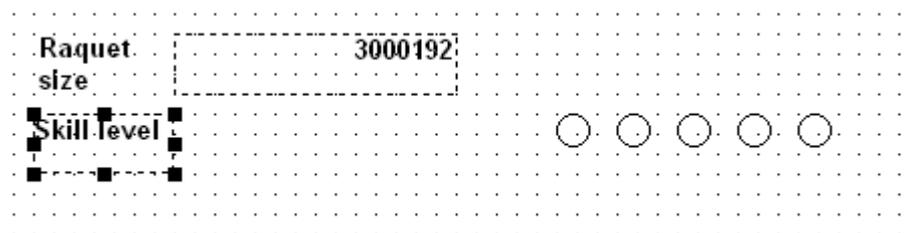
Figure 735: The caption is now correct

When an object has been singly selected, and is surrounded by the black dots, then these may be used as 'handles' to resize the object concerned. You can move a selected object by simply dragging it to its new position.

Now that we have the label correct, let's move the five button to a more sensible place. Firstly, select them all. This is done, using the mouse, by dragging an imaginary rectangle over them all.
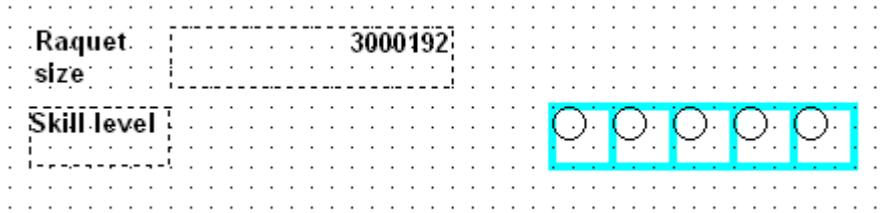
Figure 736: The buttons have been selected as a group

As a result they will be multi-selected, and can then be dragged as a group to their new position.
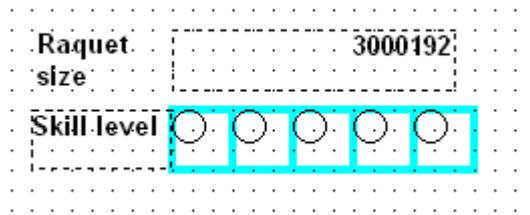
Figure 737: Moving the group of buttons

Once in the correct position, click with the mouse somewhere out in open space and they will lose their selection coloured frame.
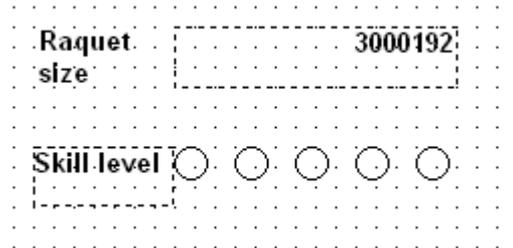
Figure 738: All in position

Click on the left hand button and look at its properties. The column connection and value, the essential properties have all been filled in for us.
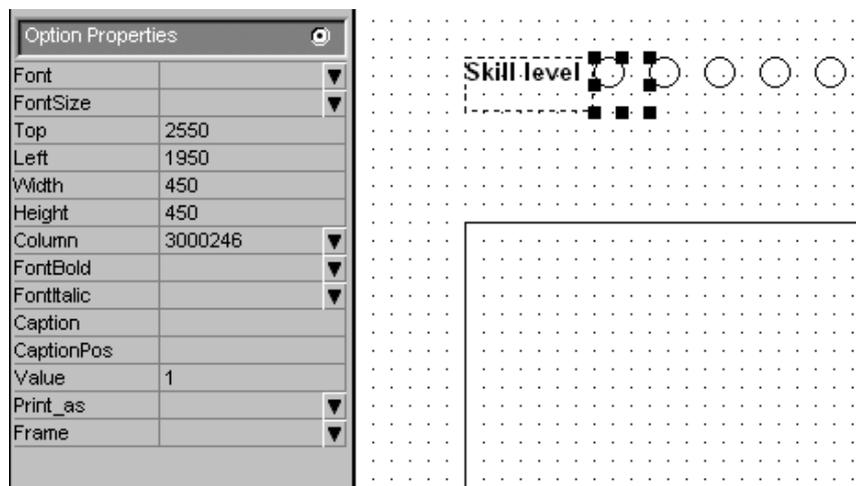
Figure 739: The resulting properties

Next, I've taken the opportunity to select both the caption and the five buttons and to lower the whole six objects a little, as I need to put a label above them to indicate the values which each button represents.
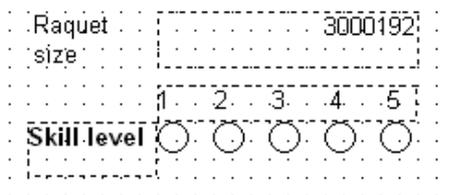
Figure 740: The headings are not quite aligned correctly

In order to align the headings exactly I need to switch OFF the 'Align to grid' setting – at least temporarily – and to subsequently adjust the button positions underneath their numbers.
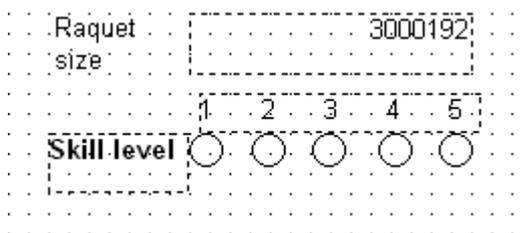
Figure 741: The headings now line up

All is complete, so the document is saved again, using the now usual process. You don't have to save the document after each addition. I'm only doing it here to allow me to show you the effect of each new object as we add it to the document, which subsequently appears as shown below.
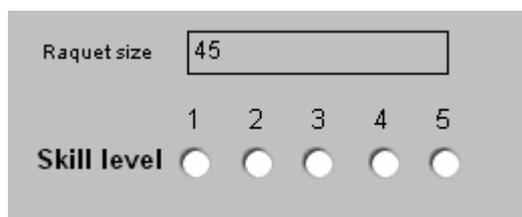
Figure 742: Ready for data entry

Now its easy to add data to the students. Simply view the document for a student and click in their relevant button. This will cause the corresponding value to be stored back in the database in the column connected to the buttons.
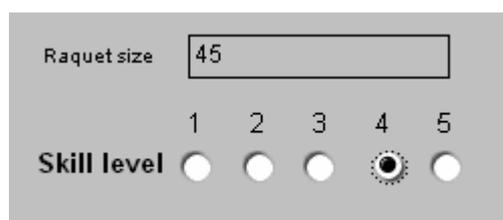
Figure 743: A skill level entered via the document

Alternatively, you can now go to grid mode and enter all of the students' resultsvery quickly.

Figure 744: Results entered in grid mode

The following illustration displays the appearance of a set of buttons on a printed document.
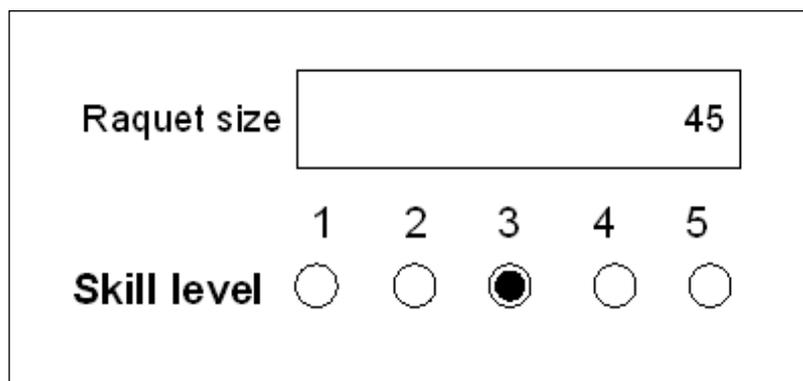
Figure 745: The printed version

Had we selected the alternative display (Boxes and ticks) then their appearance would have been as shown below.
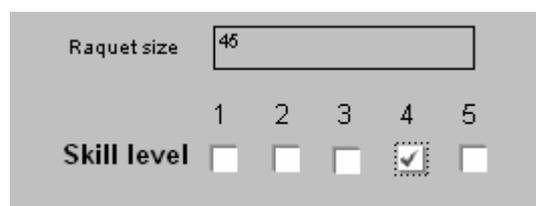
Figure 746: Boxes and ticks

The printed version of 'Boxes and ticks' has two alternatives – 'Frames' on or off.

Figure 747: The printed version — frames on

Figure 748: The printed version — frames off

A tick box — used to signal a 'Yes'

We've seen what a tick box looks like, just above when option buttons were requested to appear as 'Box and ticks'. However, their purpose is a little different. A Tick box is used to represent a 'Yes or No' situation. It can also be used to show 'No result' (an empty box) or 'some result' (a ticked box).

These, too, are linked to numeric columns and, where you have a set of boxes, each is linked to a different column. For this demonstration we shall (via CMAdmin) create three more numeric columns, used to signal whether or not a student has attended three different events associated with their Tennis.
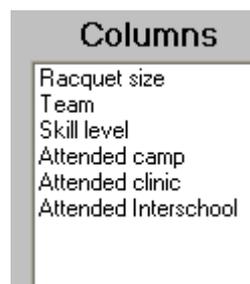
Figure 749: Three new numeric columns

We shall use the 'Data Assistant' to bring in these columns. The first step is the selection of the columns, as shown below.
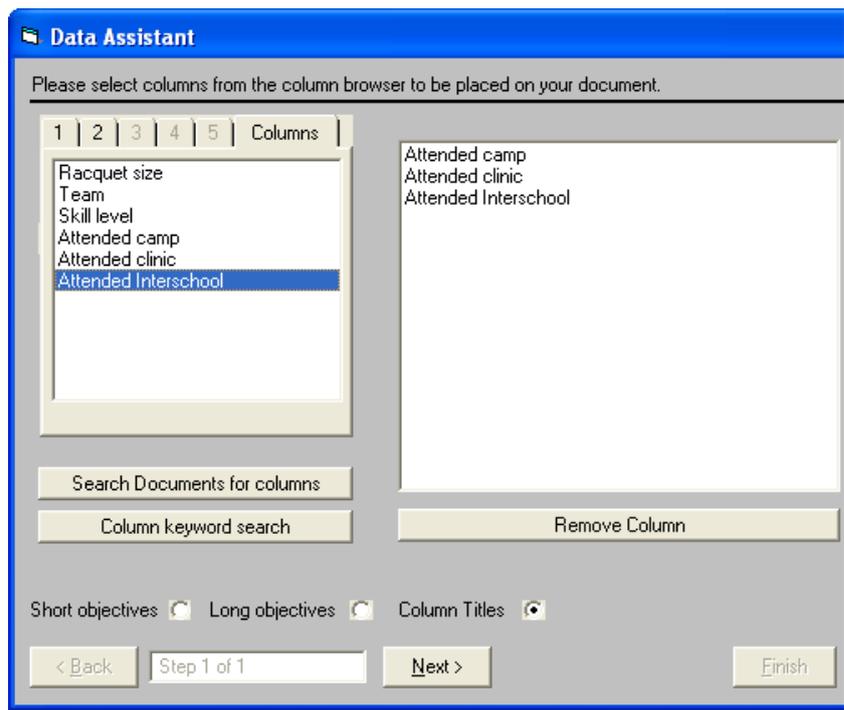
Figure 750: The three columns selected

The second and final step is to select tick boxes. While we only need one per column we shall select the '3 values' version, as shown below, then remove the ones we do not need.
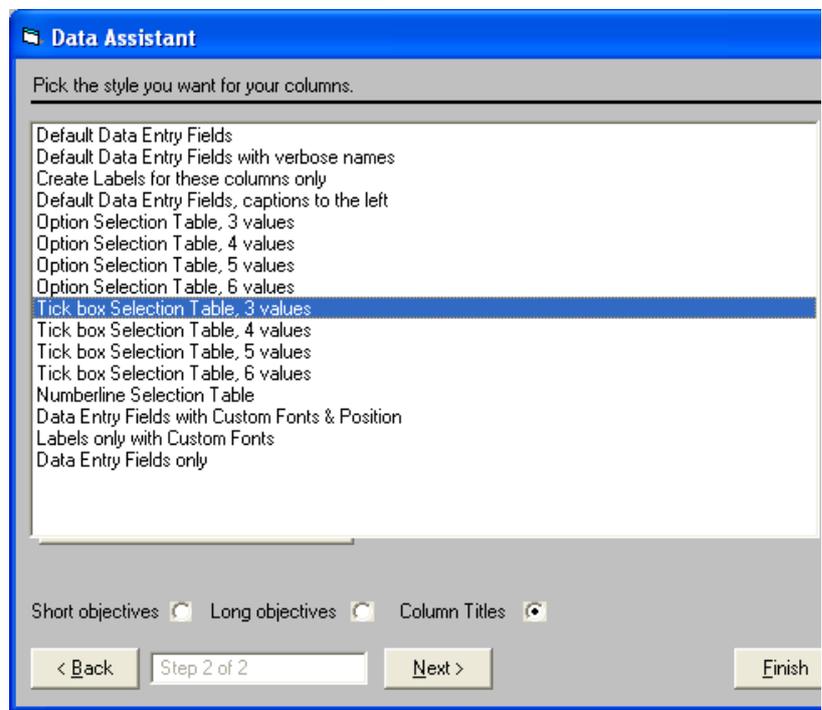
Figure 751: Tick box selection : 3 values

After clicking 'Finish' (or 'Next'), the new entries are displayed, as usual, in the top left hand corner of the screen, all selected ready to be moved into place.
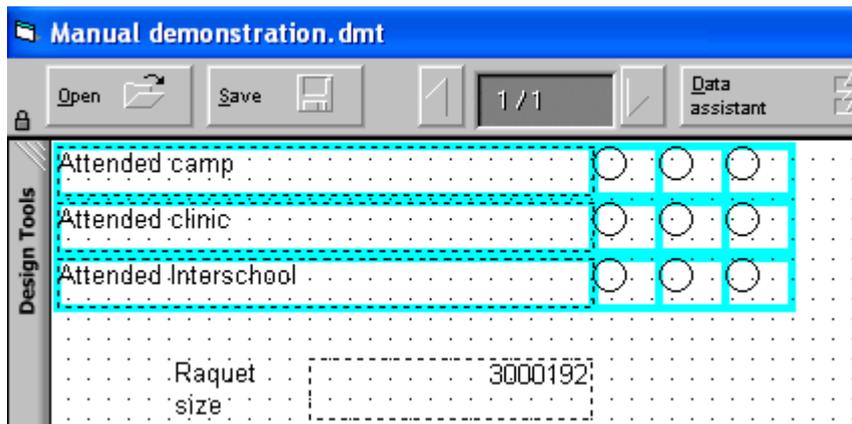
Figure 752: The initial position of the tick boxes

In the illustration below, I've dragged the entire bunch down to the area where I wish them to appear, and have clicked away, so that they lose their selection borders.
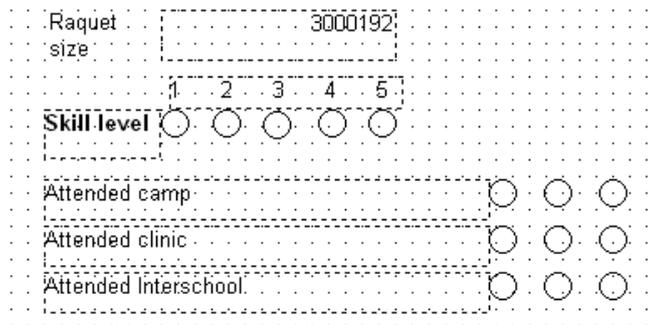
Figure 753: In place — but not quite….

Next, I've deleted two of the headings, and have modified the other to include all of the possibilities. Then I selected all of the unwanted tick boxes (shown as circles) and right-clicked to have the popup menu shown, from which I'll click on 'Delete' to remove them.
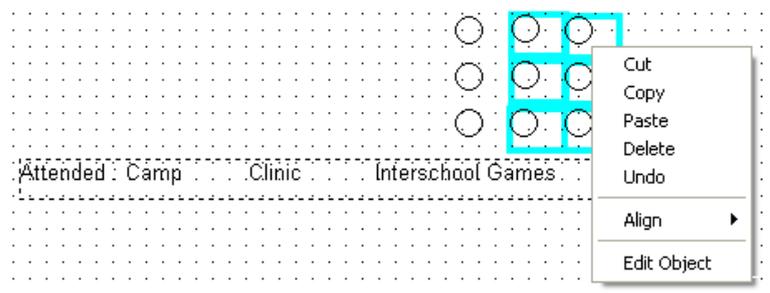
Figure 754: An alternative method of deletion

Finally, I've moved the three into their new place, alongside the tile entries.
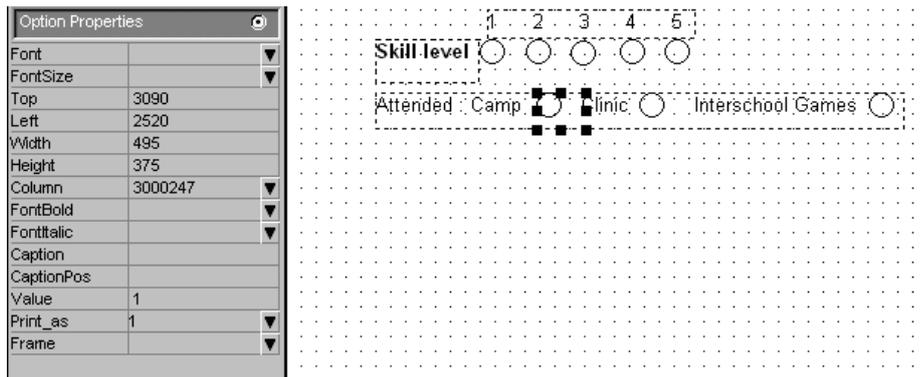
Figure 755: The standard properties of a frame

Save the document, and view it for a student, and the result is as shown below, where I've subsequently ticked two of the boxes.
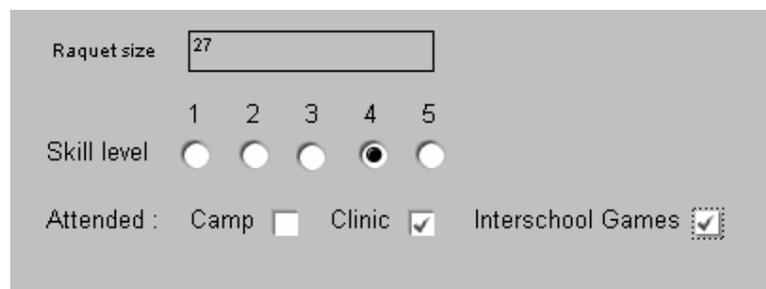
Figure 756: Frames on screen

When printed, the result is as shown.
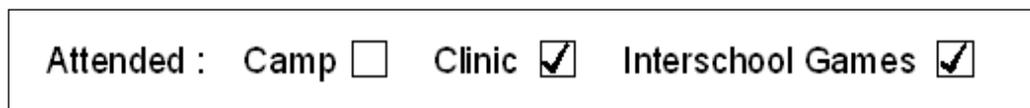
Figure 757: Frames when printed

We can of course, move through to grid mode for the easy entry of all of the data, where the 'yes/no' possibilities are entered as 1s.

Figure 758: Data entered in grid mode

A button

A button can be used to jump directly to another document. This is useful in that it allows you to design a 'Menu document' which lists all of the documents relating to a particular area of interest and you can quickly access any other them by clicking on their button.

Some schools have designed a 'Principal's document' which the principal knows how to load and can then visit any of the various analyses and graphs and reports which have been prepared.

In the example below we have begun by placing a button object on to the document.
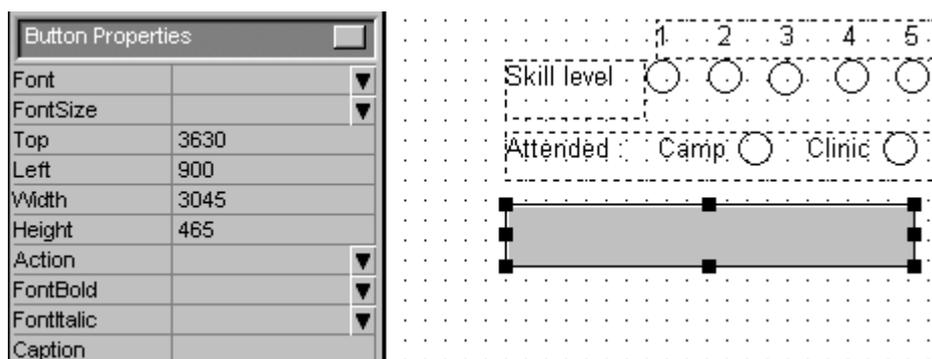
Figure 759: A button in place

The next task is to select the document or graph which we wish to link to the button. This is done by clicking in the 'Action' field. The following dialogue appears, at the bottom of which you can choose between documents and graphs. We've already seen a particular graph. In fact, we've embedded it into our document. We connect to this graph for the purpose of the demonstration.
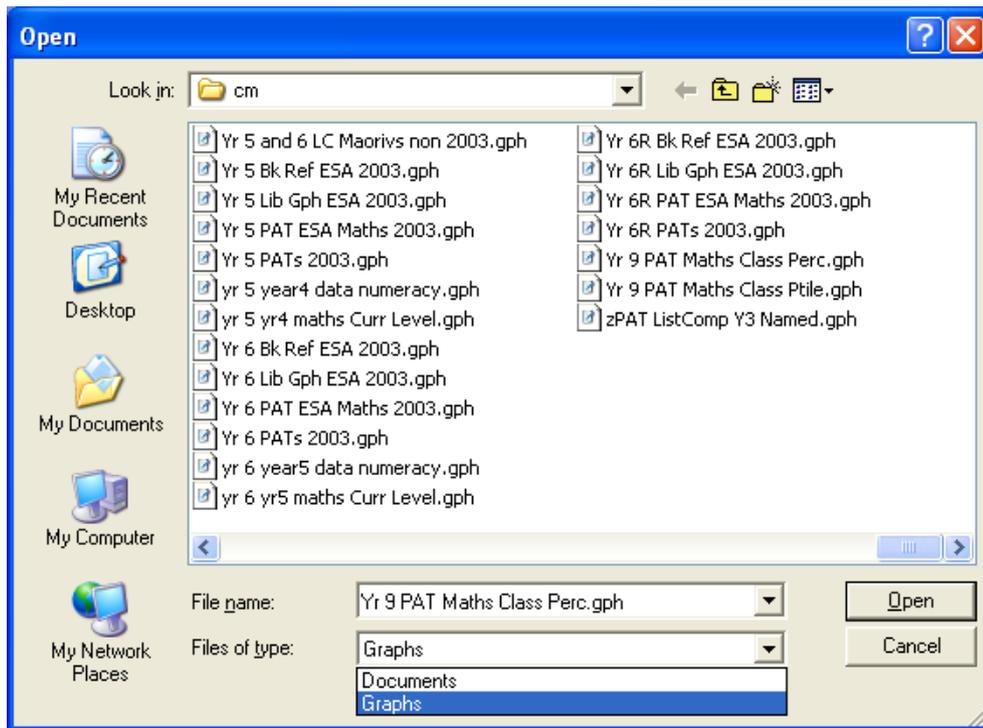
Figure 760: Selecting a graph or document

Once the graph has been selected it appears in the 'Action' property. It also is entered automatically into the 'Caption' property and is displayed on the button.
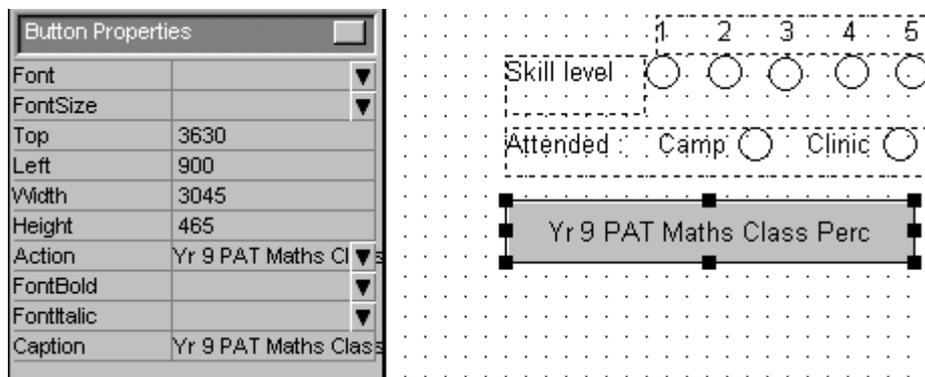
Figure 761: The completed link

We can change the caption to something simpler if we wish by editing the exiting entry. This will not affect the link, as it is recorded in the 'Action' property.
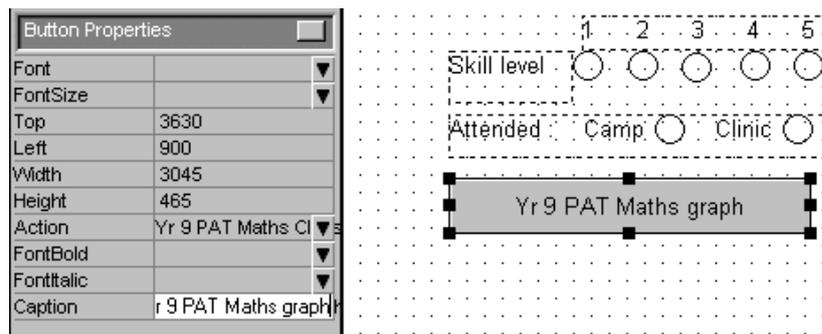
Figure 762: Changing the caption

Save the document and select it, and the button is now visible on the document.
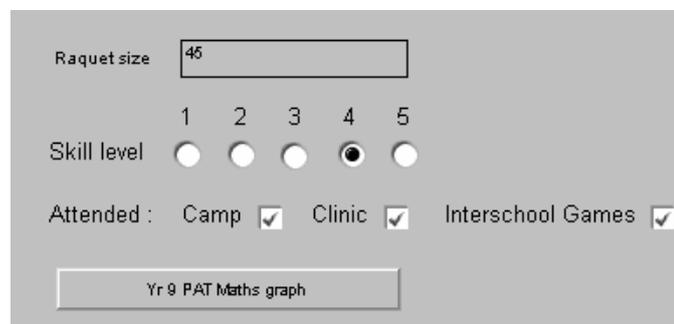
Figure 763: The button on the document

If you click on the button the graph will be displayed in the document window, as shown below.
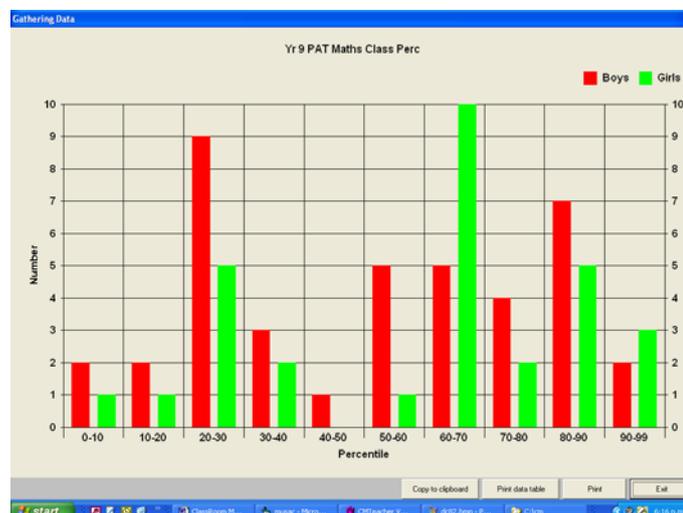
Figure 764: The graph is displayed

If you print this document, the button will NOT be included in the result.

In Student Manager, particularly on the 'Personal Details' screen/document, we have made extensive use of buttons and have, in some cases, caused them to jump not to other documents but to other windows forms. This facility is not available to you, as the program has instructions which cause it to react to these particular buttons in this different way.

A shape

Shapes are used to provide background shading for areas of a document.
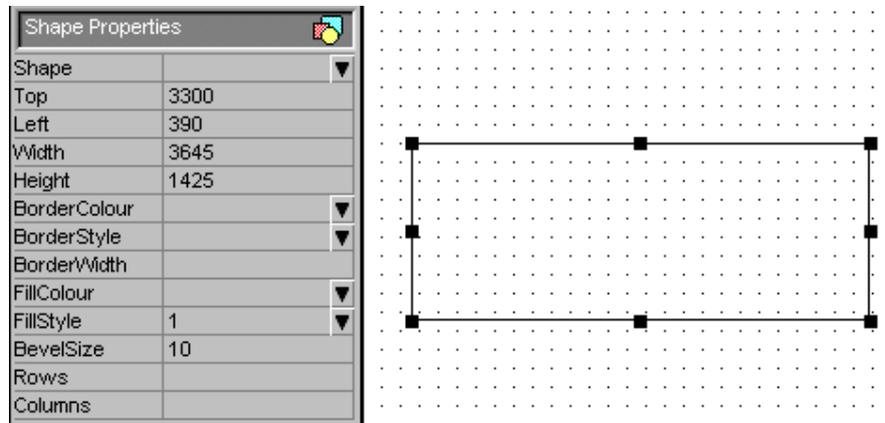
Figure 765: A shape is placed on the document

You have a choice of three shapes....
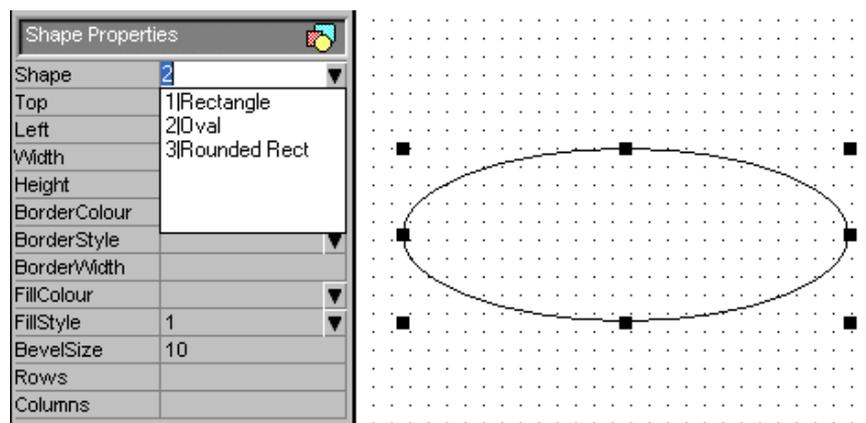
Figure 766: The selection of 'Shape'

The shape has two properties relating to its border : colour and style, and the options for each of these are shown below.
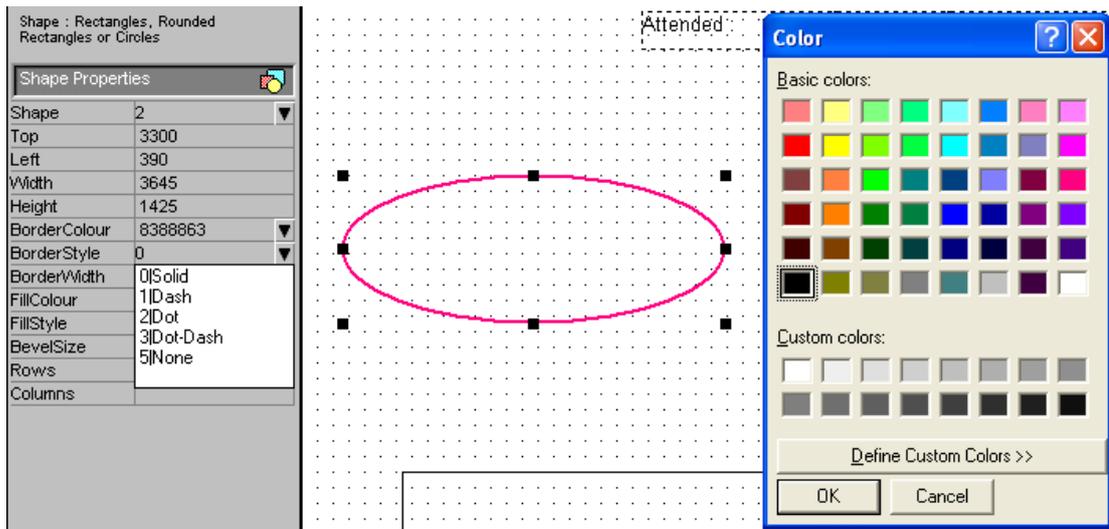
Figure 767: Border colour and style

Similarly, each shape has two properties relating to its 'insides'. You can set the colour and the style, as shown below.
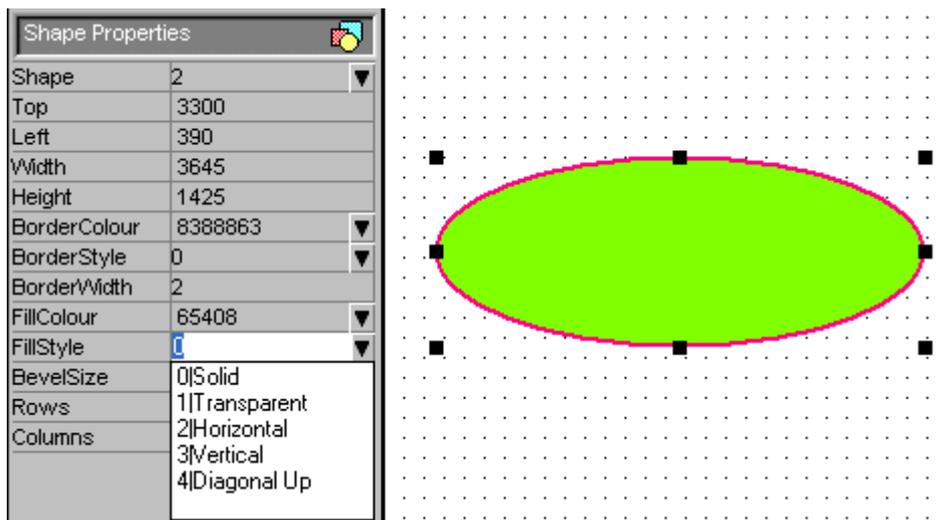
Figure 768: Fill colour and style

If you select a rectangular shape then you can produce a grid on your document by setting the 'Rows' and 'Columns' properties of your shape, as shown below. This generates an 'equally spaced' grid of the requested number of rows and columns. In the example you can see that I've also set the 'Border width' to 2.
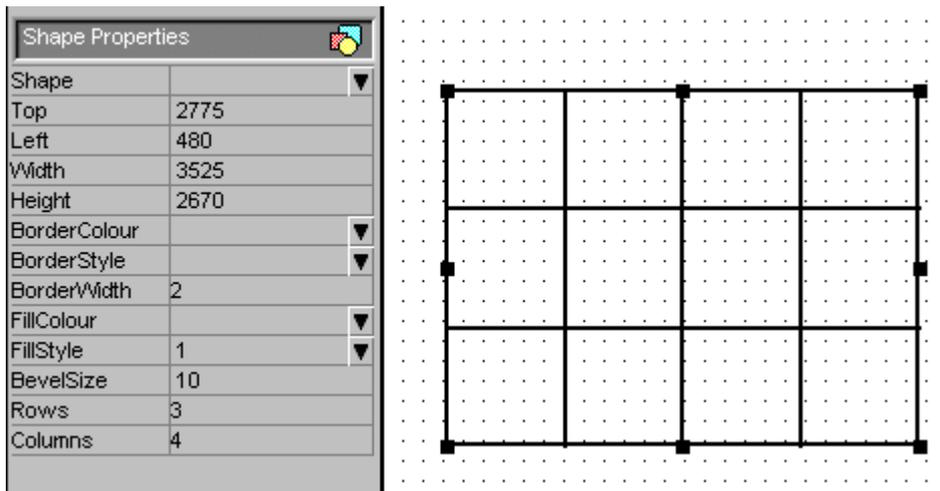
Figure 769: Use of rows and columns

If you wish to generate a more complex grid then you can do so by combining several shapes (rectangles) and lines.
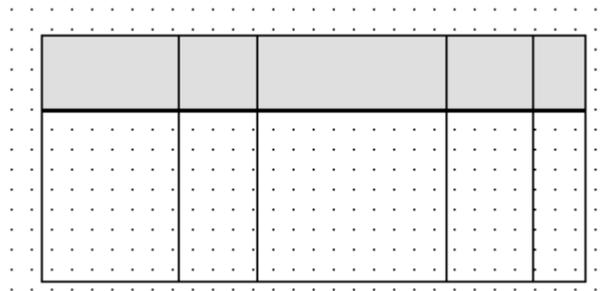
Figure 770: A more complex use of rectangles

The example above consists of four rectangular shapes, one of which has a background shading.

A line

Lines are used to separate different areas of documents.
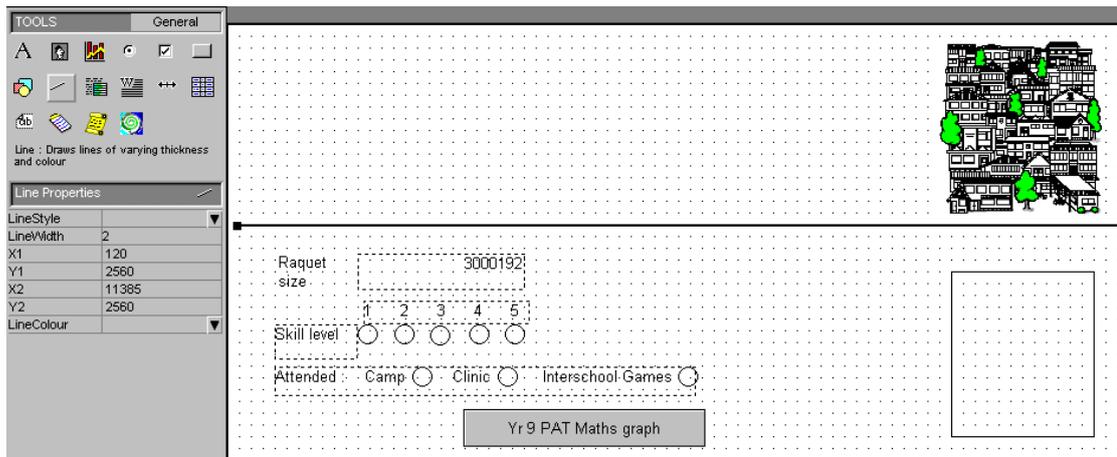
Figure 771: A line separates the headings from the central area

In the example above a line has been placed horizontally between the upper area of the document and the remainder. Lines can be placed at any angle and can be used to generate other shapes.
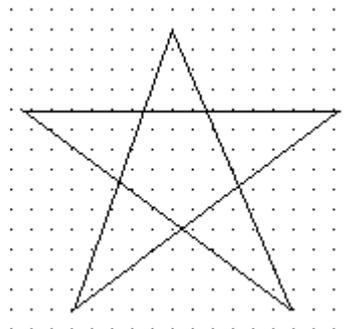
Figure 772: A shape built from lines

A 'Rich Text Box'

Now we come to one of the more interesting objects which can be placed on a document – the word processor box.

They can be used for two main purposes :

1. To act as headings
2. To display the contents of columns in an uneditable format

The first of these will be used to head up our document.
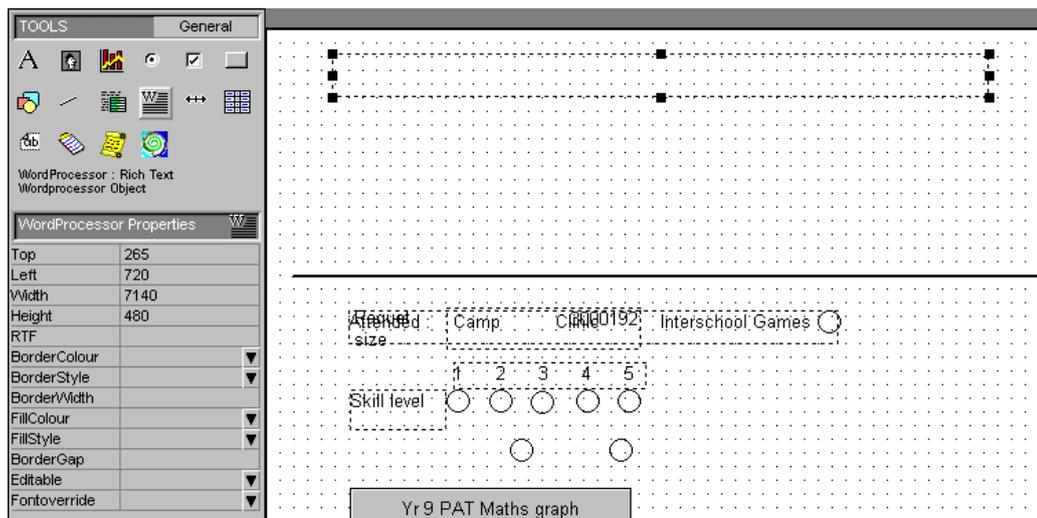
Figure 773: A "word processor' object

A 'Word processor' object – better known as an 'RTF box' has been placed on the document above. When you right-click in the box, a popup menu appears…
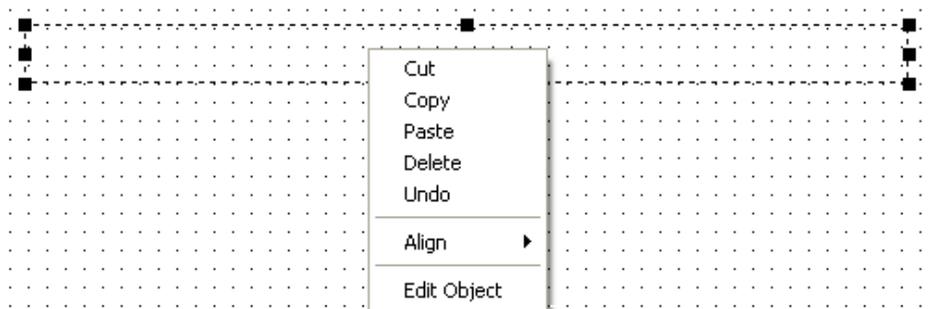
Figure 774: The right-click popup menu

… from which we select the last option – to Edit the object. This causes a (true) word processor window to appear, with a space the same size as our object displayed.
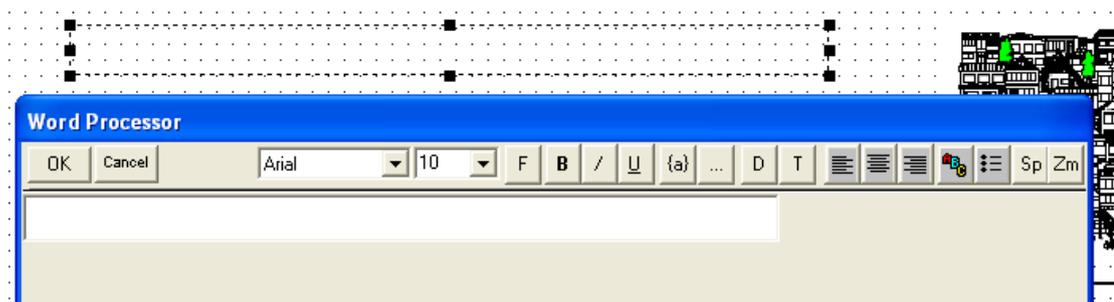
Figure 775: The word processor

Into the word processor we type the name of the school….
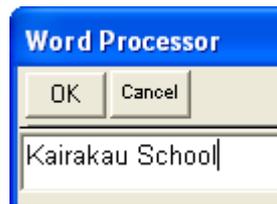
Figure 776: The text is entered

… and then, having selected the text by dragging the mouse over it, the font name and font size have been changed to something more appropriate for a heading.
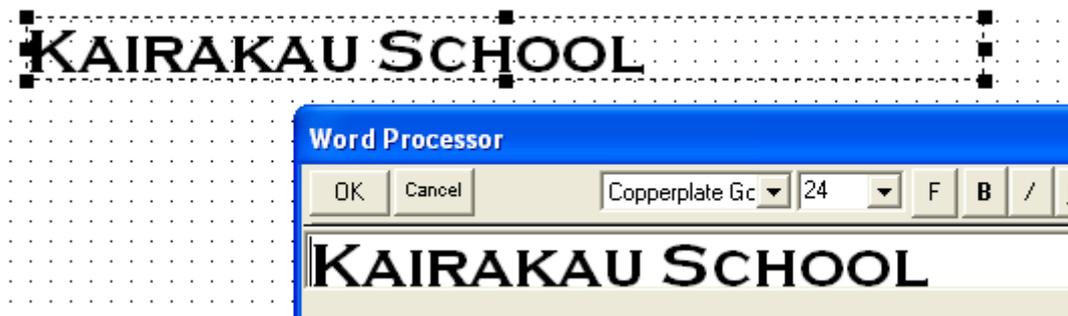
Figure 777: The font name and size are selected

Once complete, click OK and you will be returned to the document with the now splendid name in place. We now wish to add a further RTF box for the document heading. This can either be done by dragging on a new box and working with it or by simply copying the existing one. To do this, first select it by clicking on it.

Figure 778: The box is reshaped then selected

You can then copy it either by right-clicking and using first 'Copy' then 'Paste' from the popup menu, or by simply pressing Ctrl-C to copy followed by Ctrl-V to paste. The second copy, outlined in blue, will appear slightly offset from the original.
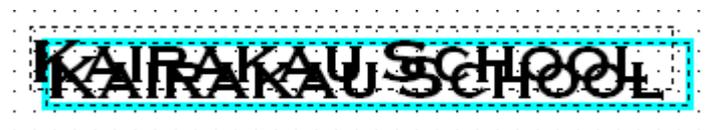
Figure 779: A copy is made

Figure 780: The copy is repositioned

Now all that remains is to enter the word processor (click away to lose the blue border, then click inside to select, and right-click to bring up the popup menu with 'Edit Object') and to adjust its contents to meet the needs of the second 'line' of the document.
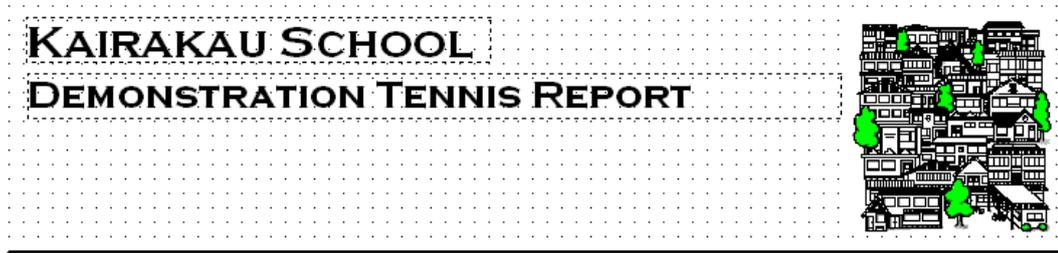
Figure 781: The copy has been modified

So far we've seen how an RTF box can be used as a heading. You'll remember that a heading was adjusted for the three events which our young tennis players had attended. That, too, was an RTF box, as shown below.
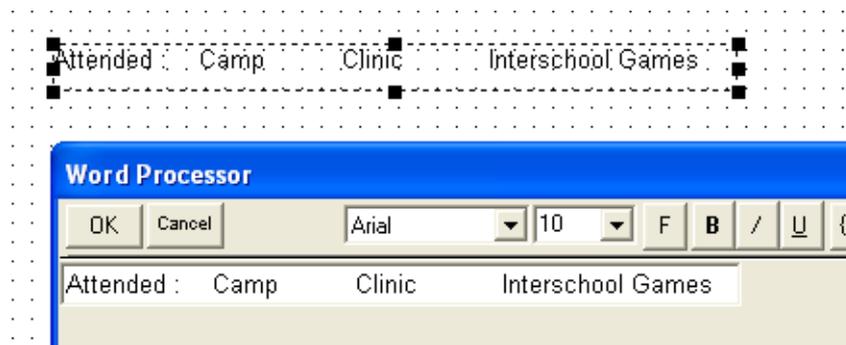
Figure 782: The headings used earlier

Now we come to the second use of the RTF box – to display the data in columns in a way which cannot be edited. The need for this is evident when you consider the display of the student's name on a document.

When ClassRoom Manager first began, we used to display a student's name using the Data Assistant to generate data boxes as shown below – spot the problem!
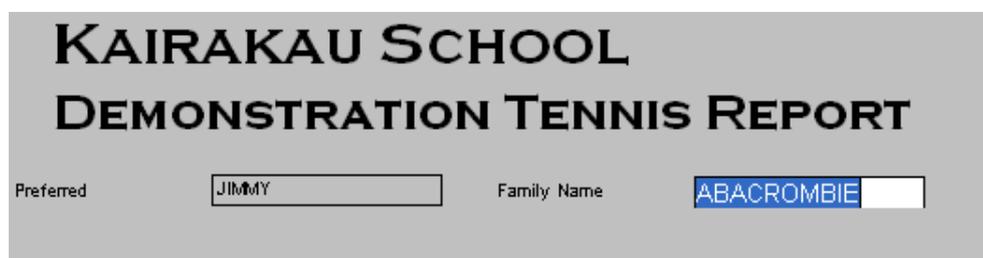
Figure 783: A new RTF box

The problem was awful. Not only did the appearance leave a lot to be desired, but it also allowed the teachers to edit the students' names! Instead, it was made possible to display the contents of a column via a RTF box.
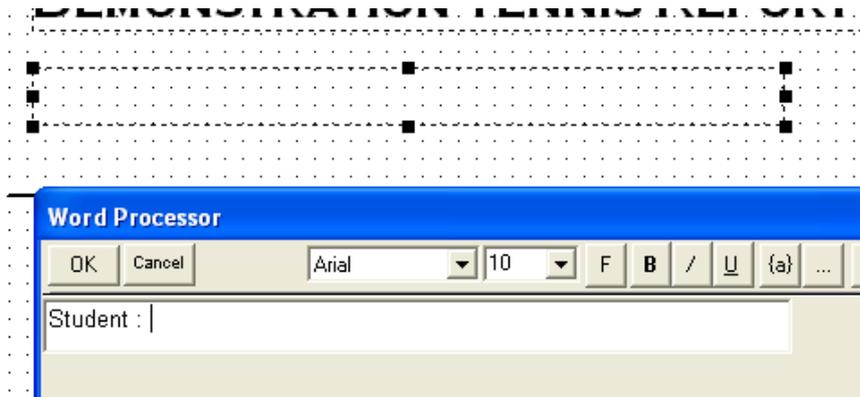
Figure 784: A new RTF box

In the illustration above a new RTF box has been placed on the document and the heading 'Student :' has been added. To insert a code for the contents of a column, click on the {a} at the centre top of the word processor. It can be seen towards the right hand end of the illustration above.
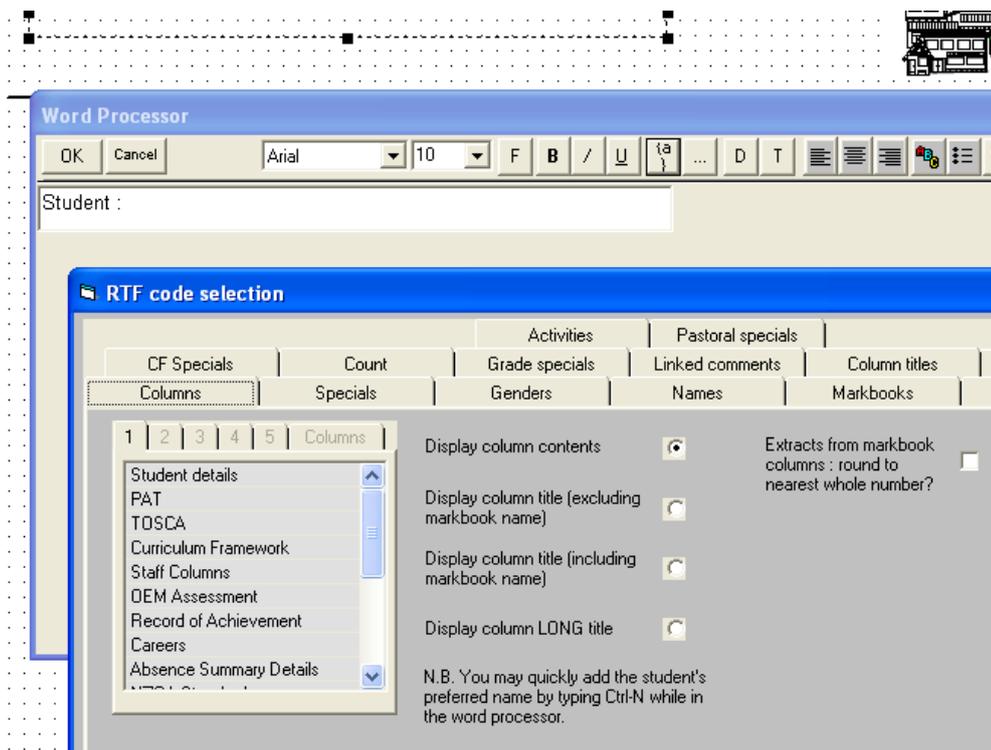
Figure 785: After clicking the {a} button

Clicking the {a} button causes the 'Code insertion' window to appear. (see an Appendix devoted to the use of this tool for full details of the wide range of possibilities).
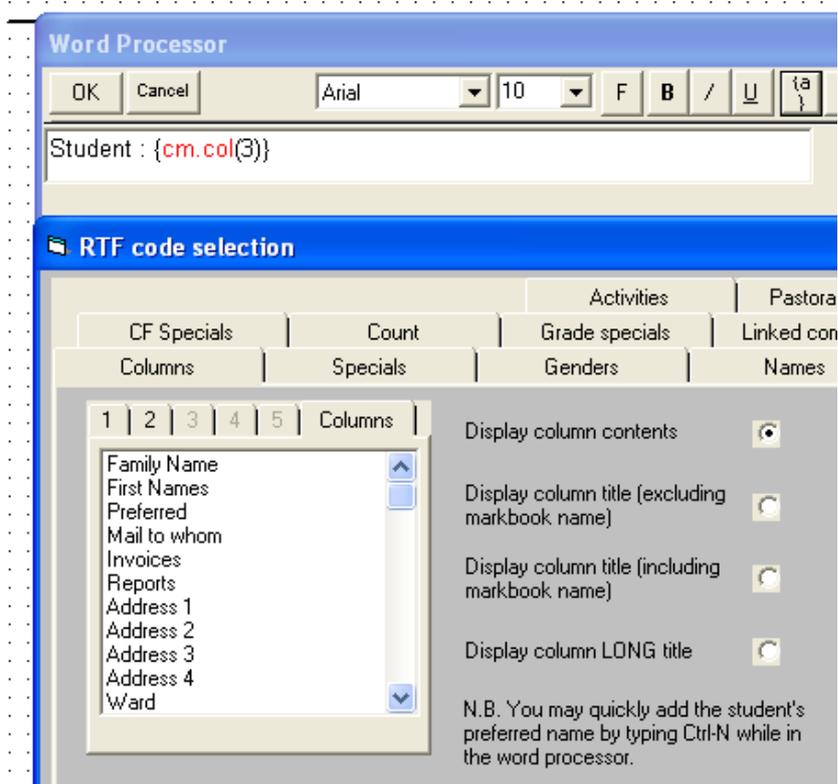
Figure 786: Selection of column (contents)

In this illustration, the student's 'Preferred' name has already been selected and their 'Family name' is about to be selected. Selection causes the insertion of a code, into the word processor text. When printed for an individual student, the two codes shown are interpreted to mean 'The contents of this student's 'Preferred' name', followed by 'The contents of this student's 'Family name''. The result of the selection is shown below.
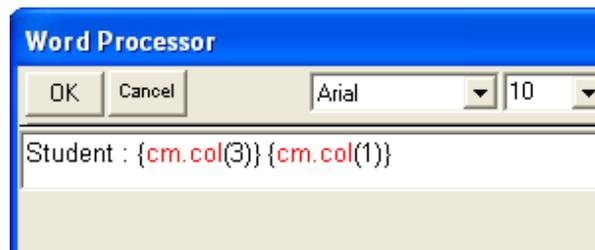
Figure 787: Columns 3 and 1 selected

Once complete, click the OK button to return to the document design. In the illustration below, a copy of the student's name RTF box has been made (which keeps the same font details) and the title has been changed to 'Year', and the 'This year' column is about to be selected to be inserted into the RTF box.
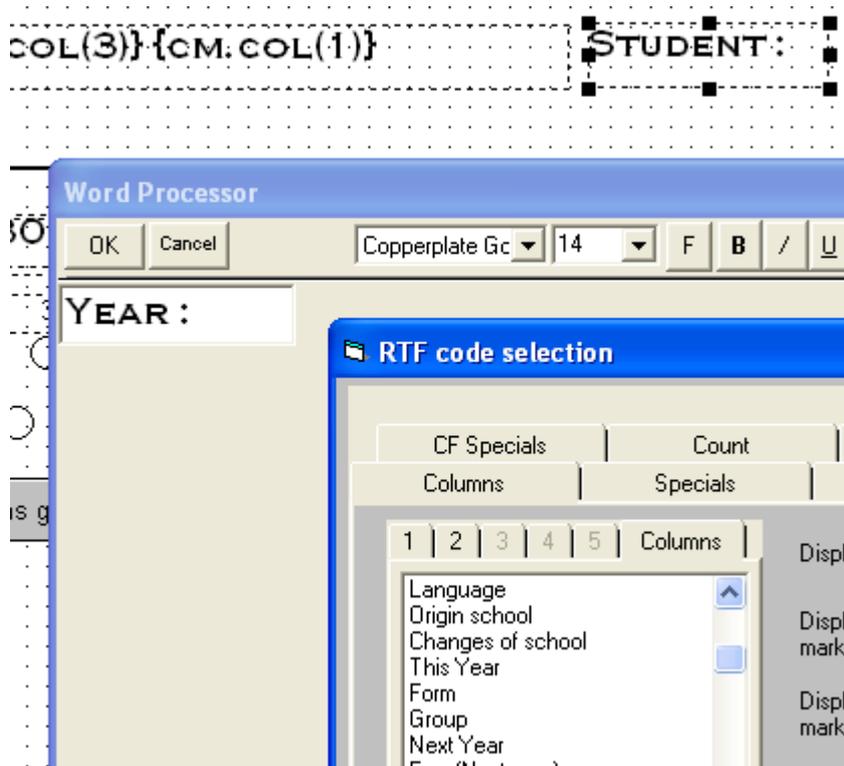
Figure 788: Selection of 'This year'

Once done, the result appears as shown below. The code inserted into the second box is now visible, but it is there, never-the-less. It has been 'word-wrapped' to a lower line, but will result in the correct display when the student's actual year replaces the code.
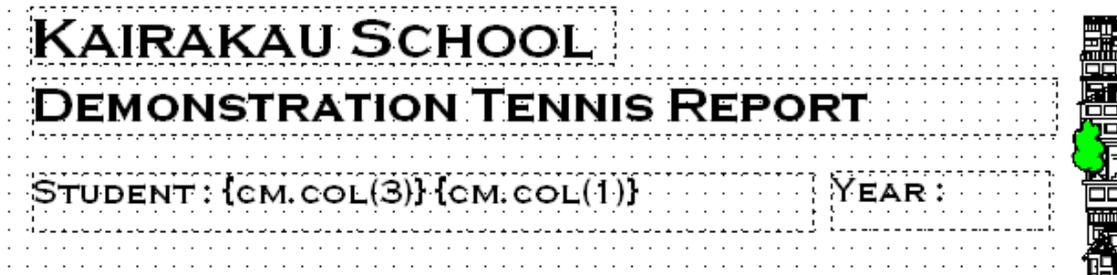
Figure 789: The final appearance

Saving the document, it can then be viewed for a particular student, as shown below.

Figure 790: The resulting document top

This brings us to the end of the demonstration of the RTF box but it is worth reminding you of the worth of visiting the appendix which concerns the code insertion tool. This allows for the display, not only of the contents of columns, but also of information derived from that data – e.g. the student's current age in years and months – which will, of course change every month you view the document, and a host of other possibilities.

A number line

Number lines are yet another way of representing numeric data in a document.

To demonstrate the numberline we shall require a further numeric data column and this time a column named 'Wrist flexibility' has been created. This will have a minimum value of zero and a maximum value of twenty. The number line will be used to indicate each student's position within this range.

We shall not drag a new number line on to the document. Instead, we shall use the now usual process of the Data Assistant to select the column and to request the numberline format.
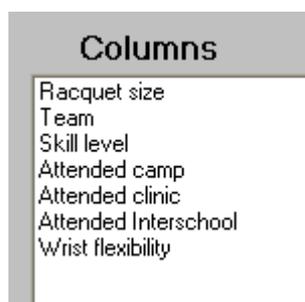
Figure 791: The new 'Wrist flexibility' column

To bring the number line on to the document, using the Data Assistant, select the column…
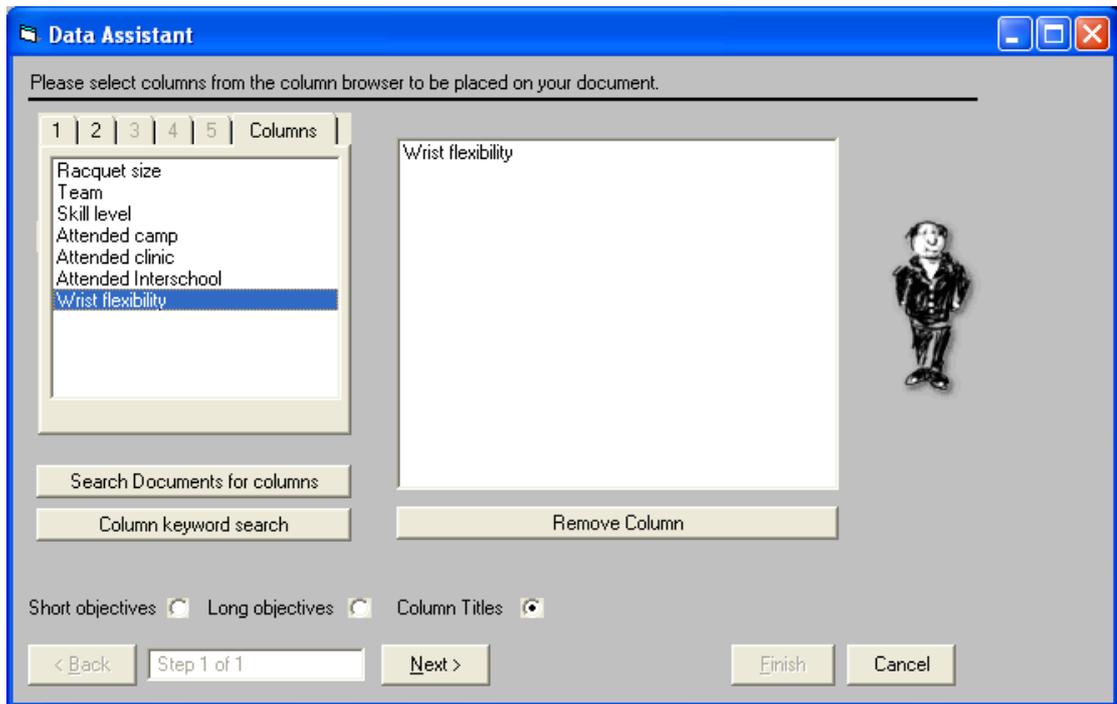
Figure 792: Selecting the column in the Data Assistant

… followed by the number line choice from the format list.
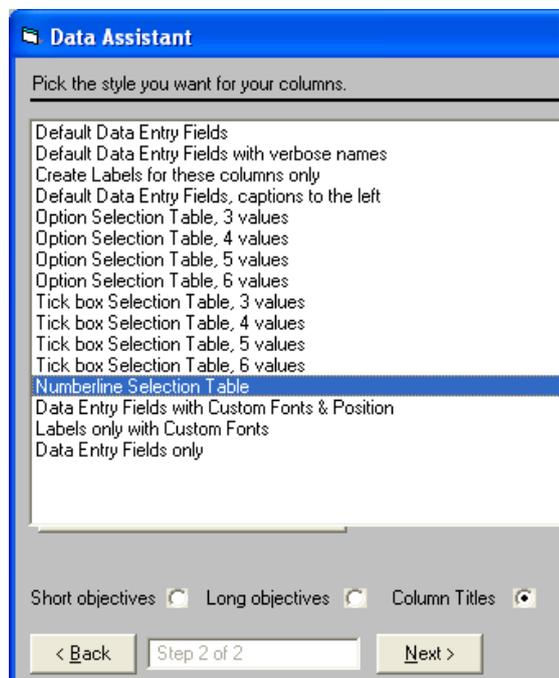
Figure 793: Selecting the Number line representation

The result will be a 'raw' number line, as shown below, the RTF caption of which has 'inherited' the font attributes of our last RTF box.
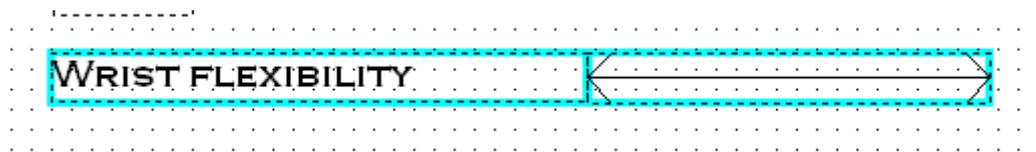
Figure 794: The number line arrive on the document

We next adjust the RTF caption to a more suitable appearance and extend the length of the number line, as shown below, where we have selected the format of the line itself from the list of five possibilities. The 'Shaded box' has been selected.
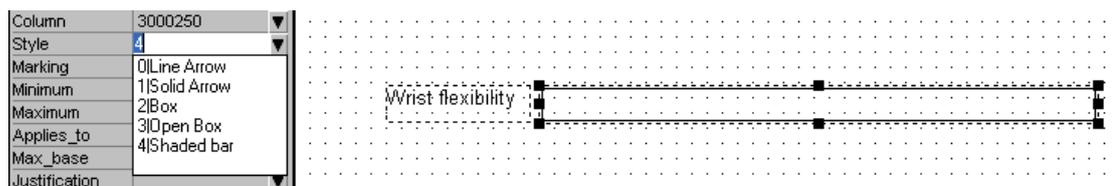
Figure 795: Selection of the line format

The next property is the selection of the number of markings within the number line and, in the illustration below, 'Fifths' has been selected.
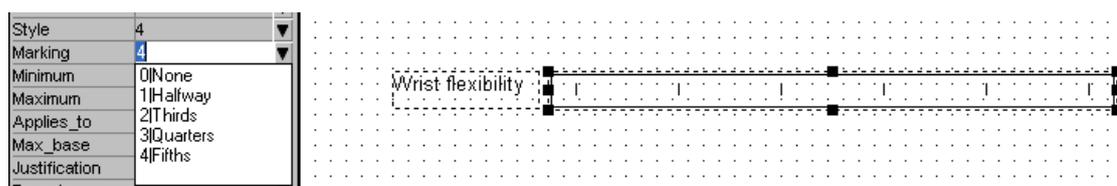
Figure 796: Selection of the markings

Two more properties have been adjusted, with the 'Minimum' having been set to zero and the 'Maximum' to 20. We are also about to select the markings that this numberline will display the results for the current student. The other possibilities will be demonstrated shortly.
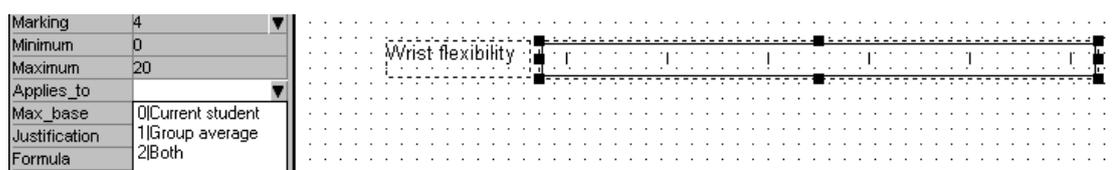
Figure 797: Selecting the 'Applies to property'

Next, two new RTF boxes have been added as labels, one at each end of the number line and the existing label has been moved to a new position, half way along the number line.
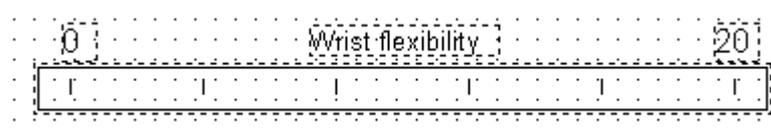
Figure 798: The addition of a different 'caption' (RTF)

Now we are ready to test its appearance, so save the document and display the result. This is shown below, and the number line has been 'clicked' at a point about one third of the way along to indicate this student's flexibility. This results in the 'Shaded box' as requested.
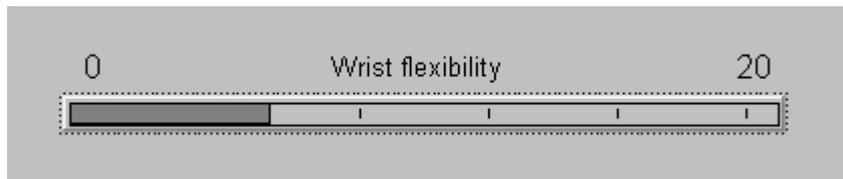
Figure 799: The finished product

A further refinement is the addition of a databox to display the student's actual flexibility score.
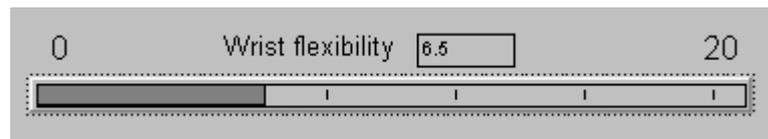
Figure 800: The addition of a databox

The following diagram illustrates some of the various possible appearances of a number line.
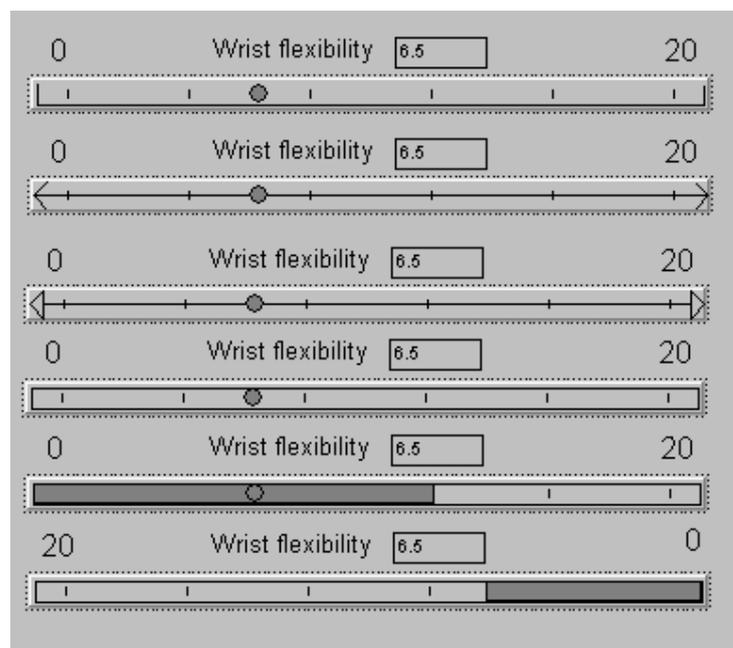
Figure 801: A variety of formats

They are, in order:

↔	An open box
↔	A line arrow
↔	A solid arrow
↔	A box

Then the 'Applies to' property has been changed to 'Both' to display the group average (the shaded bar) and the student's own score (the circle).
The final image shows the result of the 'Justification' being set to 'Right'
If you click on the 'Formula' property the following window will appear. This allows you to determine something other than the student's score to be displayed. The result is a count of the number of students who match the selected criteria.
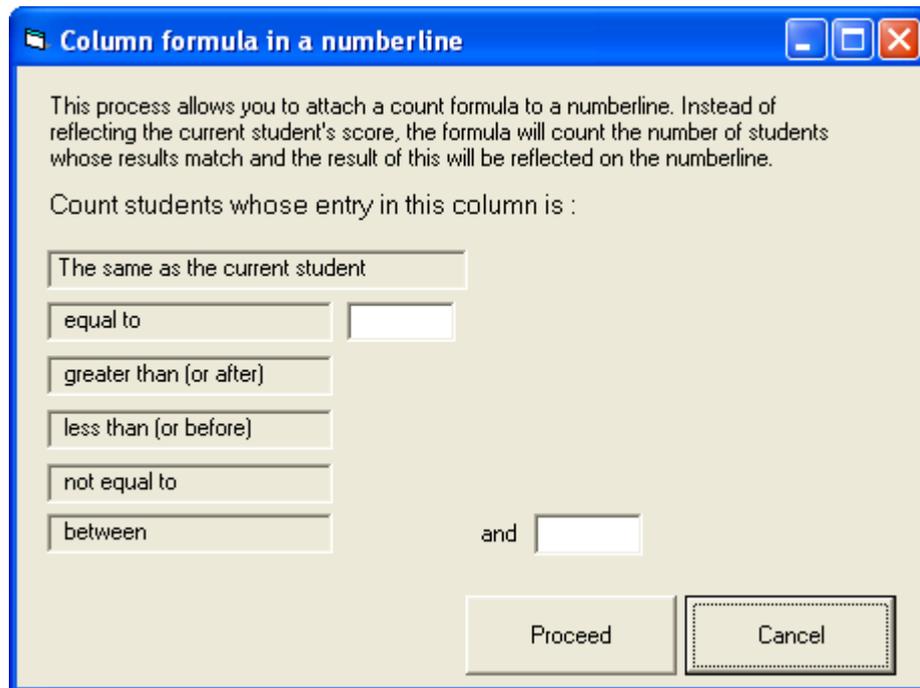
Figure 802: Applying a 'formula'

This 'Formula' Property allows you to generate a somewhat sophisticated report on the achievement of a particular group of students.

The final property only comes into play when you use a 'Shaded box' and the result is printed. The shaded bar can be started either at the first mark or at the right hand end. (Yes, one school REALLY needed these alternatives to generate the rather splendid report which they had designed to analyse their students' performance).
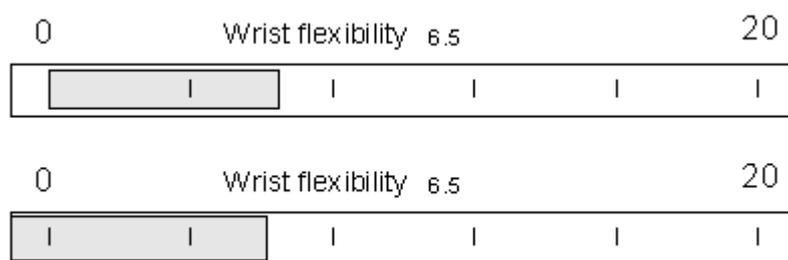
Figure 803: 'Printing to the edge' choice

A label

Labels can be used instead of RTF boxes. They are 'Lighter' in that they require less information than an RTF box. They have the added advantage that they can be rotated.

This time we shall return to the original process of adding an object by dragging it onto the document. A new label is shown below.
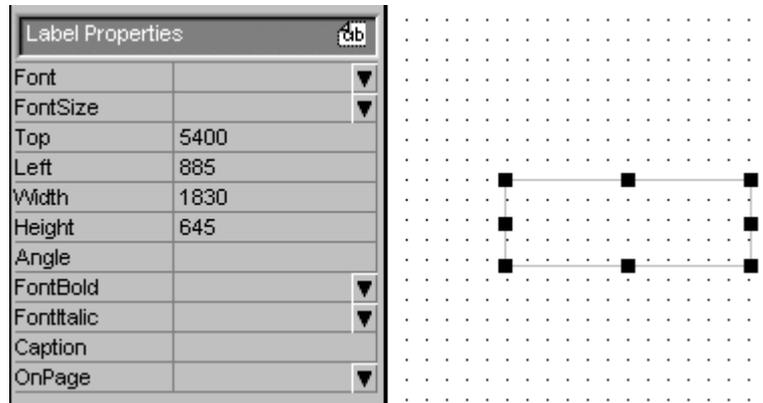
Figure 804: A new label

We shall adjust some of the properties of this label :
- We have changed the 'Font' property to Forte, size 20
- We have set the 'Angle' to 60 degrees.
- We have set the caption to 'This is rotated'
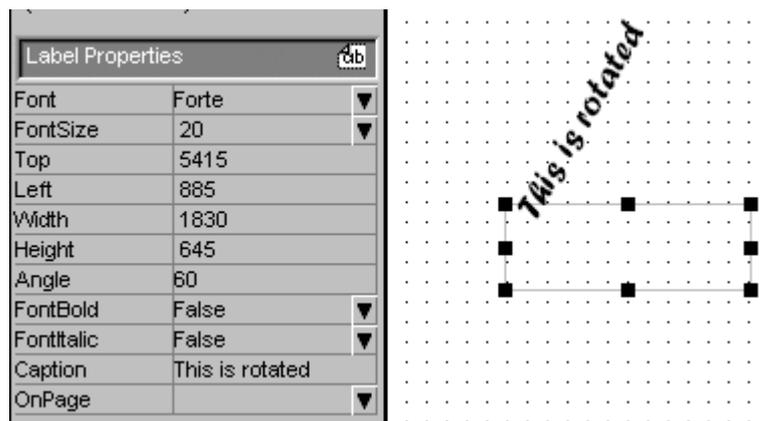
Figure 805: The completed design

The result of the process, on the final document, is as shown below.

Figure 806: A rotated label on a document

That brings us to the end of the 'simple' objects which can be used to make up a document. The final five are more complex. We shall avoid dealing with two of them in this chapter. One will be left to the next chapter, which deals with the design of graphs, and another will be left to be included in the MUSAC NZQA user guide.

A Curriculum Framework analysis / graph

This is a graphical process and will be dealt with in the following chapter.

A multi-option report – used to report on students' subjects

The multi-option report was born out of the old traditional school report where a grid listed the student's subjects with columns being devoted e.g. to their subject, their mark, their place in class, their homework grade, and a comment by their class teacher. A small sample of such a report is shown below.

11MA 2004 Mr R Butler	63%	A	Andrew is rather startling at Maths but I would be more startled if his behaviour was even moderately acceptable.
11MD 2004 Mrs M Morton	57%	B	Andrew has adapted well to this subject, particularly since he only started it two days before the exam. He has a long way to go and the sooner he leaves the better.
11MS 2004 Mr M Mataira	72%	A	Tena koe, Andrew. Ka pai tau mahi, ka pai tau korero e tino pai tau whakairo

Figure 807: A portion of a multi-option report

Before we start, let's remove the contents of our existing report, leaving the headings, which we shall turn into a 'base' or 'template' document.

Figure 808: Our existing report

We shall remove the 'contents' of the report, shown below, so we begin by dragging a rectangle across them all.

Figure 809: To be deleted – so selected by a rectangle

This rectangle is drawn without selecting any object to drag. The result is that all of the objects enclosed in the rectangle are selected, as shown below.
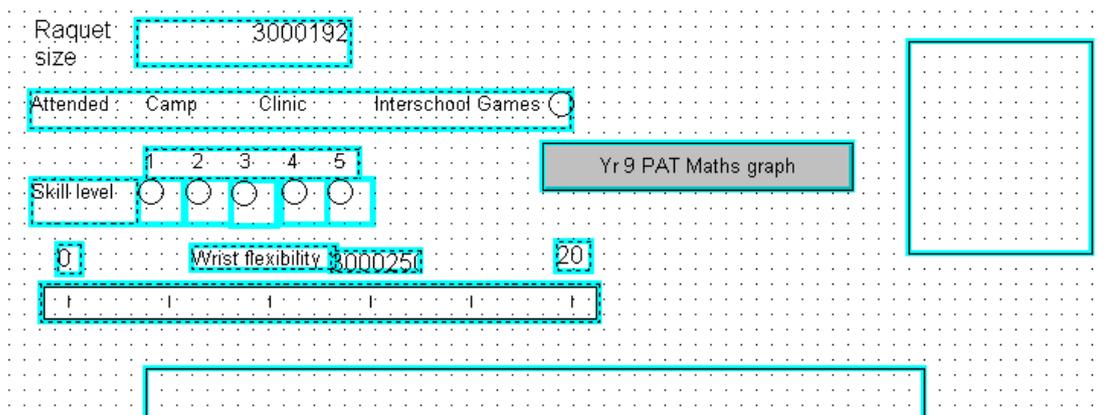
Figure 810: The items selected

Once selected, all you have to do is press the 'Delete' key, or Ctrl-X, or right-click and select 'Delete' from the popup menu.
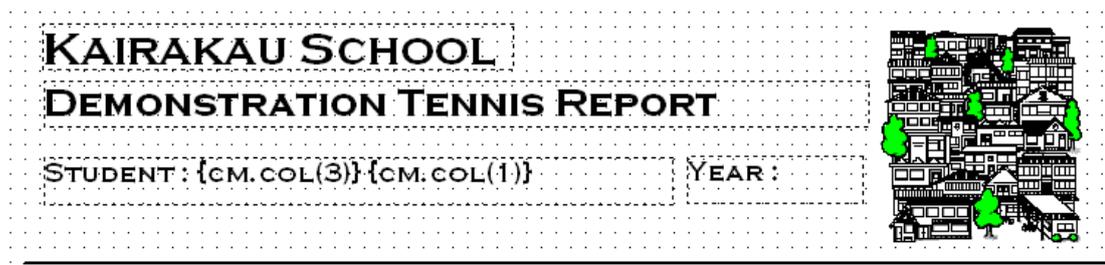
Figure 811: The remaining report top

This leaves us with the top part of the report, which we shall now save under the title 'Manual base.dmt' – as an example.
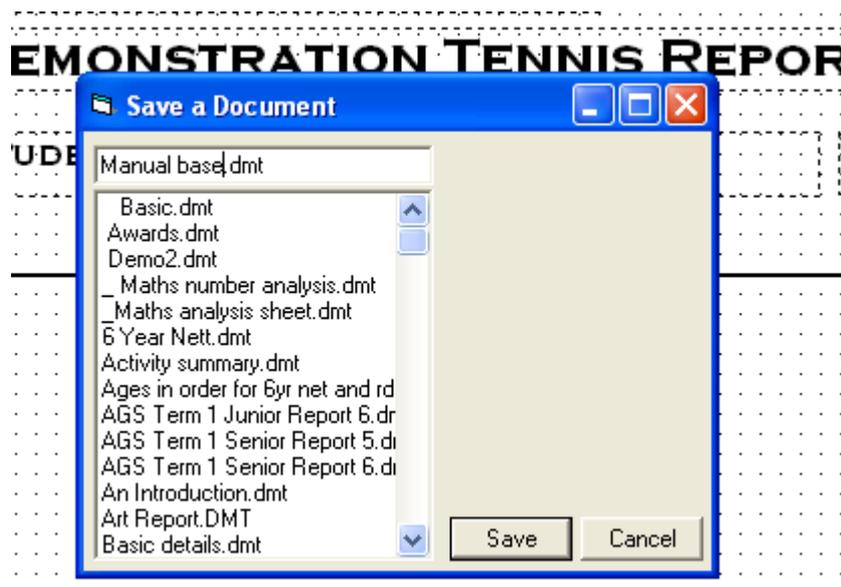
Figure 812: Saving as a base

Now, with the base loaded, we can begin to design our multi-option report. (We shall have to remember to save the result under a more suitable name, leaving the base report still available

to serve as the starting point for later documents we shall design. Select the multi-option report object and drag it out over the report to fill the space which we wish the report contents to occupy. Once done, select the object and its properties will be displayed, as shown below.
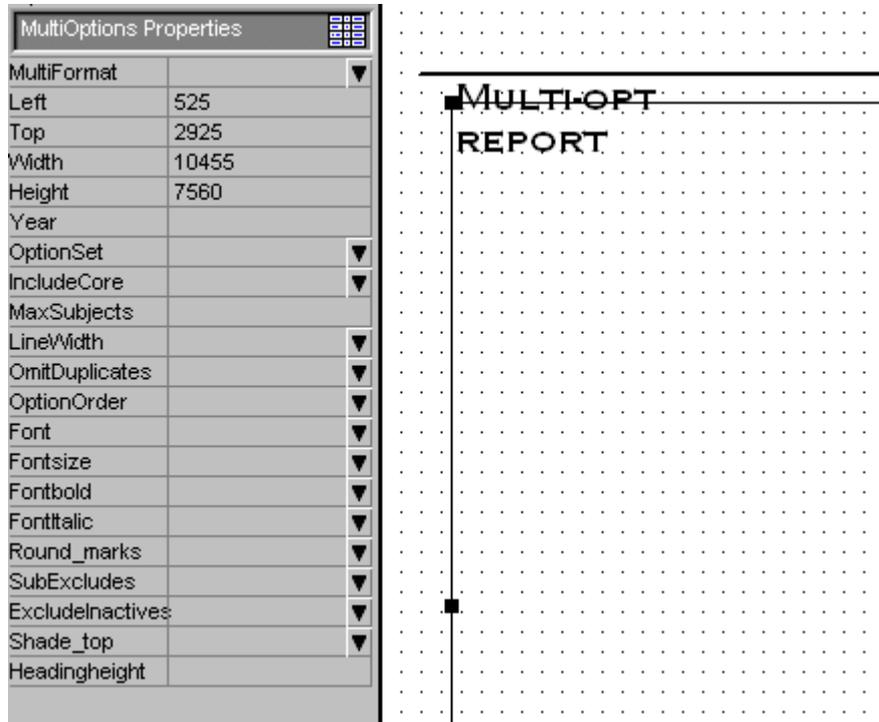
Figure 813: A blank multi-option report

If you immediately attempt to modify the first property, 'Multiformat', then you will receive the following message.

Figure 814: Set the date first

Lets do that, as shown below, and, at the same time, select the option set which we wish to form the basis of the report.
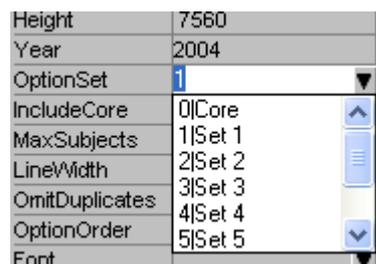
Figure 815: Selecting the option set

We can also specify:
- Whether or not the student's core subjects are to be included
- the maximum number of subjects to appear on the report
- the width of the lines on the report
- Whether or not we wish to exclude duplicate subjects
- … and the order in which the included subjects are to appear.
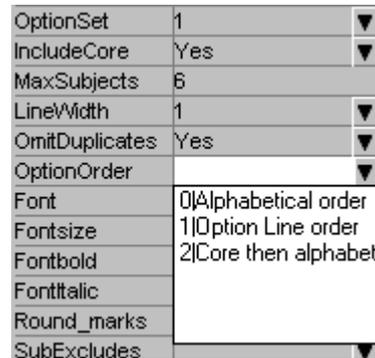
Figure 816: Selecting subject order

Further properties to be specified are :
- The font details (name, size, bold and italic)
- Whether or not we wish to have displayed marks rounded to the nearest whole number
- Which subjects, if any, we wish to exclude from the report
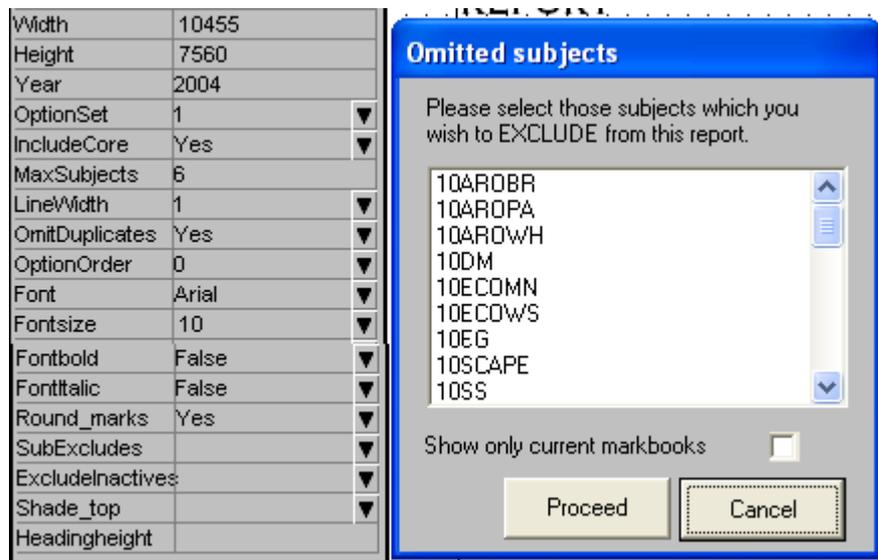
Figure 817: Nominating omitted subjects

Finally, the remaining properties are :
- Whether or not we wish to exclude inactive subjects
- Whether or not we wish to have the titles bar of the report shaded
- The height of the heading bar (The original height is about 700 twips)

Figure 818: The completed properties

Once these are down (well, after you've specified the year, actually) you can return to click on the top property – the 'Multi-option format'

Figure 819: The format screen

This reveals the screen shown above, which has two tabs. On the first tab we can specify the headings and appearance of the title bar. In the example below I allowed for four columns, and I've entered the required headings, and I've also dragged the width of the columns to adjust them to the required widths.

Figure 820: The headings are in place

Click now in the second row of the display and the connection format window will appear as shown below. Select the required format for each column in turn.

Figure 821: The display of the connections

Clicking in the final row causes the word 'Required' to appear in the clicked cell. This indicates to the printing routine that any subject which does not have an entry in this column should be omitted from the report.

Figure 822: Required entries

Next we come to the column connection screen, which is accessed by clicking on the second tab. On the way, the following message is displayed.
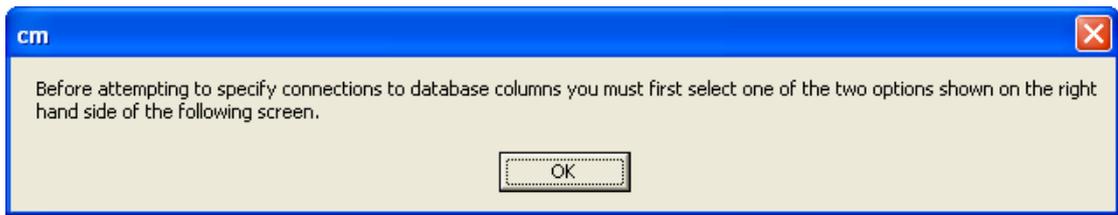
Figure 823: Select one or two methods

Arriving on the 'Columns Connections' screen, the first thing you must do is to select one of the two options in the right hand display.
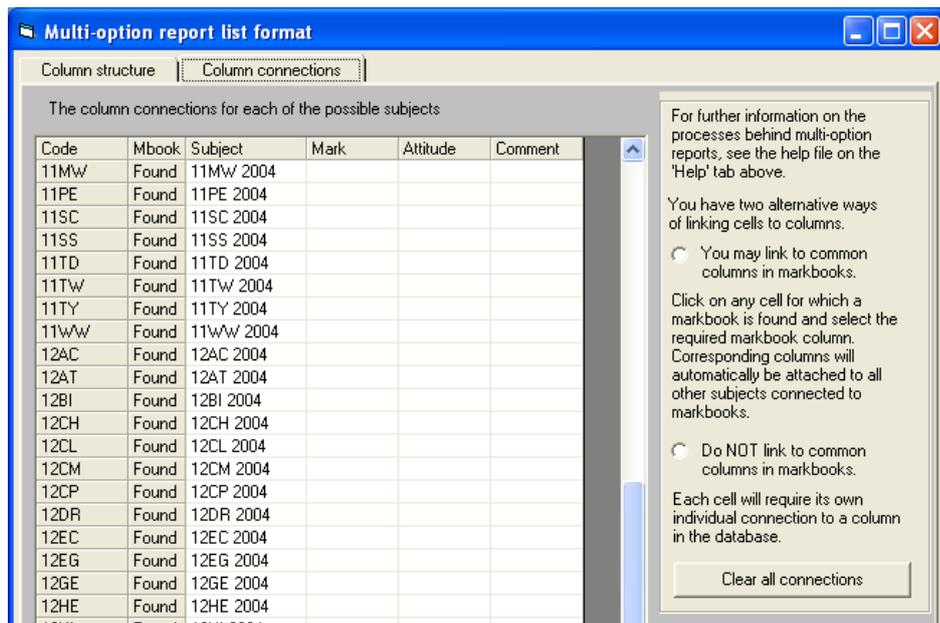
Figure 824: The connection method

This display is reproduced below. It is now that the usefulness of having standard columns in all markbooks becomes apparent.
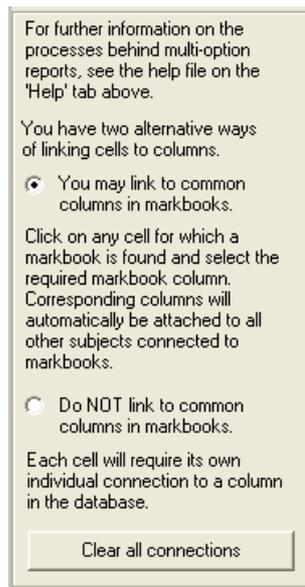
Figure 825: The connection method in detail

By having the same columns set up for reports across all markbooks a single click is all that is required to make a connection to a column. Click in a column against a particular markbook then select the required column from that markbook. With common columns all connections are then established for the column selected.
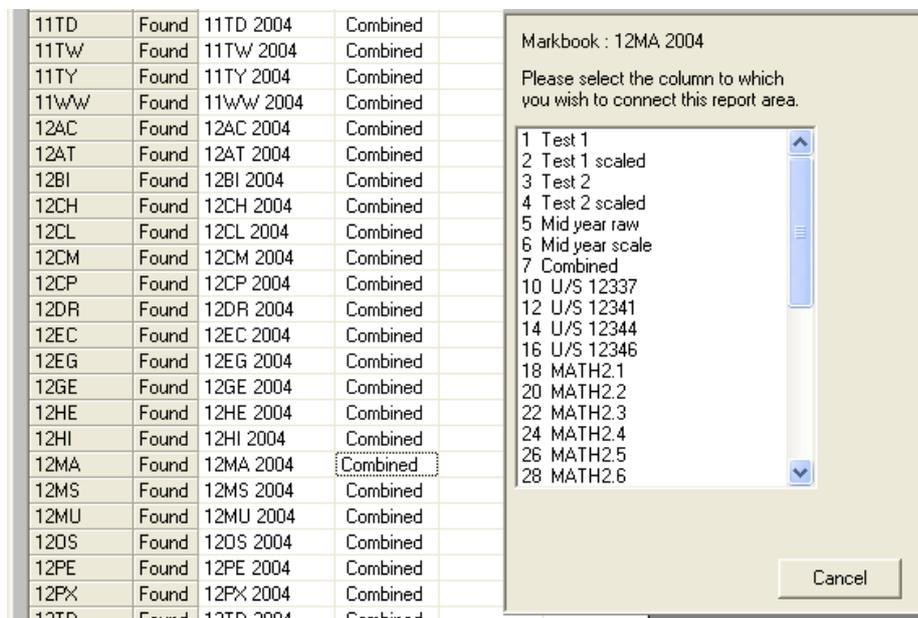
Figure 826: Making a global connection

Do this for each column and you will have established all of the required connections.
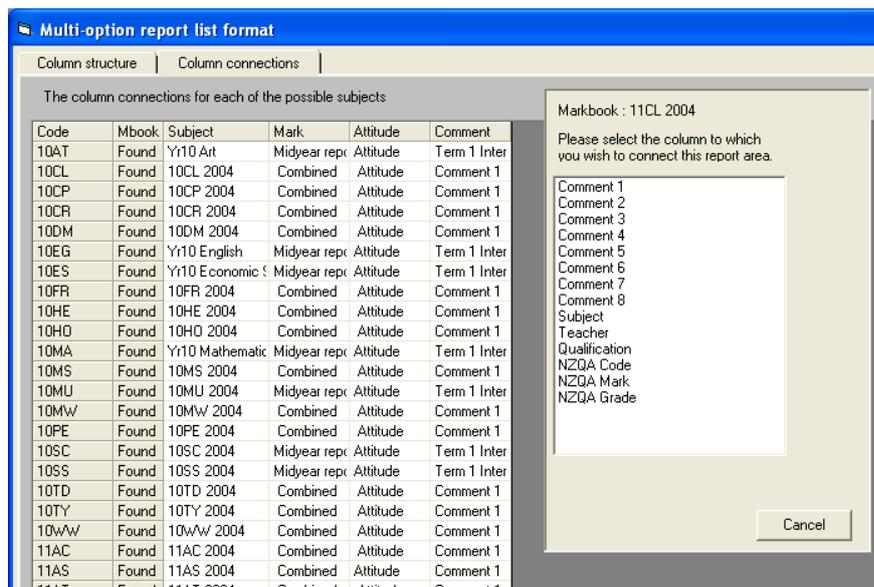
Figure 827: The completed connections

The alternative is to make each connection to a different markbook column separately. It can be done but would certainly be time consuming.

If you wish to remove all column connections then click on the button at the right hand bottom corner of this screen to achieve that result.

Once you have finished the connections, return to the design screen and save the document (remembering to give it a name other than the 'Base' name with which we began this section.

Provided that teachers have entered the results in their markbooks, the resulting report will appear as shown below. You will notice that the second heading has been altered from 'Tennis report' to 'Mid-Year report'.

Figure 828: Without further ado….
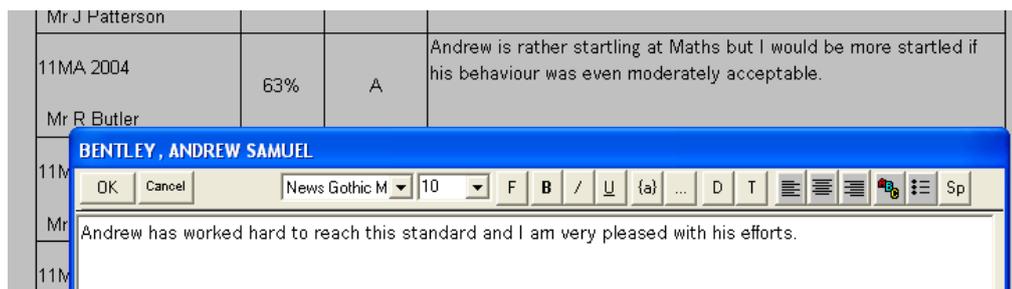
Figure 829: Direct editing of the contents

A further feature of the multi-option report is that it can be directly edited from the document screen, as shown above. Simply click on an incorrect entry and an editing window will appear allowing you to make the necessary changes. The changed entry will be stored directly back into the markbook.

The finished product will appear as shown below. We would still have to allow for a Dean's or principal's comment at the bottom, and perhaps report on attendance, but the purpose of this section was to discuss the multi-option report object.

musac

KAIRAKAU SCHOOL
MID-YEAR REPORT

STUDENT : ANDREW BENTLEY   YEAR : 11

Subject	Mark	Attitude	Comment
11AS 2004 Mrs M Kean	71%	A	Andrew is never happier than when his hands are covered in soil. He is a pleasure to teach
11LE 2004 Mr J Patterson	47%	C	Andrew has worked hard to reach this standard and I am very pleased with his efforts.
11MA 2004 Mr R Butler	63%	A	Andrew is rather startling at Maths but I would be more startled if his behaviour was even moderately acceptable.
11MD 2004 Mrs M Morton	57%	B	Andrew has adapted well to this subject, particularly since he only started it two days before the exam. He has a long way to go and the sooner he leaves the better.
11MS 2004 Mr M Mataira	72%	A	Tena koe, Andrew. Ka pai tau mahi, ka pai tau korero e tino pai tau whakairo
11PE 2004 Mr P Peters	21%	D	Andrew does an excellent imitation of a tree stump. He is no gazelle, that's for sure.

Figure 830: The finished product

One detail remains concerning multi-option reports. When you select the document containing a multi-option report, the following screen will appear, asking you to confirm which of the lines in your current set of options are active. The inactive ones can be excluded from the report.
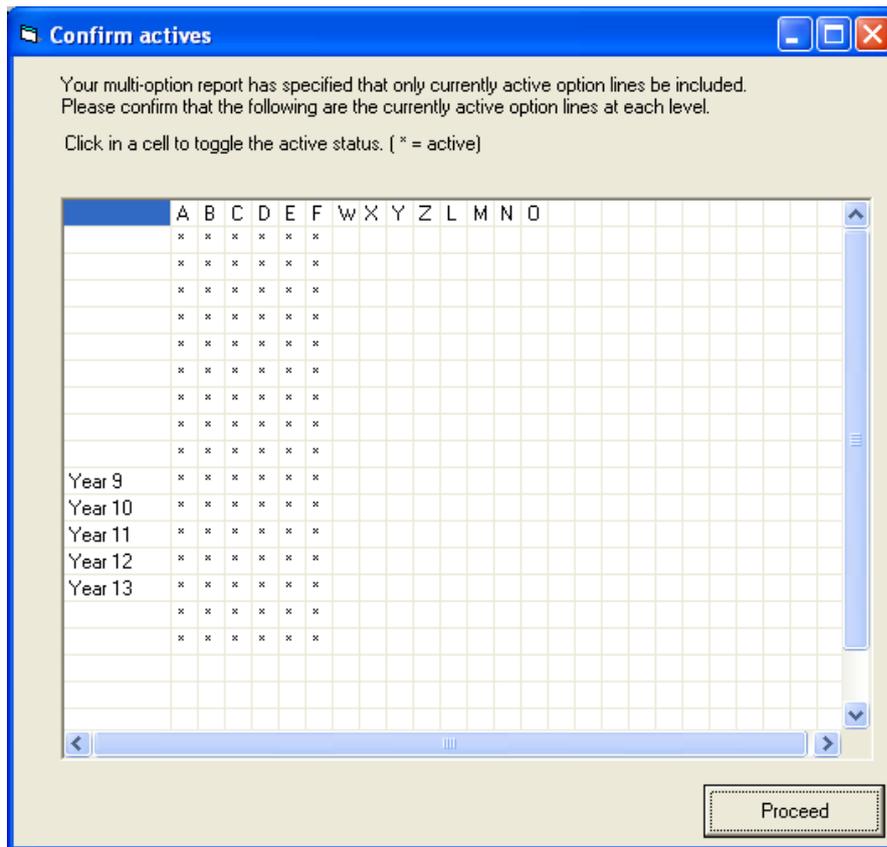
Figure 831: Confirming the active lines

A list

The 'List' object is designed specifically to report on a particular group of displays used in ClassRoom Manager and is used solely to generate the NZQA standards listing which is central to the NZQA documents designed by MUSAC for schools use in managing students standards.
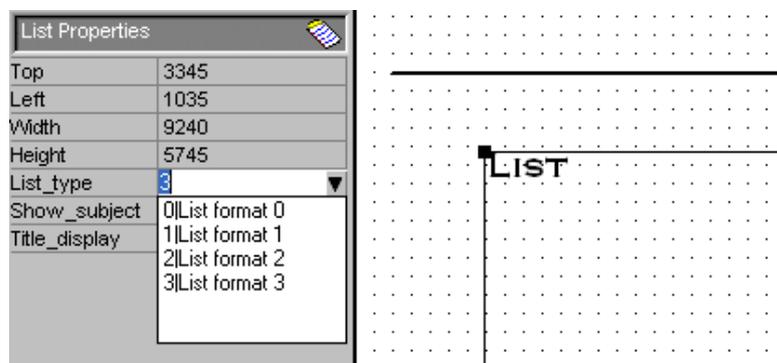
Figure 832: A 'List' object and its properties

The various formats differ only in the columns which are displayed in the list on the document.

Figure 833: The 'six column' version

The 'six column' version is shown above, and a portion of the '3 column version' below.

Figure 834: The '3 column' version

The 'Show subject' property is no longer used, and the 'Title display' toggles between the two alternative versions of the standard title, and applies only to Achievement standards. The illustration below shows the final two properties.
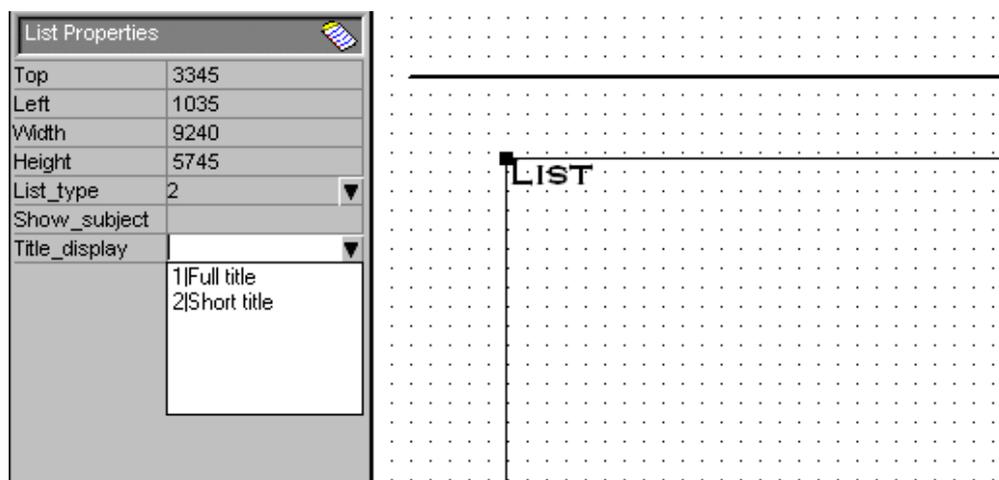
Figure 835: The other two properties

Figure 836: The '4 column version'

The illustration above shows the '4 column' version and that below displays the two alternatives for the 'Title display' property – the long titles and the short title.

Figure 837: The '4 column version' – both title options

A 'Record of Achievement' list

This object allows you to compile a list of all of the subjects a student has taken over a number of years and includes the ability to extract the contents of nominated markbook columns. You can also have this list saved as a single text (or 'comment') in a column of its own.
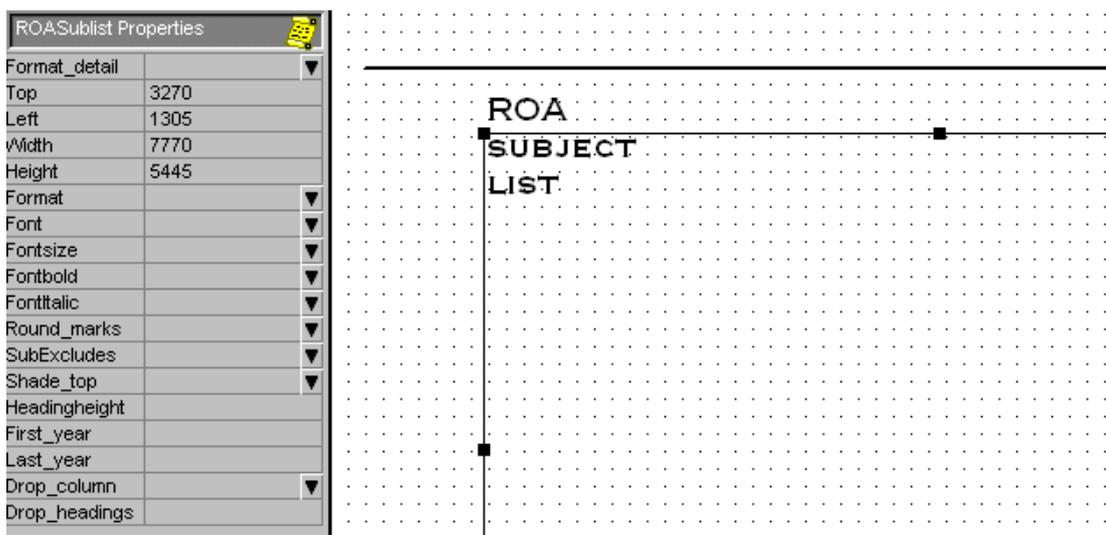
Figure 838: The basic ROA list object and its properties

Shown above is the 'raw' list object placed on a document. There are three formats available and they are selected from the 'Format' property, as shown below.
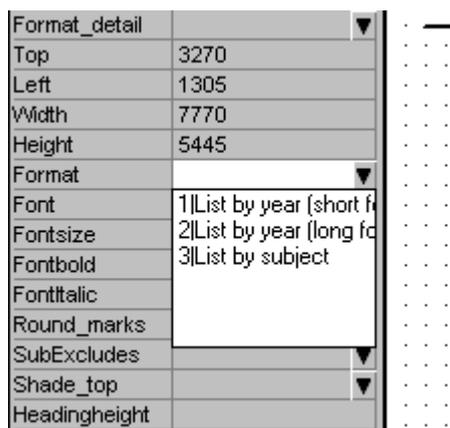
Figure 839: The three formats

Further properties are :
- The various font settings
- Whether or not you wish to have marks extracted from markbooks rounded
- Which subjects you wish to exclude from the list

The last of these is shown below.
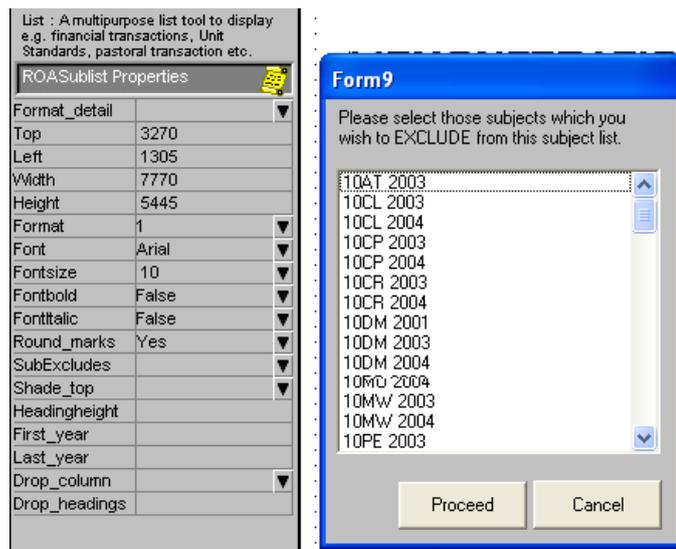
Figure 840: Excluded subjects

You can also :

- Elect to have the top heading shaded or not
- Set the heading height (remember that 600 is the basic row height)
- Set the first year for which you wish to have subjects extracted from markbooks
- Set the last year for the same
- Nominate a 'Drop' column
- Set a Drop heading

If you select a 'Drop column' (and it must be a column of type RTF – i.e. a comment column) then, when you come to the point of printing, you will be given the option of NOT having the documents printed, but, instead, have them generated and the contents of the list box saved into a column – which you can then treat as a normal column and can edit as necessary. If you do this then you might also wish to set the last property – the 'Drop heading'. This is a heading which will be saved at the top of the captured list as it is saved into a column. When you click on the 'Drop column' property, the following dialogue appears ….
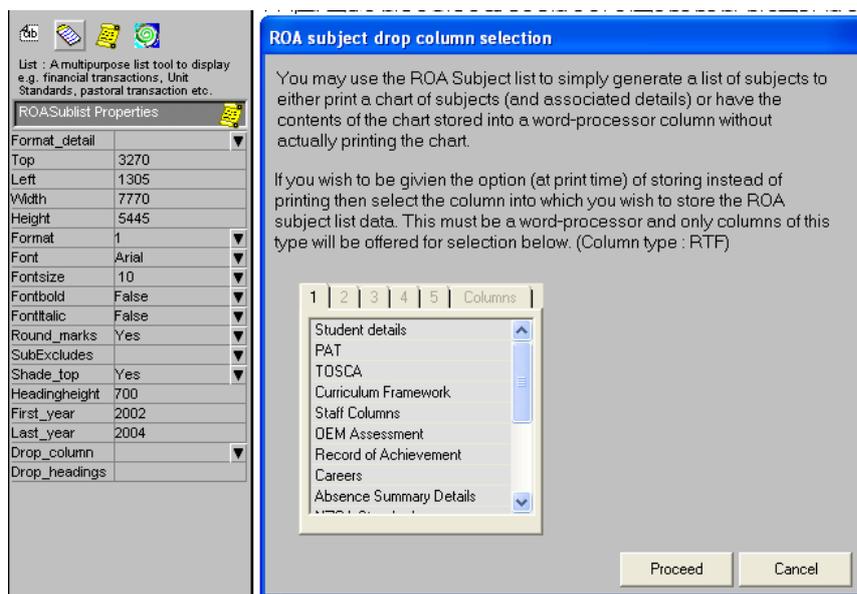
Figure 841: The 'Drop to a column' option

… allowing you to select the comment column, as shown below.
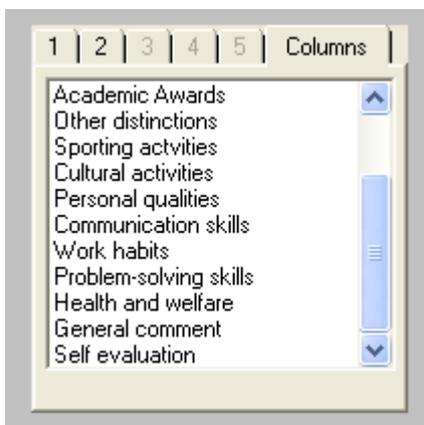
Figure 842: Selecting the destination column

Now we can return to the very first property. If you have selected the first format then the following message tells you that there is nothing further required as far as the format design is concerned.
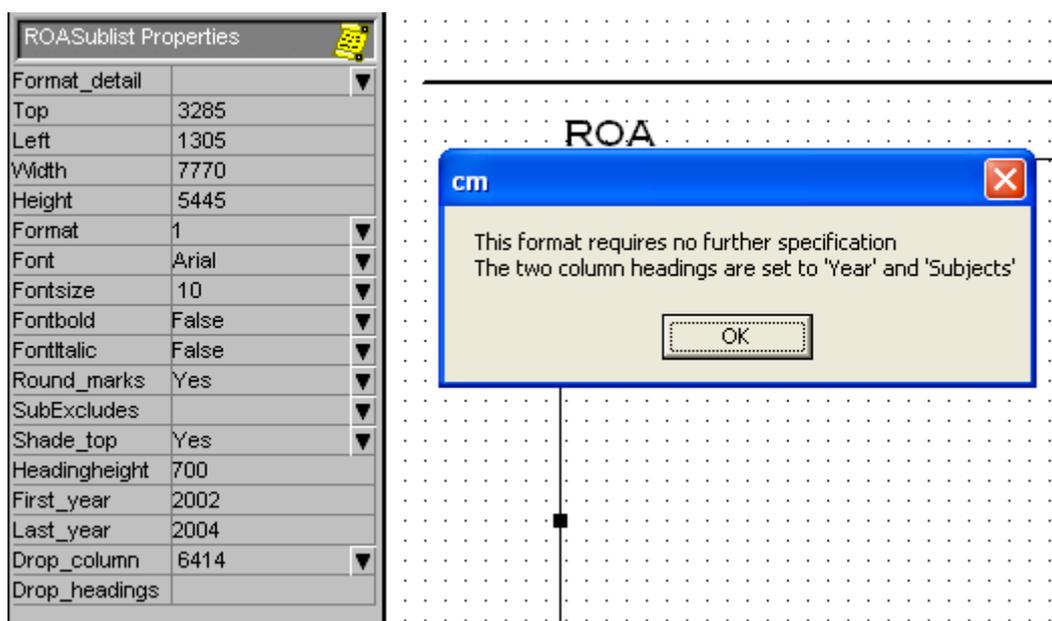
Figure 843: Format 1 is automatic

The following is a result of a format 1 list. The three selected years were checked for markbook connections for the student concerned and she was found to have been a member of the following markbooks. Usually the list would be comprised of the subject names, rather than the markbook names. In this case the subject names had not been set for the markbooks.

Figure 844: The results of format 1

If you select the second format then the first property reveals the following screen, wherein you can set the column headings for your list. You will notice that the first two headings are fixed. You will remember that you can extract the contents of up to four columns from each markbook. In the example below it is understood that two markbook columns are to have their contents reported in the list. For the example, these are the two which we earlier extracted for the multi-option report.

Figure 845: Setting the titles for your ROA table

The following illustration shows the 'ROA links' being set in a markbook. To do this, go to the markbook specifications screen – accessed via the popup menu, and select the 'Marks/ROA Analysis links' tab. Click in each of the ROA link Column connections then either type in the required column number or select it from the list displayed on the left of the screen. If you wish

to have the teacher's name reported instead of a mark in a column then tick the 'teacher' box instead.

These connections can be established more easily using a global markbook process for a selection of markbooks in CMAdmin.
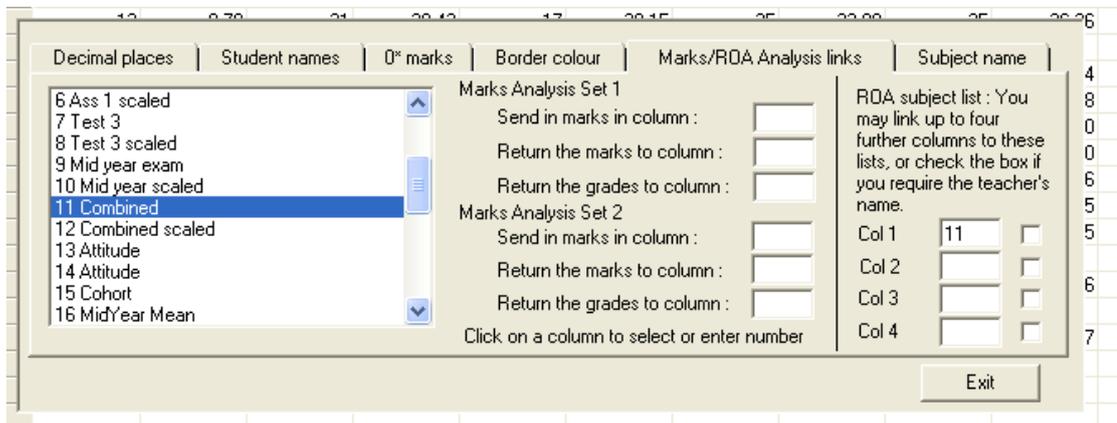
Figure 846: Establishing the links in a markbook

The illustration below is an example of the second format....

Year	Subject	Mark	Attitude
2002	11 Computer Studies	73	A
	11 Economics	64	A
	11 Science	68	B
	11 English	81	A
	11 Geography	66	B
2003	12 Computer Studies	63	C
	12 Economics	65	B
	12 Physics	73	A
	12 English	82	B
	12 Geography	77	A
	12 Mathematics	68	B
2004	13 Economics	84	A
	13 English	68	C
	13 Geography	58	C
	13 Mathematics	82	A
	13 Physics	77	C

Figure 847: Format 2 – sorted by year

... and that which follows is of the third format.

Figure 848: Format 3 – sorted on subjects

When you come to print a document which contains one of these lists which has a 'Drop column' specified (Printing is dealt with in a separate chapter –later in this user guide) then the following screen will appear giving you two choices. Either you can proceed to actually print the document by clicking 'Yes' or, instead, you can click 'No' and instead of being printed the documents will simply be generated in the computer's memory.
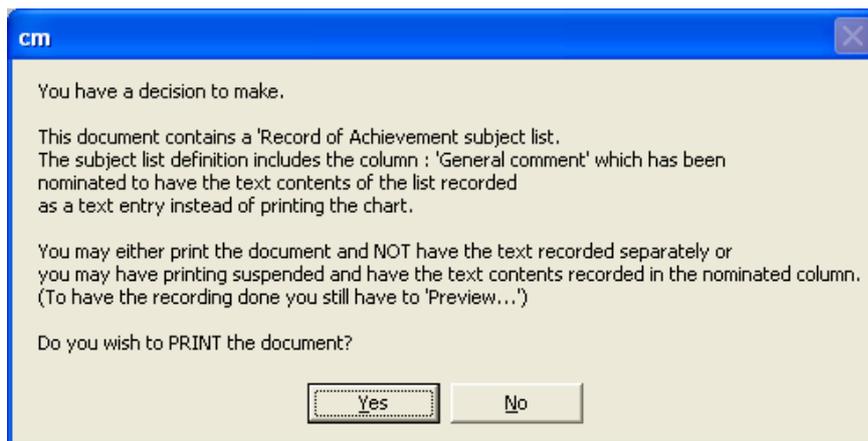
Figure 849: the two 'printing' options

As this is done the resulting information will be collected and stored in the nominated column as a 'comment'. The column can then be connected to a data box and you will be able to view AND edit the data captured. An example of the capture is shown below.

Figure 850: The captured list saved as a single comment

An NCEA report

We shall leave discussion of this topic to be included in the MUSAC NZQA user guide. An example of such a report is shown below. There are, in fact, seven different formats, including mulitoption reports, IRN notices, individual summaries, Literacy/Numeracy reports etc.

Internally assessed Achievement Standards				
Code	Title	Level	Credits	Grade
MATH1.3	Solve problems involving measurement of everyday objects	1	4	A
MATH1.4	Use geometric techniques to produce a pattern or object	1	2	E
MATH1.5	Use straightforward statistical methods to explore data	1	3	NYA
Externally assessed Achievement Standards				
Code	Title	Level	Credits	Grade
MATH1.1	Use straightforward algebraic methods and solve equations	1	3	A
MATH1.2	Sketch and interpret linear or quadratic graphs	1	3	M
MATH1.7	Solve straightforward number problems in context	1	3	NYA
MATH1.8	Solve right-angled triangle problems	1	2	NYA
MATH1.9	Use geometric reasoning to solve problems	1	2	NYA
MATH1.6	Calculate relative frequencies and theoretical probabilities.	1	2	NYA
NYA = Not yet assessed N = Not achieved A = Achieved M = Achieved with merit E = Achieved with excellence				
Andrew is rather startling at Maths but I would be more startled if his behaviour was even moderately acceptable.				

Figure 851: An example of an NCEA report – format 3

This brings us to the end of the various objects which can be placed on a document. All that remains is to cover a few bits and pieces which we managed to avoid along the way, before embarking on the top row buttons (almost all of which we HAVE covered along the way) and the popup menu – which we've also seen earlier in the chapter.

27.4 The Data Assistant, the top row buttons and menus

Earlier in the chapter we used the Data Assistant to create objects which were already connected to columns. However, along the way, we missed a few details relating to this process.
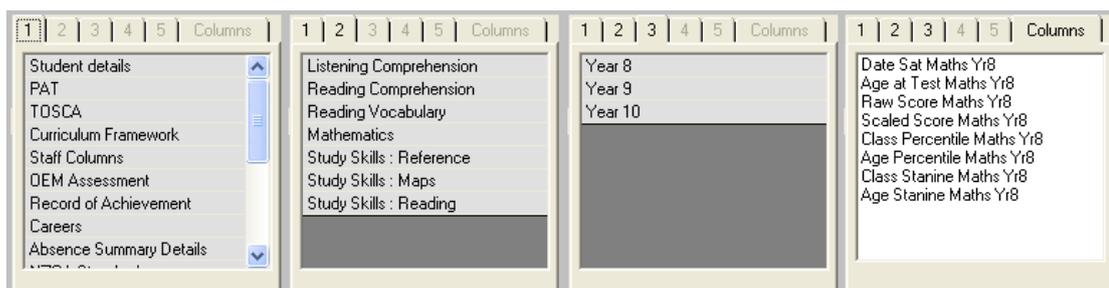
Figure 852: The use of the column selector

By now you are very familiar with the use of the column selector in the Data Assistant as a means of selecting the columns which you wish to have connected to objects in the document. There are two other ways of selecting columns available via the data Assistant, which is shown below.
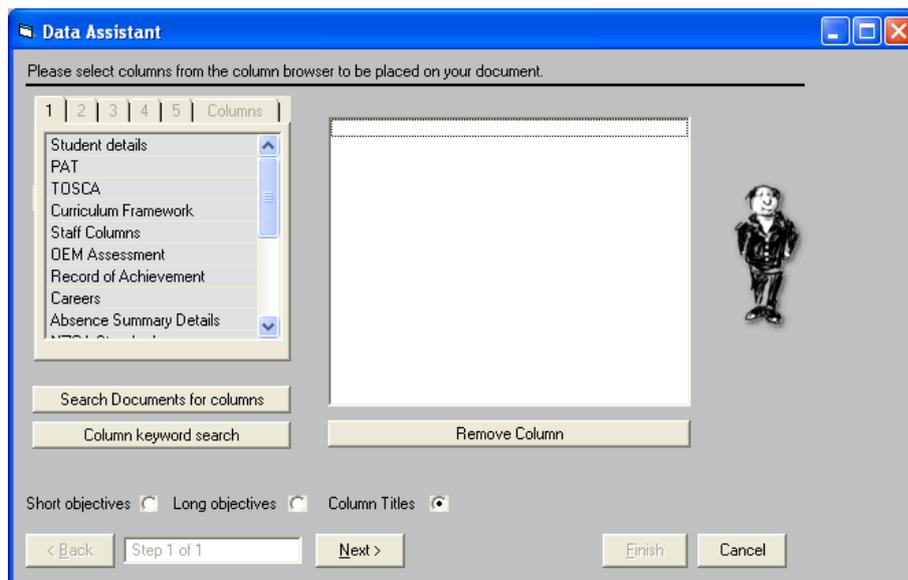
Figure 853: The Data Assistant

27.4.1 Search Documents for columns

This option allows you to browse through the available documents, identifying which columns are connected to each, and to make your selection from the previously attached columns.

Figure 854: The 'Search documents for columns' screen

The screen above displays the documents found in the \cm directory. As you click on the small '+' button to the left of each document name, the columns referenced in each document are displayed, as shown below.
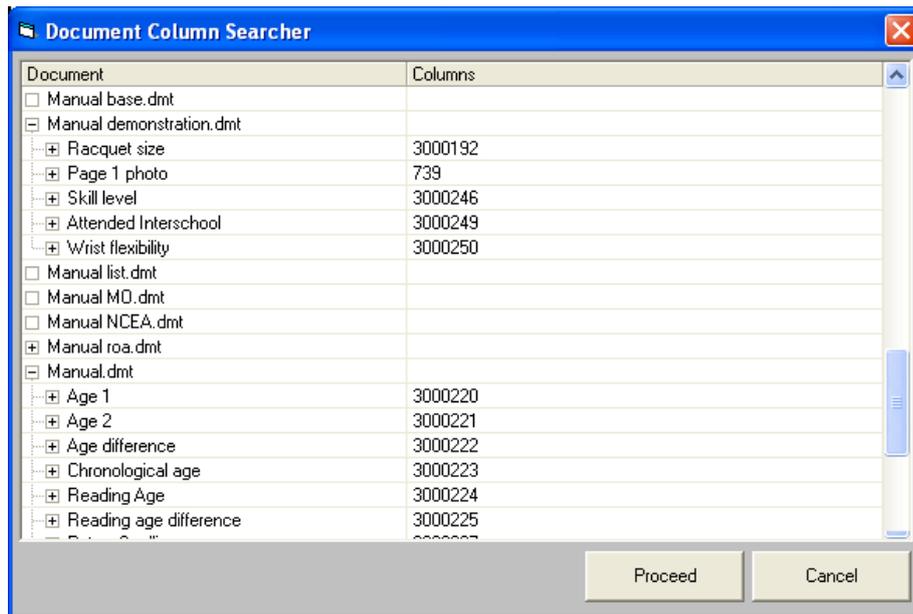
Figure 855: Some columns in two documents

These columns may then be selected by clicking on them …
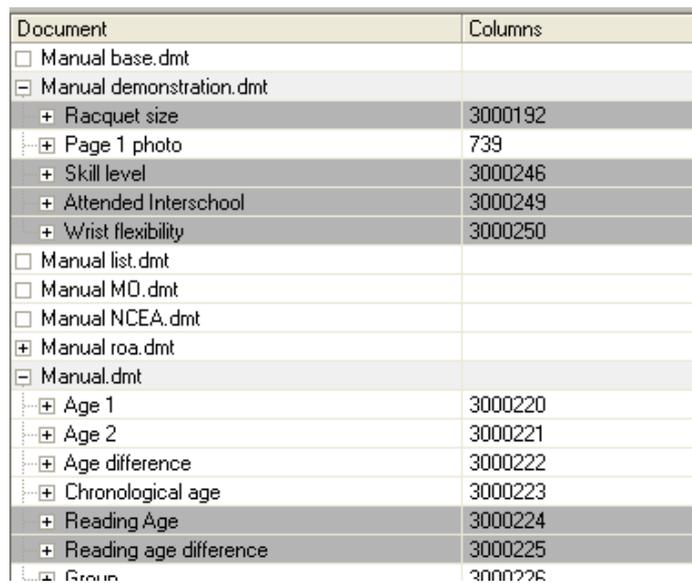
Figure 856: Some selected columns

… and the selected columns will then appear in the main Data Wizard column screen, as shown below.
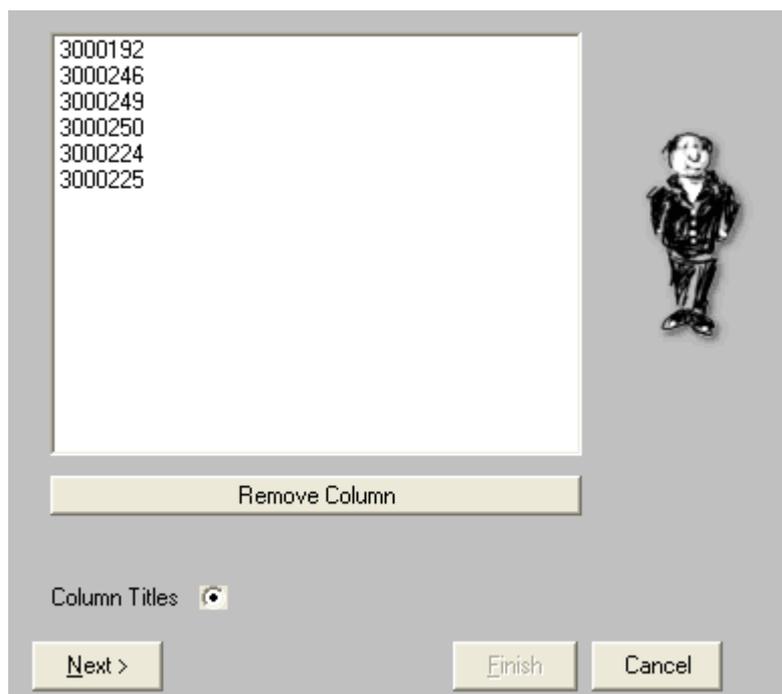
Figure 857: The selected column (numbers)

You can then progress through to the document in the usual way and have the selected column connected to databoxes, or which ever option you have chosen, as shown below.
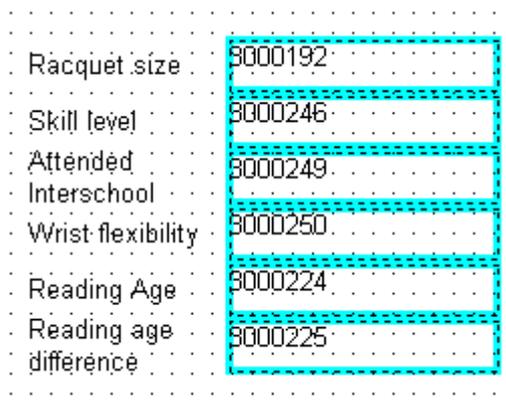
Figure 858: The result on the document

27.4.2 Column keyword search

One of the properties of each column is the list of keywords which can, if you so wish, be attached to each. This is done through CMAdmin. All columns have a title. Some also have long titles and short titles. These apply in particular to the Curriculum Framework columns.

Clicking on the 'Column keyword search' button on the Data Assistant screen leads to the following window.
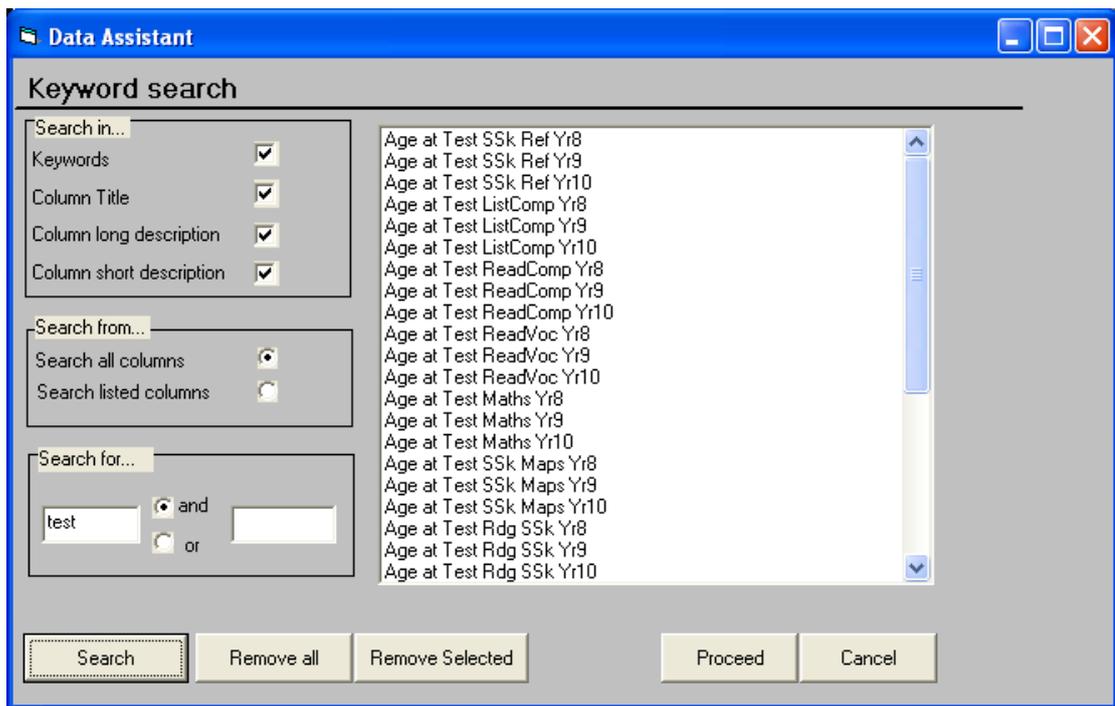
Figure 859: The word search option

On the left hand side of this window you have several options.
You can elect to search keywords, titles, long descriptions and short descriptions or any combination of these.

You can search through all columns, or just through the columns already displayed as a result of a previous search. This second possibility is known as 'refining' your search.

You can type in one or two words or phrases for which you wish to search, and set the logic between them to either 'and' or 'or'.

The illustration above shows the result of a search for the word 'test'. In the illustration below, this search has been refined by adding the second word 'ref' and applying the search to the columns already displayed above.
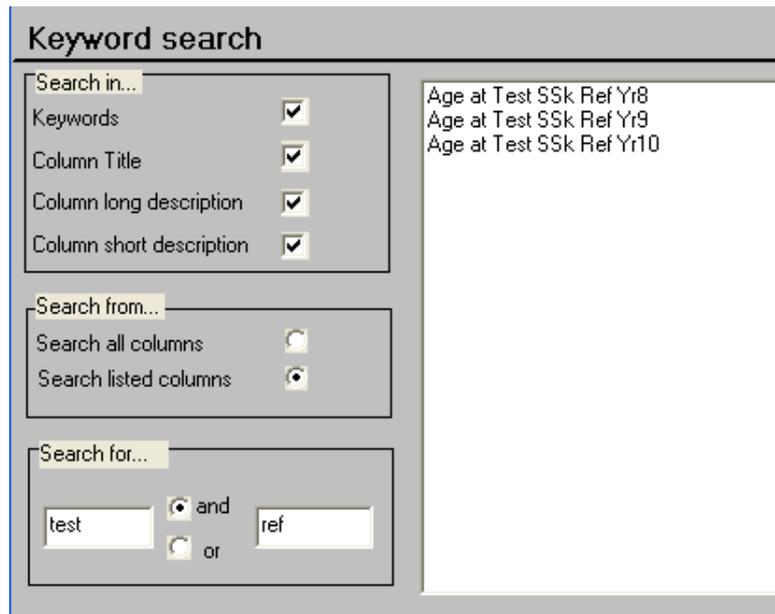
Figure 860: A 'refined' search

Finally, you can select the columns you wish to add to your document, as shown below.
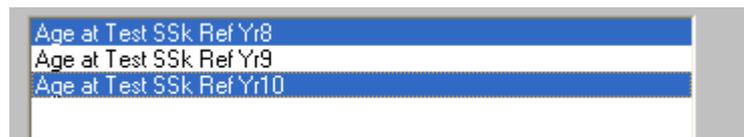
Figure 861: Two columns selected

… and have them added via the final step of the Data Assistant.
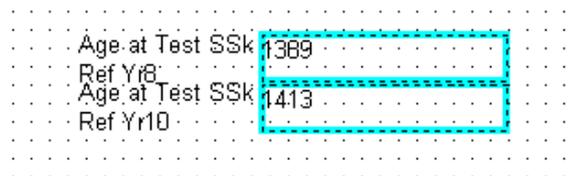
Figure 862: The result on the document

There is a further possibility available via the Data Assistant. At the bottom of the first step screen you can return to your document either the title, the long description, or the short description. (Remember that the latter two are really only available for Curriculum Framework columns – unless you have added descriptions of your own to columns. The example below illustrates a request for the short descriptions.
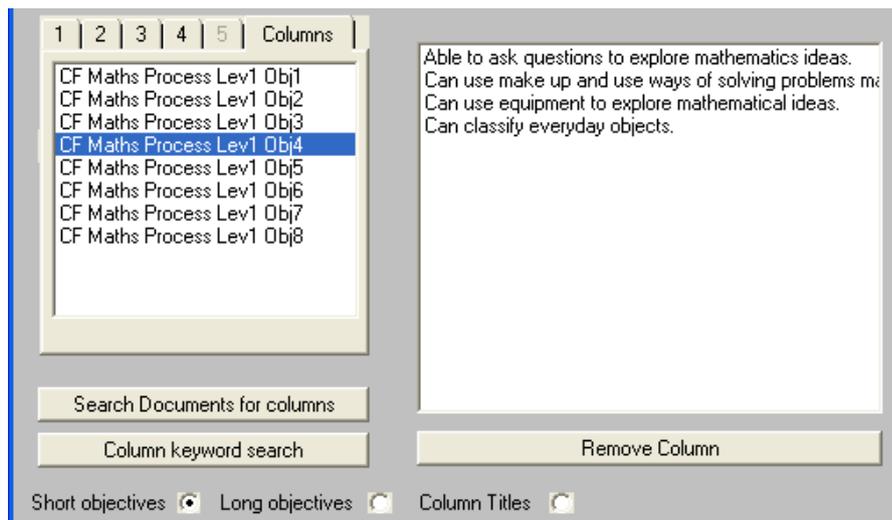
Figure 863: Selecting using the 'Short objectives' format

The illustration below displays examples of all three of these possibilities.
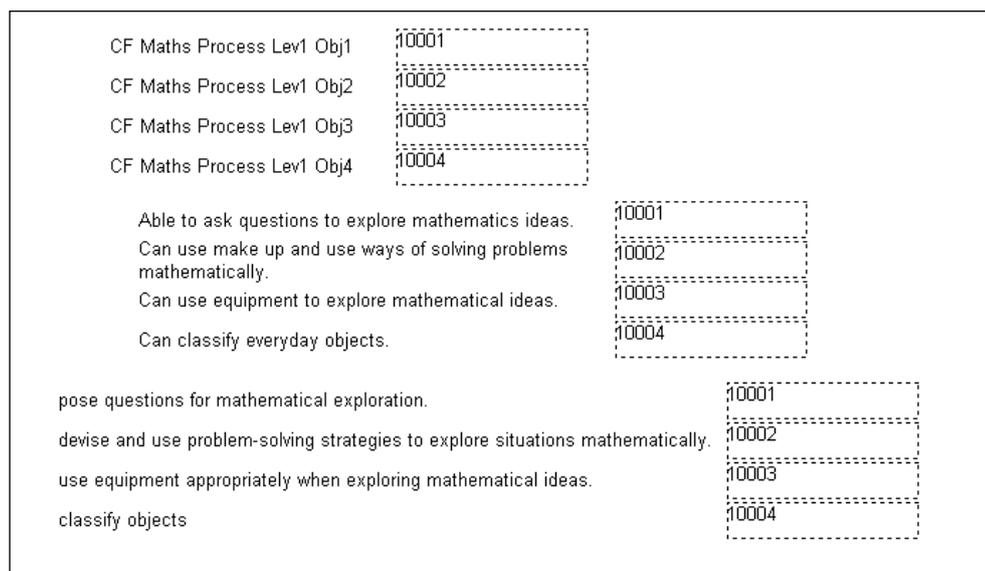
Figure 864: Examples of the various title formats

The 'Type' options

Through the earlier stages of this chapter we used several of these 'types' when having columns connected to objects in our document. All of the possibilities are listed below.
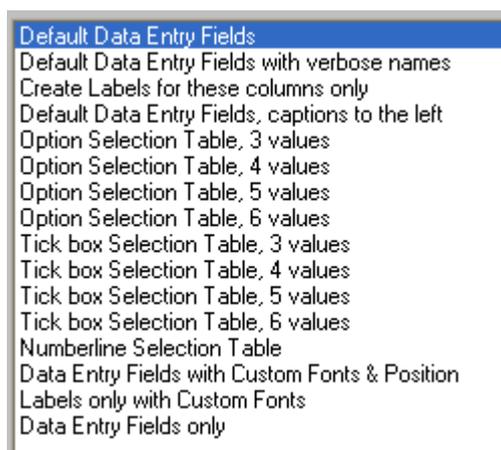
Figure 865: The 'type' options

- **Default data entry fields** – have the captions automatically displayed on the right hand side of the data boxes.
- **Default data entry fields with verbose names** – uses the long description or the short description if they exist within asking.
- **Default labels for these columns only** – creates an RTF box for each column with its title displayed.
- **Default data entry fields, captions to the left** – this is the most commonly used entry and is the standard for normal databoxes.
- **Option selection tables** – we have used this in the Option button section of this chapter.
- **Tick box selection tables** – we used this choice for the tick box section of this chapter.
- **Number line selection table** – this was also used in the corresponding section of this chapter.
- **Data entry fields with custom fonts and positions** – this is used to allocate a selected font and position to the caption of data boxes as they are created.
- **Labels only with custom fonts** – this choice creates just labels, but allows you to nominate the font prior to their creation.
- **Data entry fields only** – this choice creates data boxes without captions.

The top row buttons

Figure 866: The 'Top row' buttons

We have, during the course of this chapter, dealt with all of the top row buttons except two. The buttons are :

This is the main button which we have not yet come across. It allows you to open a new document for editing while you already have a document open in edit mode. This allows you to copy one or more objects from one document to another.
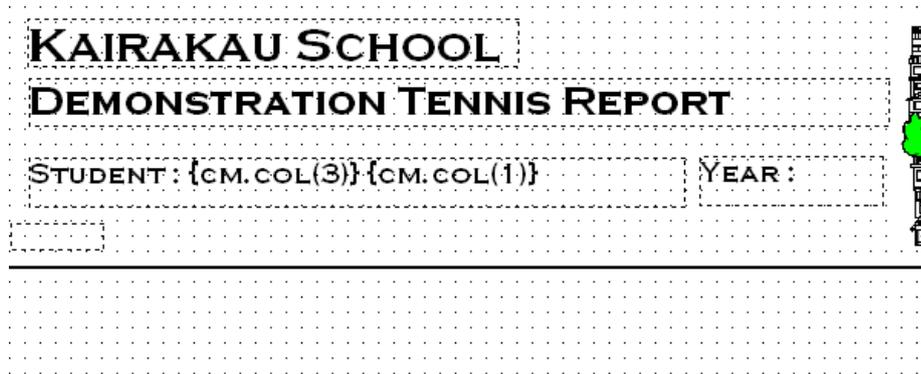
Figure 867: Our base document

As an example, let's consider our base document, shown above. Now add to this document a group of objects from a report which has a section which we'd like to duplicate. The report in question is shown below.
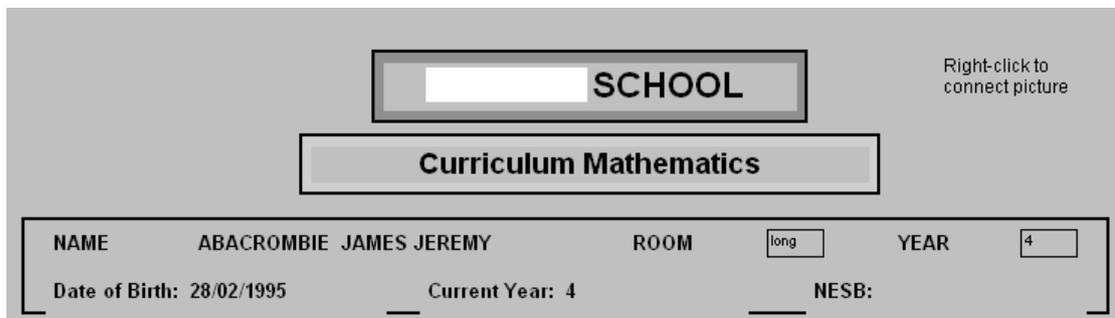
Figure 868: A portion to be copied

Open this report for editing and select those objects to copy. Remember that you can select by dragging a rectangle over the required objects. (Alternatively, you can hold down the Shift key and click on the objects).
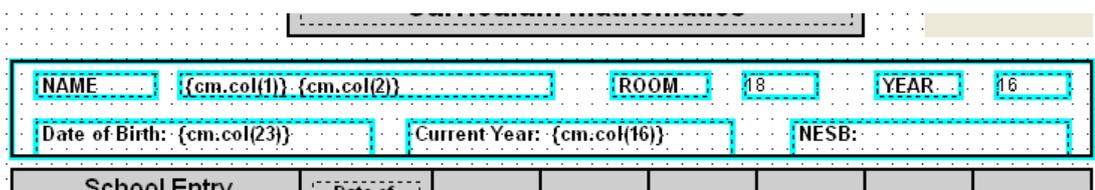
Figure 869: Selecting the required objects for copying

Now that the objects are selected, copy them. This can be done either by pressing Ctrl-C or by right clicking in one of them and selecting 'Copy' from the popup menu.
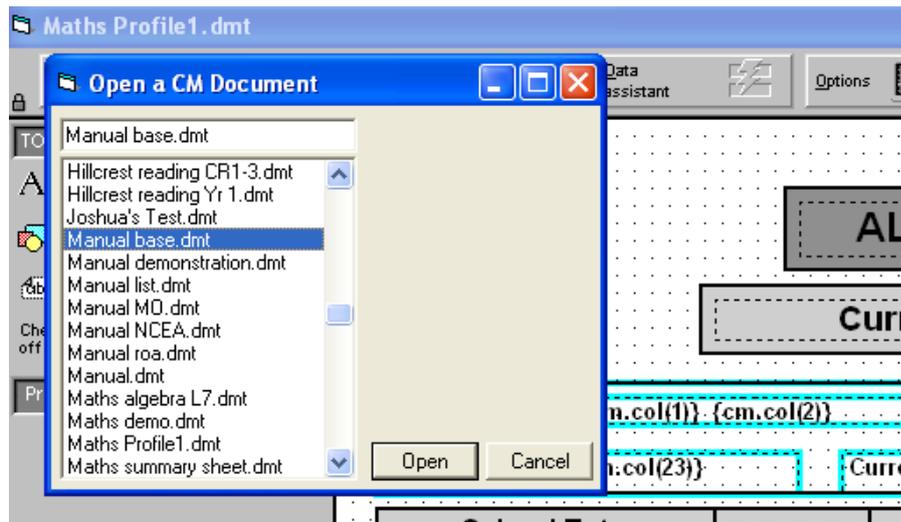
Figure 870: Opening a second document

Next, as shown above, click on the 'Open' button and select our base document.

It will open, replacing the first document. Paste the memorised group into the base document (either by pressing Ctrl-V or by right clicking in open space in the document and selecting 'Paste' from the popup menu).

Then click INSIDE one of the pasted objects and drag the group to the new position.

If you click OUTSIDE any of the objects the program will assume that you are happy with their position (at the top left of the document) and will de-select them, leaving them in the wrong position. I managed to do that while preparing this demonstration and had to exit from edit mode without saving the changes, then repeat the process.
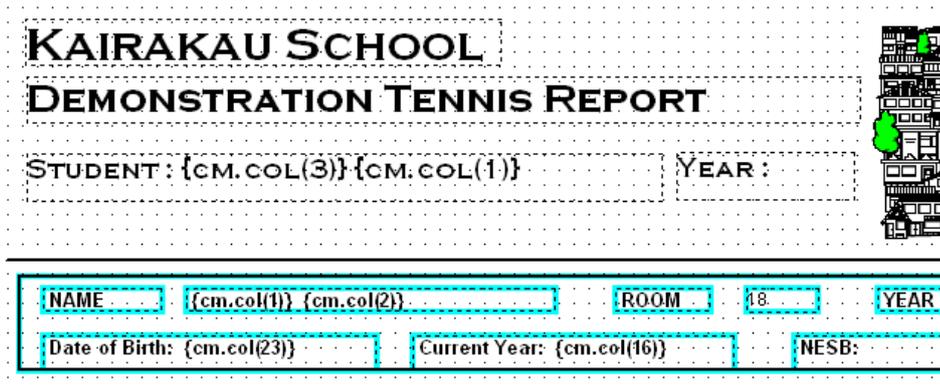
Figure 871: Pasted into place

You cannot open one document for editing, copy a group of objects, then exit from editing and select the second document – as the process of exiting from editing causes memorised objects to be 'forgotten'.
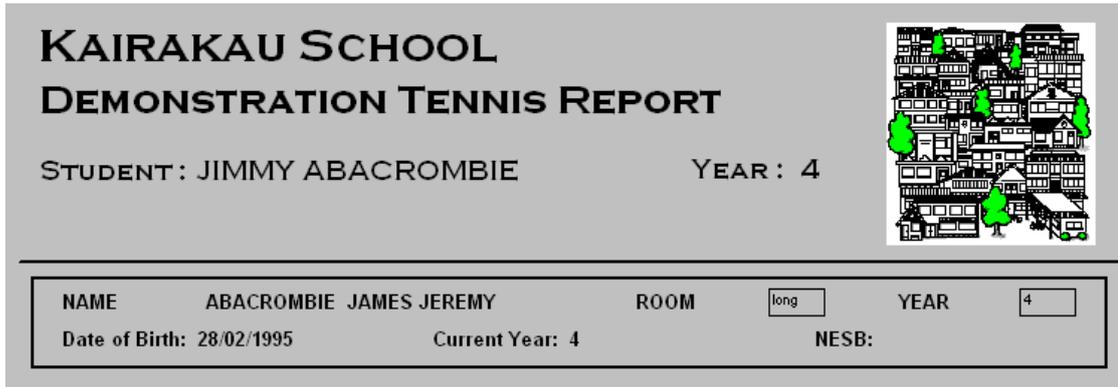
Figure 872: The finished product

The 'Save' button allows you to save the changes you have made while editing a document. It is common to save giving your document a new name, in order to produce a second version of the original document.

These two buttons allow you to move between the pages of a multi-page document while editing it. The display in the middle tells you on which page you are currently working.
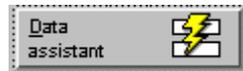
This button accesses the Data Assistant, with which you are now intimately familiar.

This button displays the options window which allow you to set various parameters (e.g. grid visible / zoom factor etc) which apply to the editing process.

This button closes edit mode and returns you to whence you started. If you had a document loaded then you will return to that document. If, in fact, it was the document which you have just finished editing then you will be returned to that document with the changes taking effect.

If you exit without having saved your changes then a dialogue will ask you whether or not you wish to do so.

The popup menu

Finally, we come to the last topic of this chapter – the popup menu.

Figure 873: The popup menu

This menu appears when you right-click while in a document being edited.
We've already dealt with the top group of choices, which allow you to process selected objects.

The 'Align' process can be used to align mis-aligned objects. As an example, I've moved a couple of the option buttons on our document, as shown below.
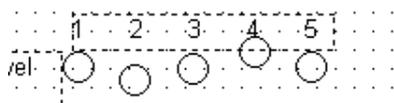
Figure 874: Misaligned objects

To correct this, you must first select them, then use the 'Align to top' menu choice, as shown below.
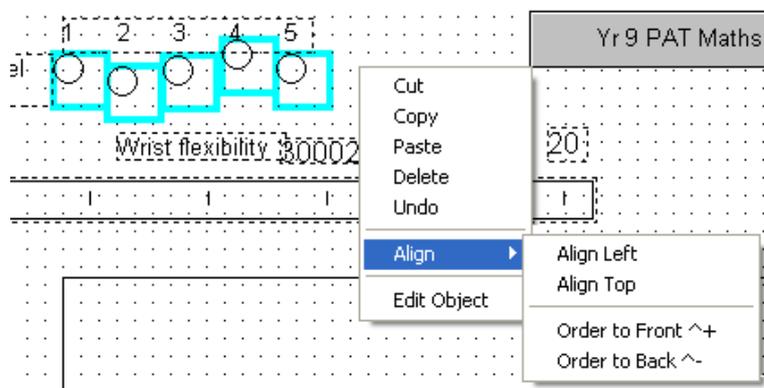
Figure 875: The 'Align' options

The result is pleasing to see!
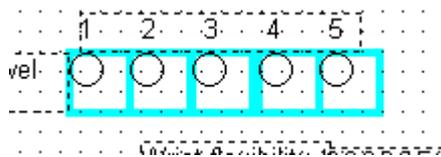
Figure 876: Much more betterer

There are two more options in the 'Align' part of the menu – 'Align to Front' and 'Align to Back'. An example of their use is shown below. I've purposely moved our button object over the top of the picture object – shown below.
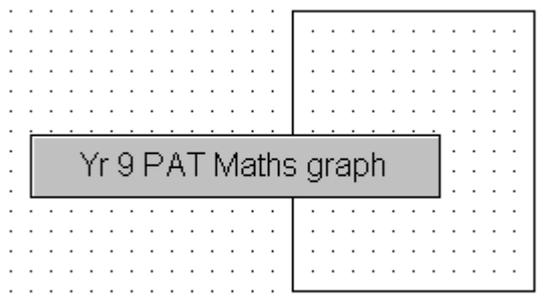
Figure 877: The photo is at the back

Now to bring the picture object to the front of the button object, select it, then select 'Bring to Front' from the popup menu.
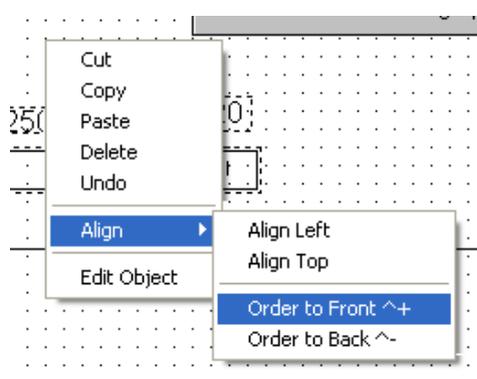
Figure 878: The 'Ordering' options

The result is that the picture object is now in front of the button object.
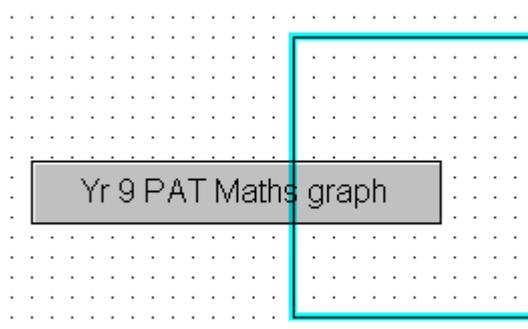
Figure 879: The photo is now at the front

These have 'Hot keys' associated with them to allow them to be used within calling up the menu. Why would you wish to do this? This is very useful for a particular purpose. If you have a group of databoxes on a document and you wish the person entering data to be able to move from box to box by pressing the <Enter> key then the databoxes must all be 'in order'. Pressing <Enter> while in a databox will cause focus to move to the next object in order – and you cannot see the order by looking at a document.

To put the databoxes into order, select each one in turn and press Ctrl-'-' (i.e.Ctrl minus).. This will cause each successive databox to be moved to the back. When you have finished, the first

one in the group will be at the 'Front' and each one will be one place further 'back' then its predecessor. When a user presses <Enter> in a box, focus will move to the next one further 'back'.

The final two buttons allow you to add a new page to or delete the existing page from the document.
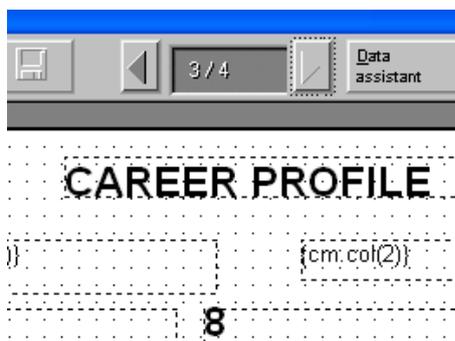
Figure 880: The multi-page display

Once you have more than one page the multi-page buttons at the top of the screen come into play, as shown above.

If you elect to delete a page, the following dialogue will ask you to confirm your wish.
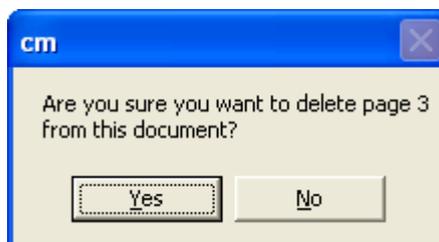
Figure 881: The Deletion confirmation

27.5 Coloured Buttons

As request was received from a MUSAC agent (from Solutions and Services Ltd) to be able to place coloured buttons on documents. Their preference is to provide users with a 'master document' with buttons linking to their other documents, to act as a sort of large menu screen. They felt that the appearance of such a menu document would be enhanced if they could provide coloured buttons, rather than the standard grey ones already available.

To facilitate this three new properties have been added to the button object as shown below.
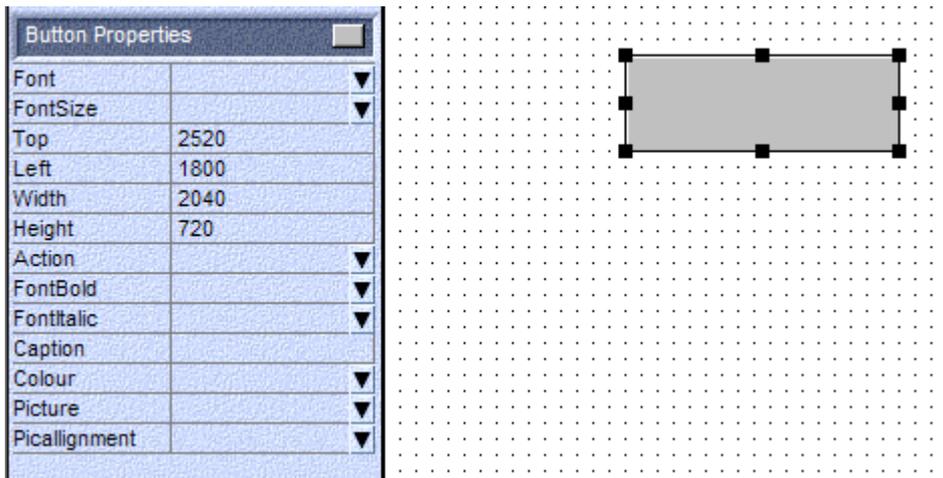
Figure 882: Button properties

The three new properties are :

a   Colour

Selecting this area (by clicking in the small downwards black arrow at the end of the 'Colour' row) leads you to the following colour choice dialogue via which you can either select one of the colours offered or, via the 'Define custom colours' button, design a new colour of your own. Make your selection and the colour chosen will be attached to your button. Please note that the colour will NOT appear in the design process. It will appear when the document is displayed on the screen. It will NOT appear if the document is printed. It was felt that the intention was to provide colour for buttons on a menu document which was not intended for printing.

Figure 883: Colour selector

b   Picture

You can add a suitably small picture to your button by clicking on the 'Picture' row. This opens a selection dialogue via which you can select the required picture.
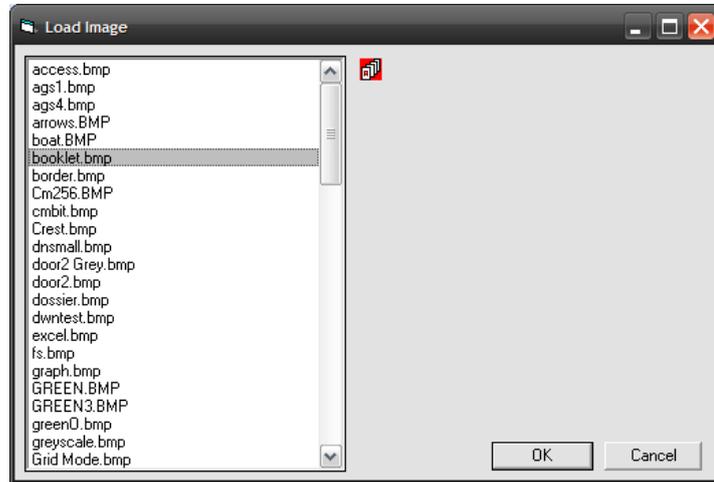
Figure 884: Image selector

All suitable pictures found in your \cm directory will be listed. As you click on a picture it will be displayed on the right hand side of the window to allow you to judge its size and suitability for your button.

Once selected the picture title will be displayed in the properties window.

Note that the picture is NOT displayed on the button in design mode but will appear on the button when the document is viewed.

c   Picture alignment

You can, of course, also have a caption for your button and the position of the caption will be determined by the alignment of your button.
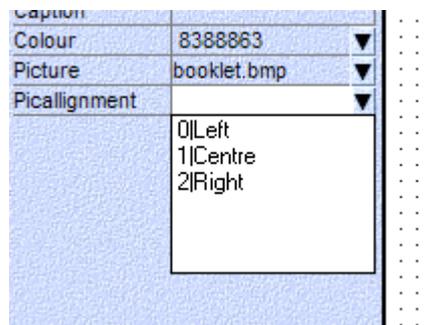
Figure 885: Picture alignment

You have three choices as shown above.

Finally, visit the last of the previous properties and add a caption (eg. 'Booklets'), save your document and select it for viewing as a document and you will be rewarded with something similar to that shown below.

Figure 886: Newly created button

Ouch! You will soon learn to be a little discriminating in your choice of colour!

28   Graph Design

28.1 Overview of graph design

The most important tool in the analysis of data is the graph. In ClassRoom Manager 'Graphs' include chart and tables and it is the purpose of this chapter to explore the various possibilities available.

We shall look at:
- **Histograms** - which can be two- or three-dimensional
- **Data cubes** – which allow you to produce a table comparing the contents of any two columns
- **Scatter graphs** – which can include linear regression
- **Individual student graphs** – used to illustrate a student's progress in one or more areas.
- **Data tables** – used to analyse data from columns. This is a more specific version of the data cube.
- **Curriculum Framework graphs** – which can be used to analyse the data stored via the dates at which students reached the various stages of progress towards the Curriculum Framework objectives.

By now you have seen graphs in the menu listing at the left of the screen.
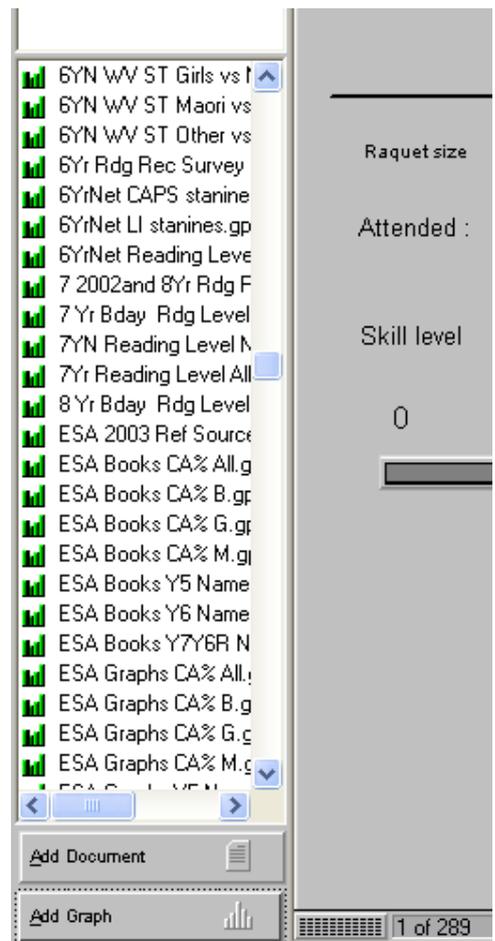
Figure 887: The selection of a graph

The process of designing a graph is entered via the 'other' button below the menu list.

This button takes you to the first screen of the graph design process.
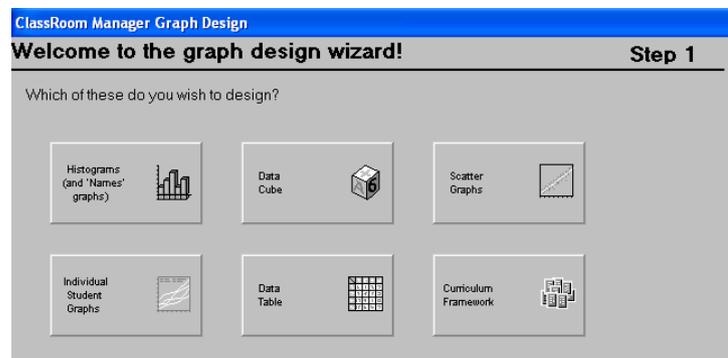
Figure 888: Graph design – Step 1

28.2 Designing a histogram
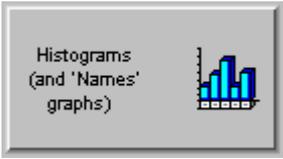
Click on the button labelled 'Histograms (and 'Names' graphs') and you will arrive at the second step in designing a histogram – the selection of the format.
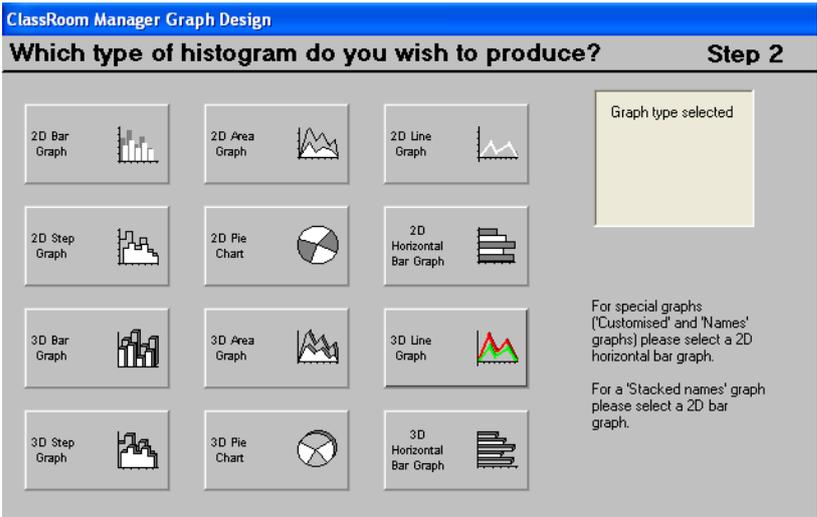
Figure 889: The histogram choices

We shall start with a 2-dimensional bar graph. When you make your selection it is displayed in the top right hand corner of the screen. The 2D bar graph has one further option – a Stacked names graph. (We shall generate examples of such alternatives later)
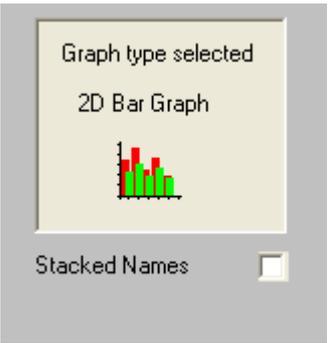
Figure 890: An extra option for the 2D bar graph

Had we selected the 'Horizontal 2D bar graph' then we would have had a wider range of extra possibilities, as shown below.
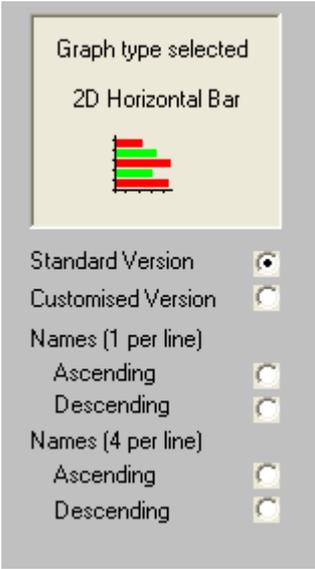
Figure 891: Several extra options for the 2D horizontal bar graph

Once Step 2 has been completed, click on the 'Next' button at the bottom of the screen to proceed to step 3 –The Definition of the X axis.
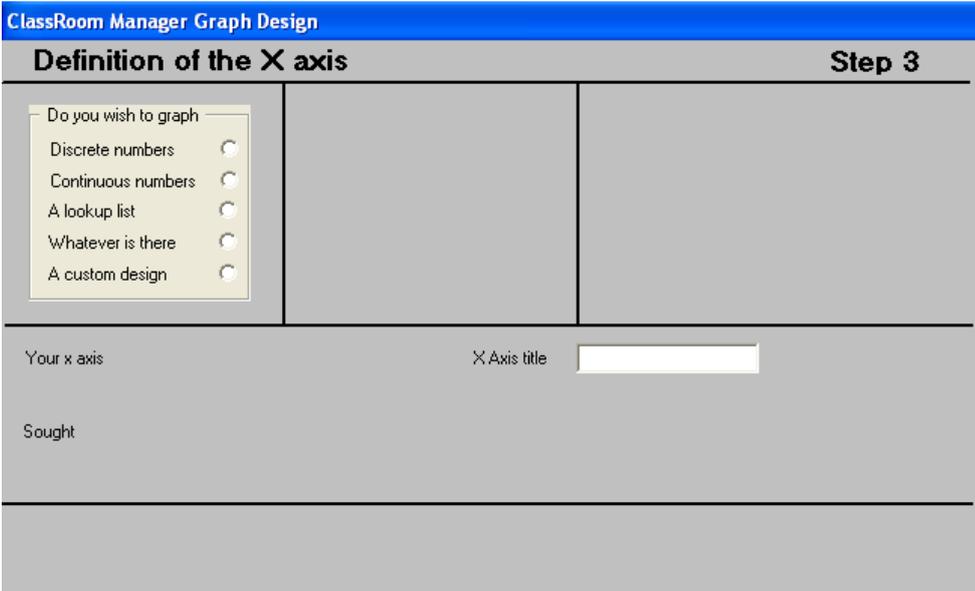
Figure 892: The definition of the X axis

Histograms have two axes – the horizontal axis, (the X axis) which displays the students' scores, and the vertical axis (the Y axis) which displays the number of students having each of those scores. The X-axis has a wide range of possibilities, the first of which is shown below. As shown below the process displays both the axis as it will appear in the graph (Your x axis) and the corresponding data entries which will be used to populate the columns of the graph (Sought).
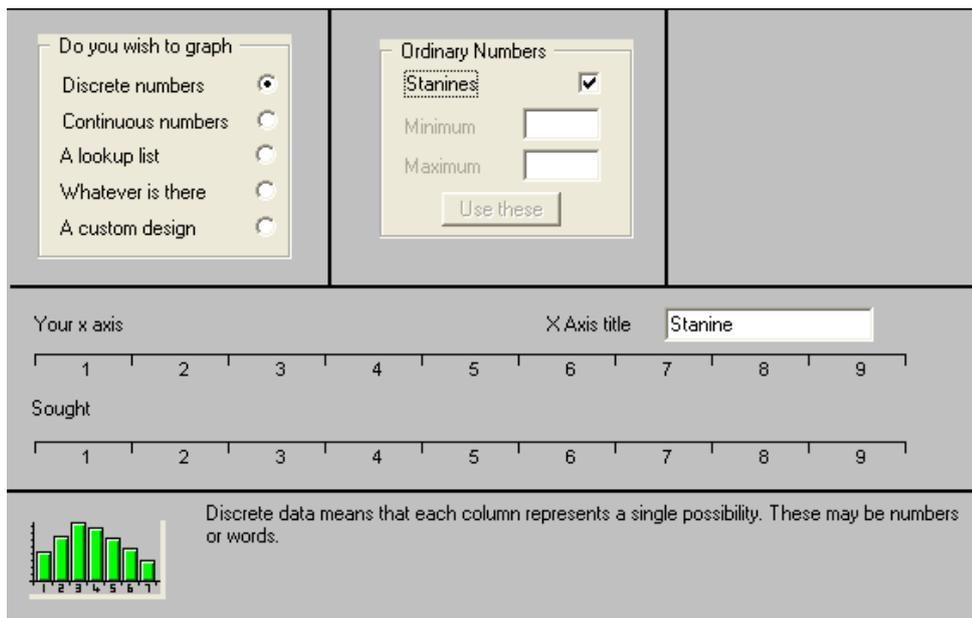
Figure 893: Discrete numbers — stanines

The first possibility is Discrete numbers. Discrete numbers are individual, non-grouped numbers and the perfect example of this is 'Stanines' where the possibilities run from 1 to 9. The illustration above shows the result of selecting stanines.

The alternative is to set your own range of discrete numbers. In the example below I've gone 'from 10 to 25'.
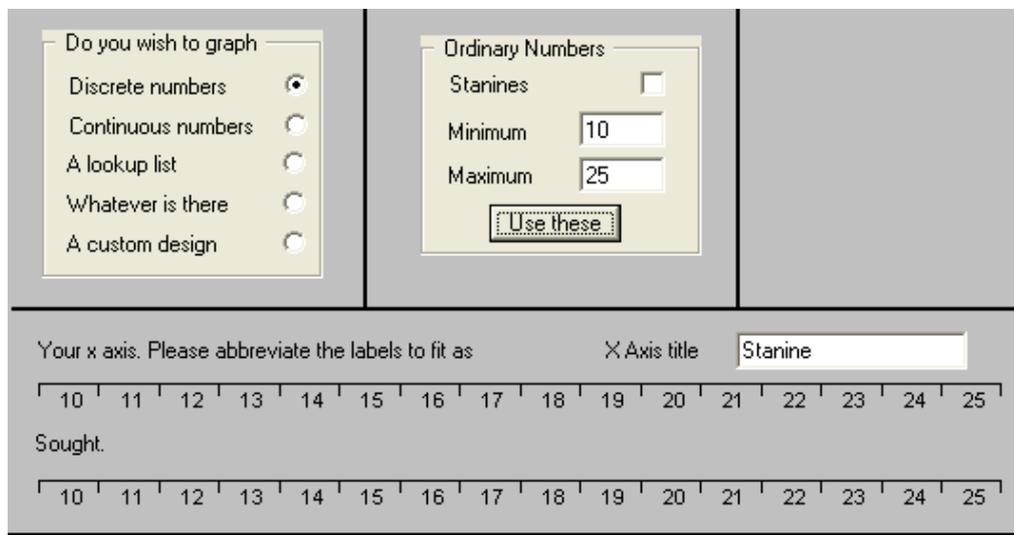
Figure 894: Discrete numbers — your own choice

Of course, if you request too many, then the resulting graph will be rather jumbled. The warning below appears if you request more than eleven columns.
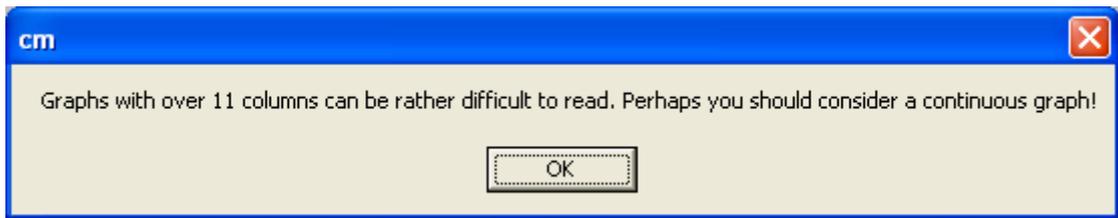
Figure 895: The 'Too many columns' warning

The second possibility is 'Continuous numbers' where, although the student's scores may be discrete, they are, for the purpose of the graph, separated into groups. Scores in this situation must fall into one of the ranges created, and these can cope with continuous numbers, where the difference between one number and the next might be extremely small e.g. 34.5565432 and 34.5565433 !
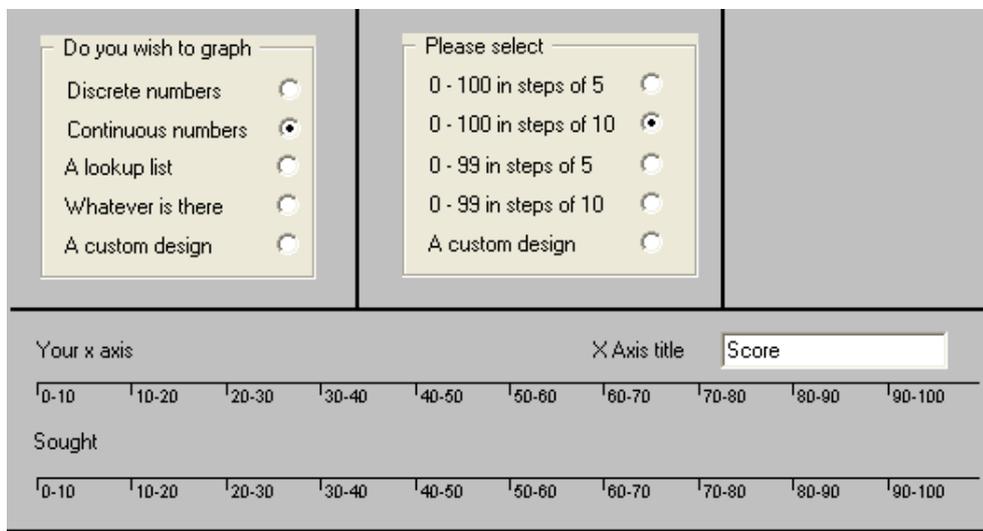
Figure 896: Continuous numbers – a standard selection

There are four 'standard' possibilities for continuous numbers and each can be selected with a single click. One is displayed above. (The 0-99 options represent percentiles). The example below is of the fifth possibility – a custom design, where the requirements are entered into the boxes on the right hand side of the display.
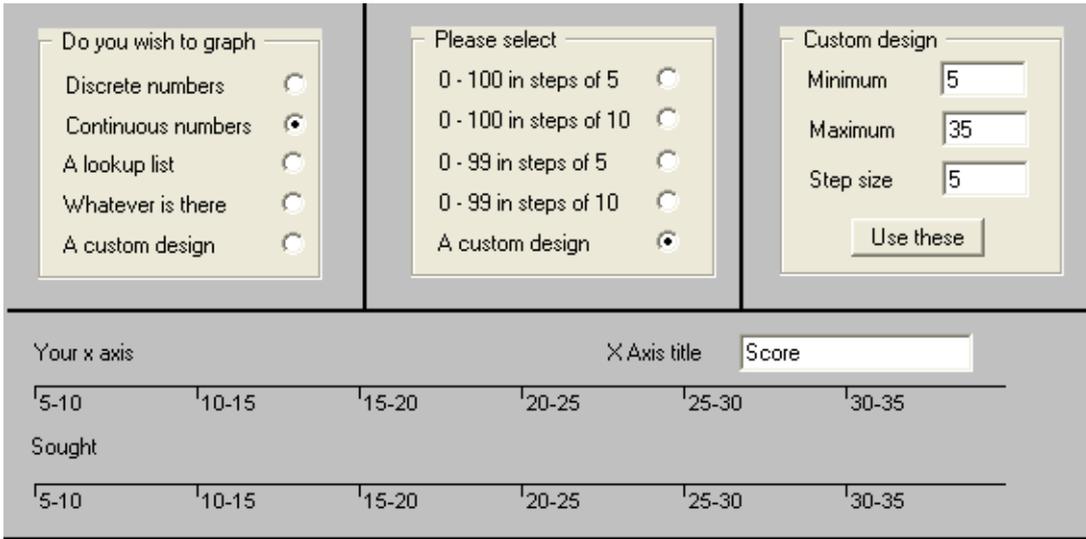
Figure 897: Continuous numbers – a custom design

The next option is a 'Lookup list' – frequently known as a 'popup file'. These are the popups which appear when editing an entry in a column linked to a popup. Shown below is the selection of the popup required.
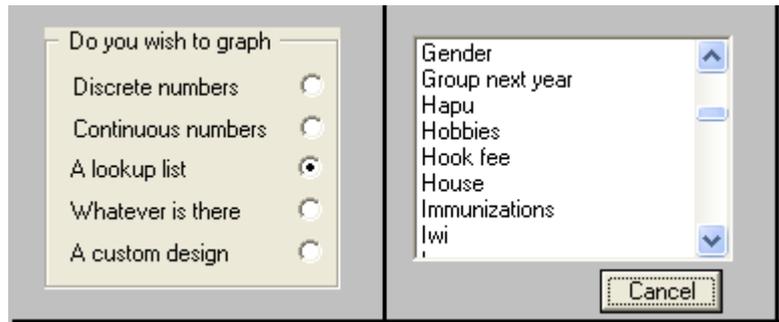
Figure 898: A lookup (or popup) list

Having made your selection (in the example I've selected 'Hobbies') you now have several possibilities regarding the display. In the example below, I've elected to display just selected entries, and have selected some of them.
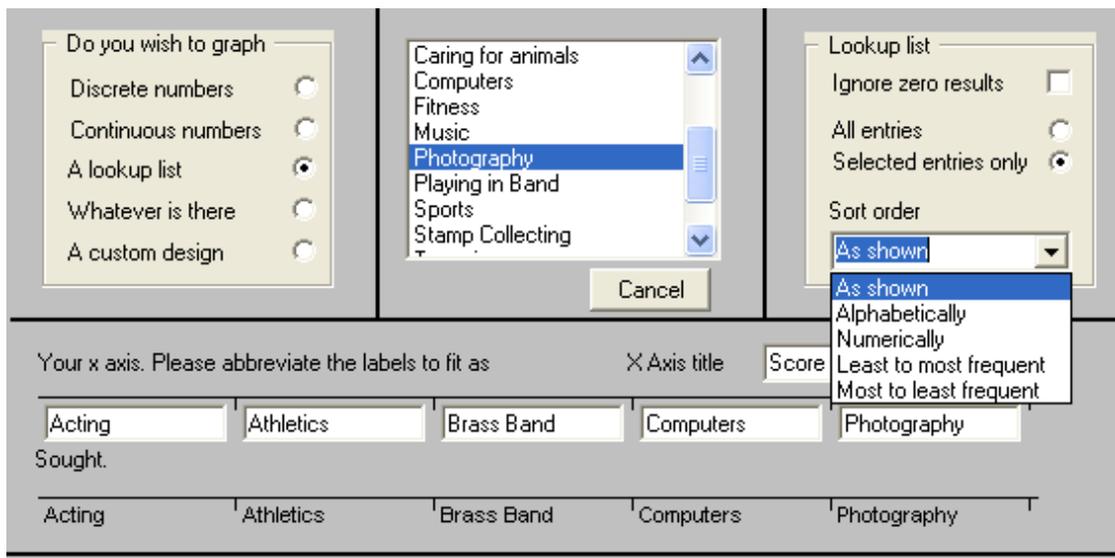
Figure 899: Selected members of a popup

At the bottom of the screen are the two displays. The top row shows the labels as they will appear on the graph – and you may abbreviate these to reduce their lengths if necessary – and the actual data entries sought which will be used to place each student in one of the columns. These cannot, of course, be altered.

The next possibility is 'Whatever is there'. This will count the number of students in each of the results found in the column and will generate an X-axis consisting of these entries. You do have a sorting choice to make, as shown below.
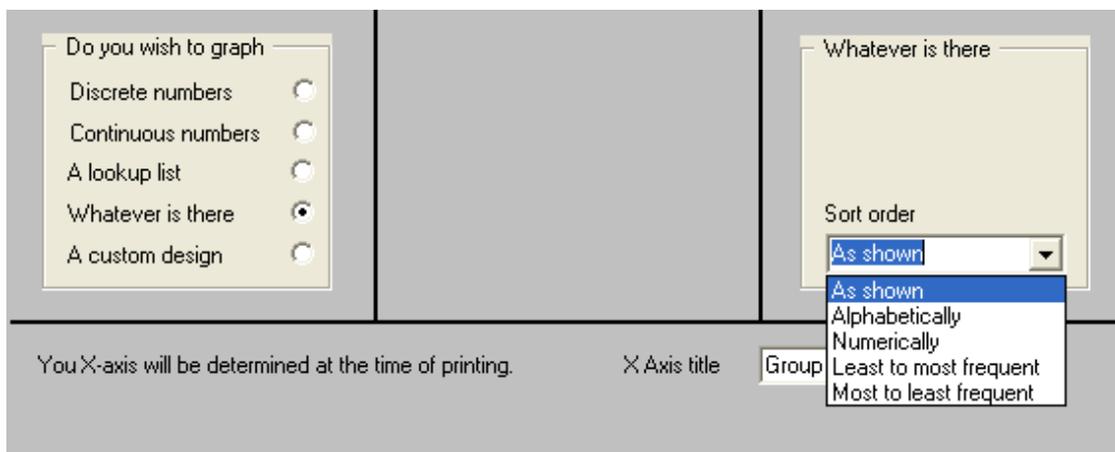
Figure 900: Whatever is there – sorting choices

The final possibility is the 'Custom Design' where you get to nominate the number of possibilities, the matching labels, and the actual data entries which will correspond to these labels.

Figure 901: A custom design

In the example above, I've set up six columns with the labels as shown. In my data column, however, the student's entries simply consist of the codes 'R1', 'R2' etc, and it is these that are entered in the final row of the display.

This brings us to the most complex step in the design of the graph – Step 4 – The Definition of the Series.

A series is simply a 'layer' of the graph. Each layer will be represented by a different colour and, for the purposes of this demonstration, I'm going to create two series. The first will display the results for the boys and the second for the girls.
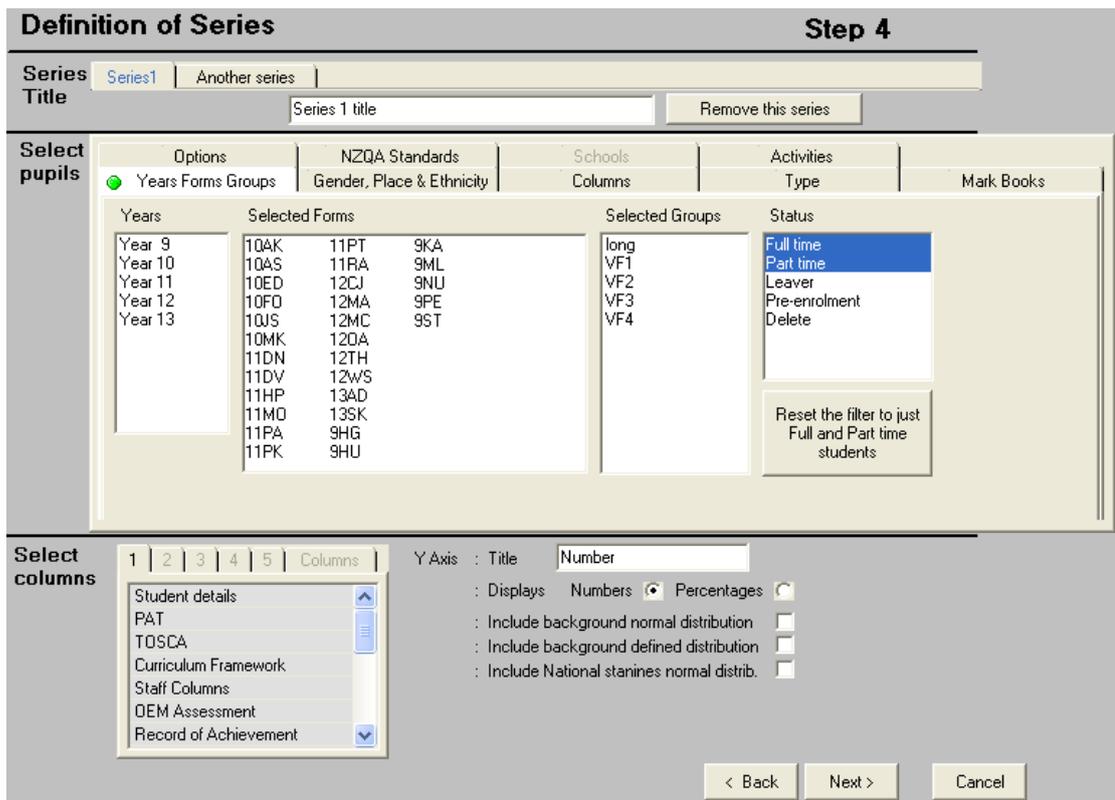
Figure 902: Step 4 - Definition of Series

The screen above shows the first appearance of the 'Y-axis' definition. As you can see in the following illustration, I've done three things:

1. I've entered the title of the first series – 'Boys'
2. I've used the student filter (see appendix for full details) to select the 'Males' – and I've also selected 'Year 9' from the 'Years Forms Groups' tab.
3. I've used the column selector (see appendix for full details) to select the PAT / Mathematics / Year 9 / Class Stanine column

There are further possibilities at the bottom right of this screen. We shall return to these later.
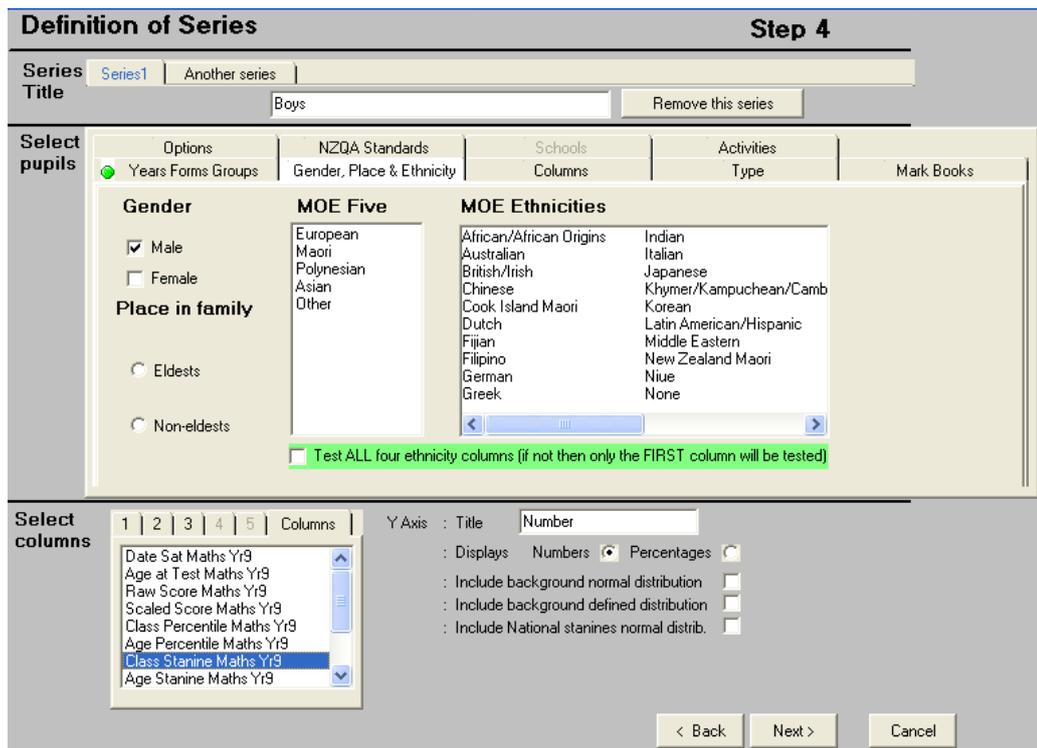
Figure 903: Series 1 defined

To produce a second series, click on the 'Another series' tab in the top part of this display.
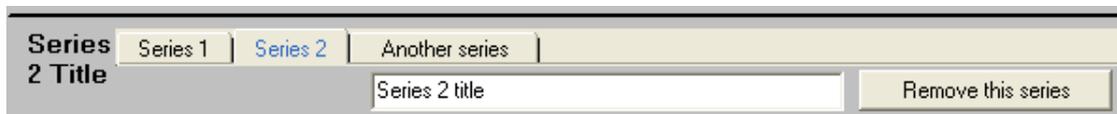
Figure 904: Creating a second series

This will cause a second series to appear, and the corresponding selections have been made, shown below:

- The series has been named 'Girls'
- The 'Females' button has been ticked in the student selector
- The SAME column has been selected using the column selector

Figure 905: The second series details

Move next to the final step – Step 5 – where we must give the graph a name and a heading. This screen is displayed below. You can see that the first four steps have been successfully completed.

Figure 906: Step 5 – the graph name

The top line is where you enter the name of the graph. When you move to the second line, the name is automatically inserted for you. You can either leave it, or you can edit it, adding up to five lines of heading, which will be printed above our graph.

This screen also allows you to request that the legend be displayed on the graph. This is essential for a two-dimensional graph. A three-dimensional graph will have the series name displayed against each series.

Figure 907: All complete

Once you have entered these details to your satisfaction, click the 'Save' button at the bottom of the screen and you will be returned to the main screen, where you can now find the new graph listed, as shown below.
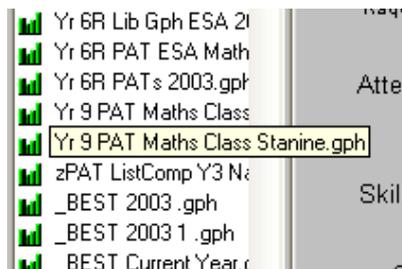
Figure 908: The new graph is listed

A 'tool tip' appears if you hover the mouse over an entry in this list – displaying the full name, not all of which may be visible in the menu itself. Select the graph and it will be generated and displayed, as shown below.
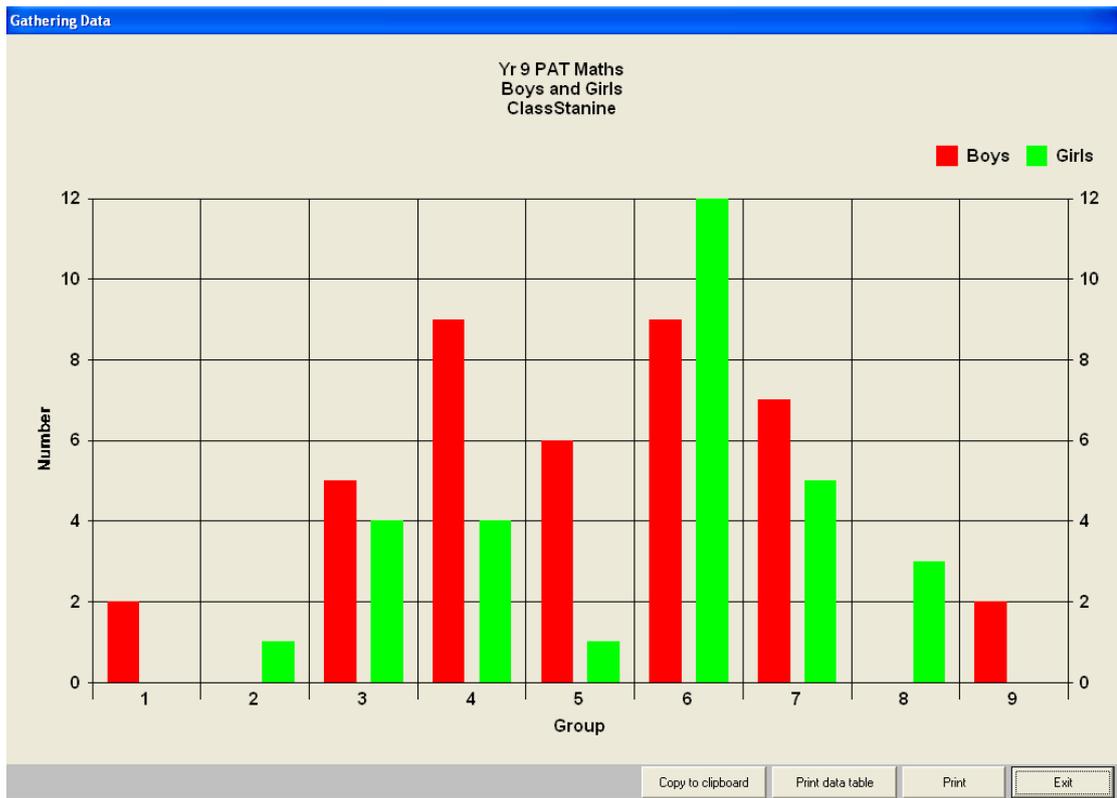
Figure 909: The new graph is displayed

At the bottom of the graph is a row of buttons ….

Figure 910: The 'Bottom row' buttons

The first of these allows you to copy the graph to a clipboard, from whence it may be inserted into other programs. You have already seen how to embed a graph in a CM document, but you may wish to have the graph copied to Excel, or Word. The procedure for this is detailed if you click on the first button 'Copy to clipboard'. The details are displayed below.

Figure 911: The 'Copy to clipboard' instructions

Microsoft Word does not have a 'Paste Special' option so, to get your graph into Word you must pass it through Excel, as described in the steps above and as shown below.
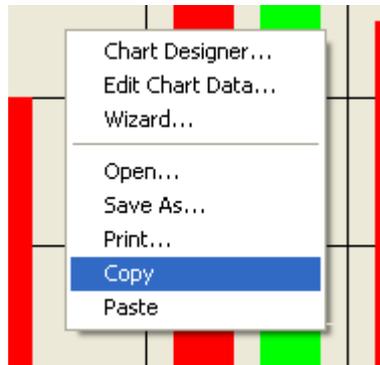
Figure 912: The popup menu

The first step is to right-click in the graph and select 'Copy'. This copies the graph (actually the data table behind the graph) into the Windows clipboard.
Next, enter Excel and right-click and select 'Paste special'. This will result in a second dialogue, from which you should select 'Bitmap'. The two screens for these are shown below.
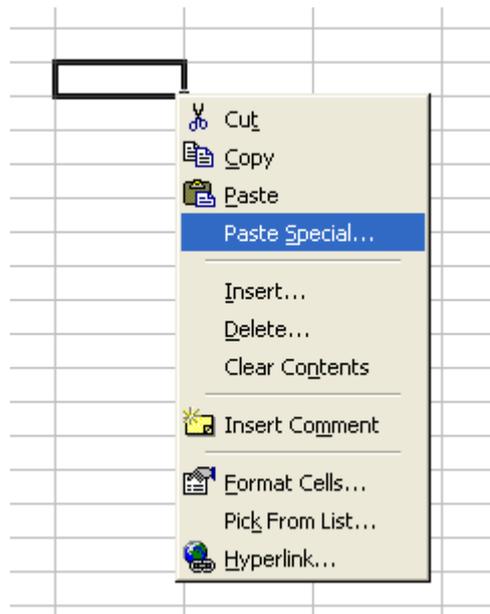
Figure 913: Paste special in Excel
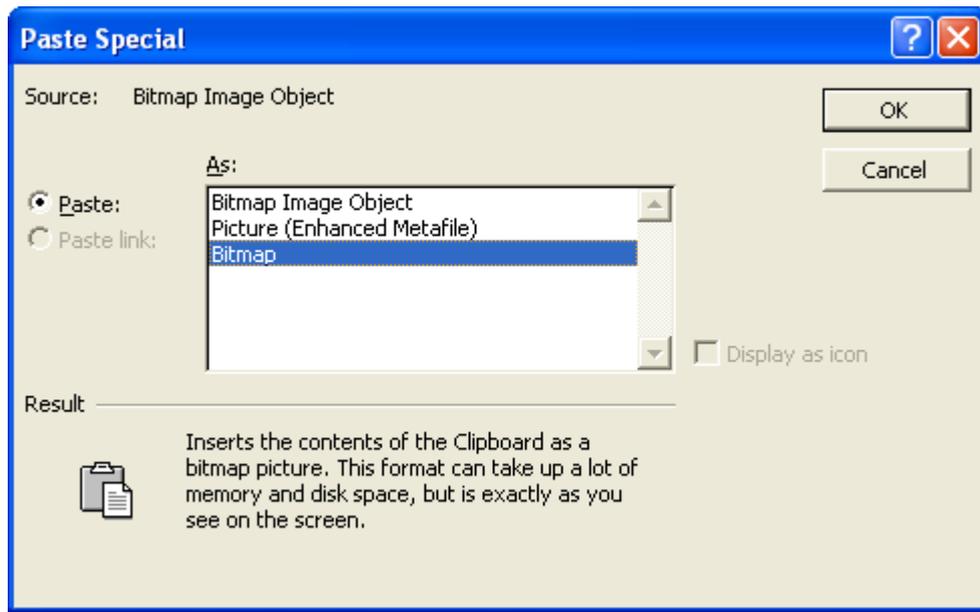
Figure 914: Selecting a bitmap in Excel

The result of this will be that the graph now appears in an Excel spreadsheet, as shown below.
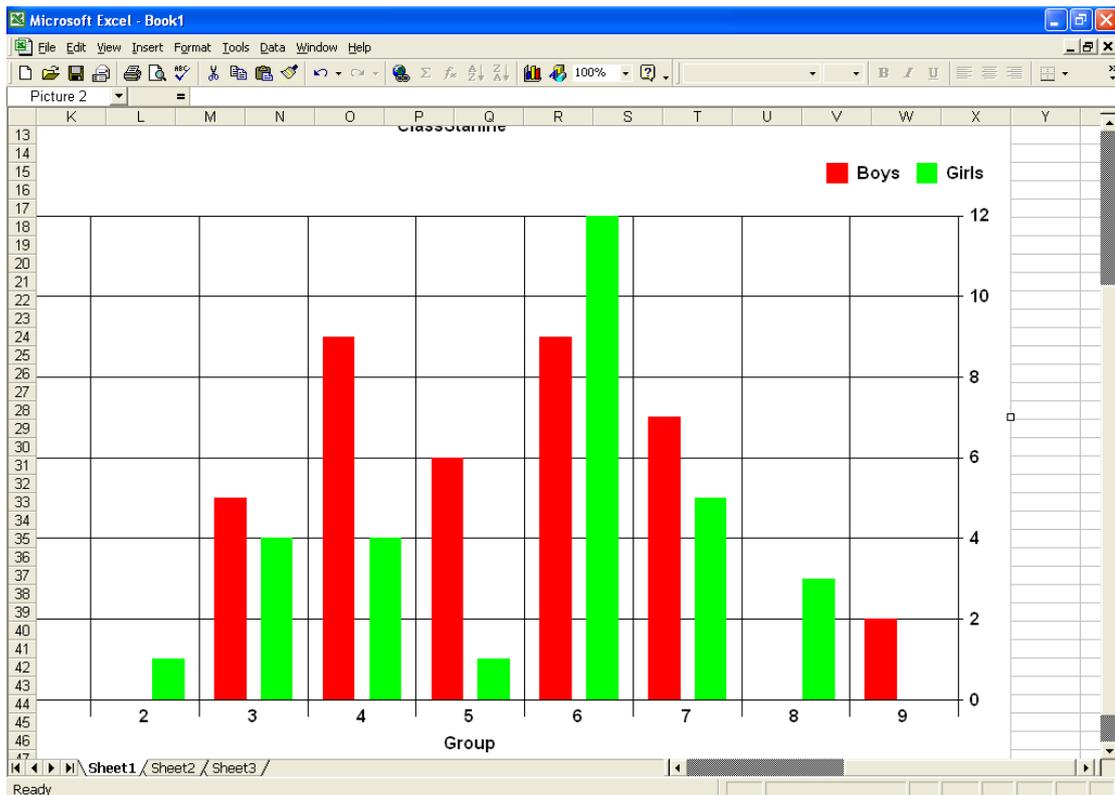
Figure 915: Our graph arrives in Excel

From here it can be copied into Word. Right-click in the spreadsheet and select 'Copy', as shown below…
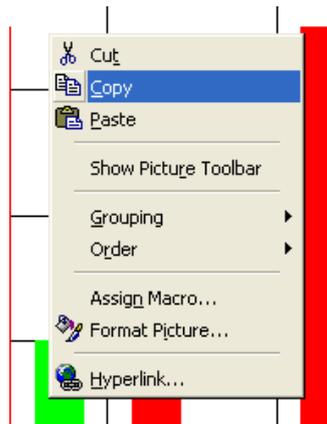
Figure 916: Right-click – copy – in excel

Then enter Word and right-click and 'Paste'. The document will receive the graph, as shown below.
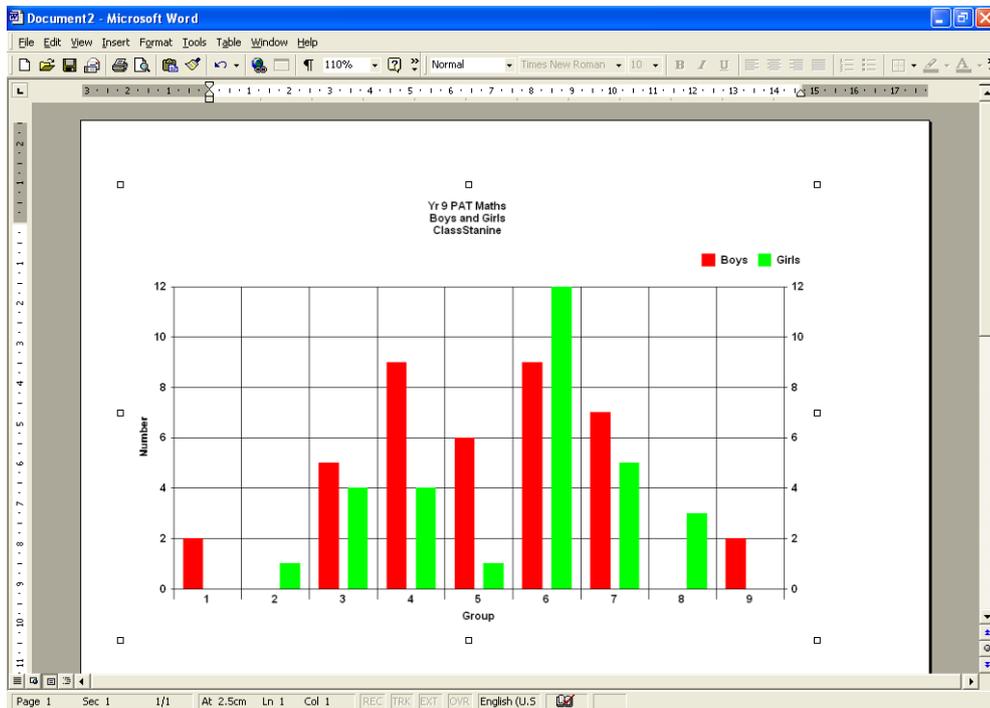
Figure 917: Pasted into Word

The second button at the bottom of the screen allows you to print the data table behind the graph. A print dialogue offers you the choice between printing this in landscape or portrait orientation. The data table for the graph above is shown below.

Yr 9 PAT Maths Boys and Girls ClassStanine				
Group	Boys		Girls	
	Frequency	Percentage	Frequency	Percentage
1	2	5.00	0	
2	0		1	3.33
3	5	12.50	4	13.33
4	9	22.50	4	13.33
5	6	15.00	1	3.33
6	9	22.50	12	40.00
7	7	17.50	5	16.67
8	0		3	10.00
9	2	5.00	0	
Total	40	100%	30	, 100%
Mean	5.10		5.53	
Std.Dev.	1.80		1.63	

Figure 918: The printed table

The last two buttons allow you to send the graph to the printer and to Exit from the graph display respectively.

Let's now return and look at some of the other options which we passed over along the way. To do this we shall edit our original graph. This is done by right-clicking on its name in the list, and selecting 'Edit'. (You can also use this process to delete a graph or document…)
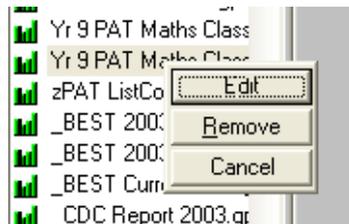
Figure 919: Selecting to edit

Firstly, let's look at the 3-dimensional version. Click on the '#d Bar Graph' button….

Figure 920: The changed format

… then keep clicking the 'Next' button until you to come to Step 5.

Figure 921: The preview option

At the bottom of the screen are three buttons, the left-most one of which allows you to preview the graph without actually saving the changes. This is most useful to our purpose here as we can experiment....
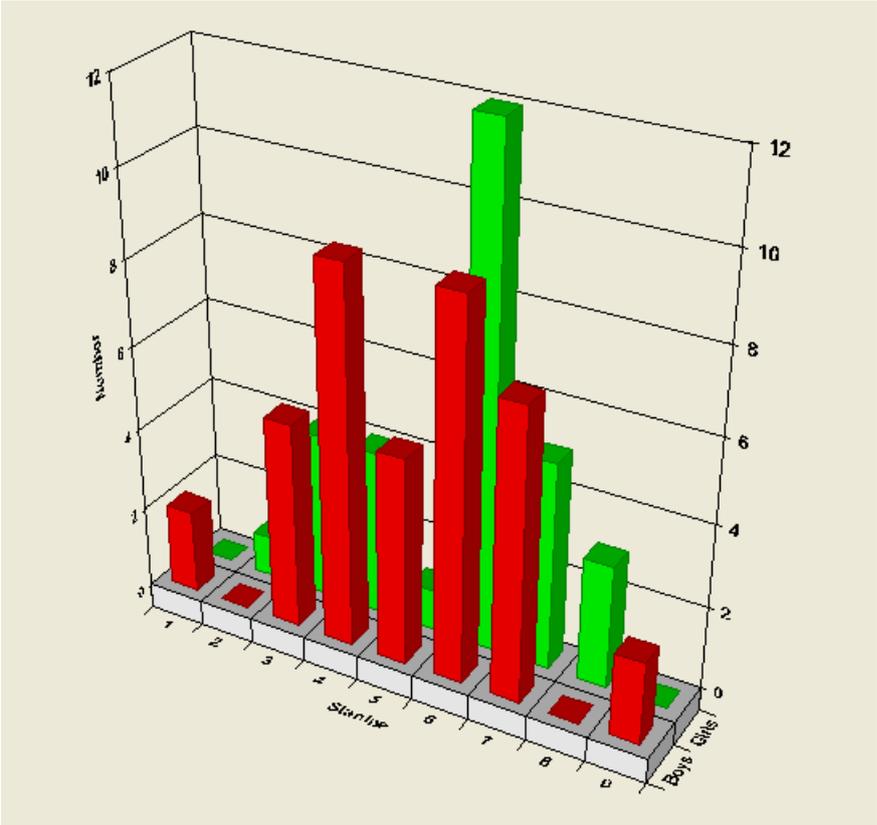
Figure 922: The 3D appearance

The illustration above displays the 3D version and, by holding down the Ctrl key and dragging with the mouse, you can rotate the graph to any angle which pleases you.
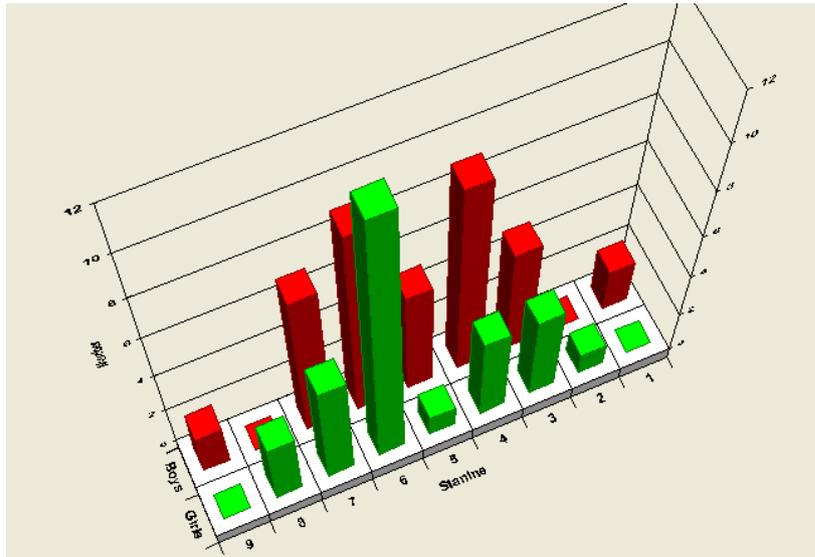
Figure 923: Because you can…

To our 2D version; now put a backdrop in place. Right-click on the displayed graph, and select 'Chart Designer'. This has a wide range of options for changing the appearance of the graph, but we shall only deal with one here.
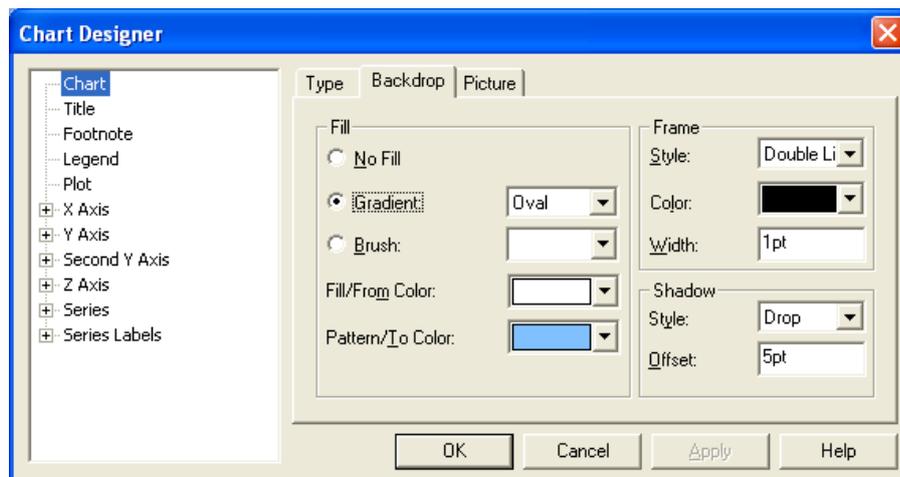
Figure 924: The back drop options

The selections above result in the appearance below.
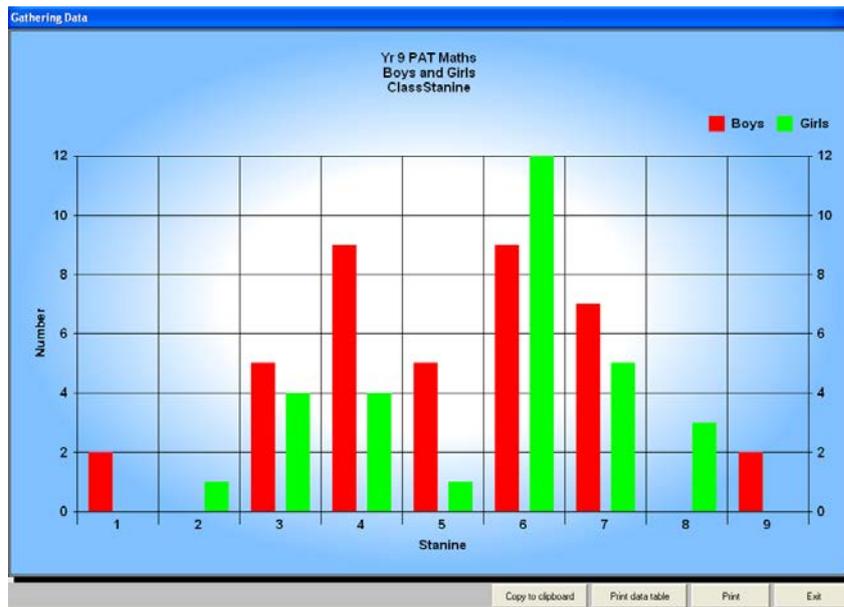
Figure 925: The backdrop applied

Next we shall combine the Boys and Girls into a single series. This is done by deleting one of the existing series, using the button shown below….

Figure 926: Removing a series

… and then changing the name of the remaining series to 'All students' and removing the click on 'Females' in the student filter.

Next, click on the box to add a background normal distribution, as shown below.
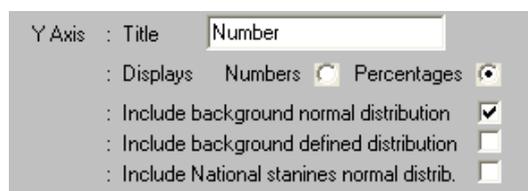
Figure 927: Adding a normal distribution

The resulting graph now includes a green normal distribution, as shown below.
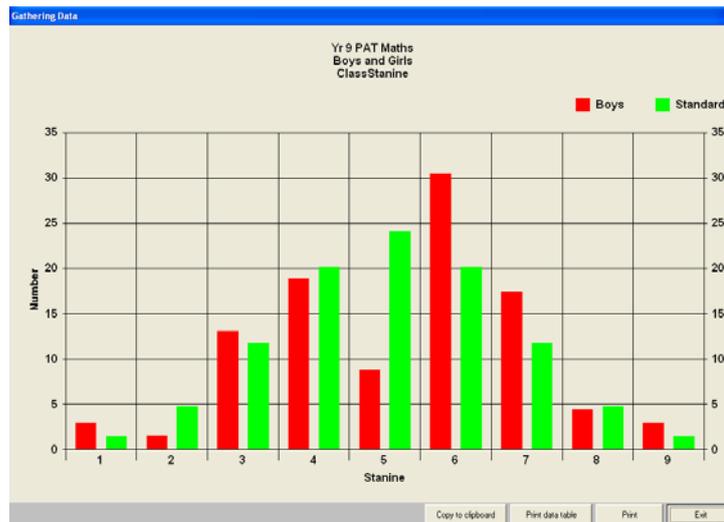
Figure 928: The background normal distribution

Next, remove the normal distribution request, and ask for a background defined distribution. A button appears, as shown below…

Figure 929: Adding a custom background distribution

… which takes you to the screen whereon you can define your own background distribution, by allocating a percentage to each of the X-axis possibilities. A helpful 'total to go' assists you to ensure that the entries total 100%. On the right hand side of the screen you can give your distribution (which will be displayed as a second series) a name, and you can also specify its appearance.

Figure 930: The details of the custom distribution

The result of the setting shown above is displayed below.
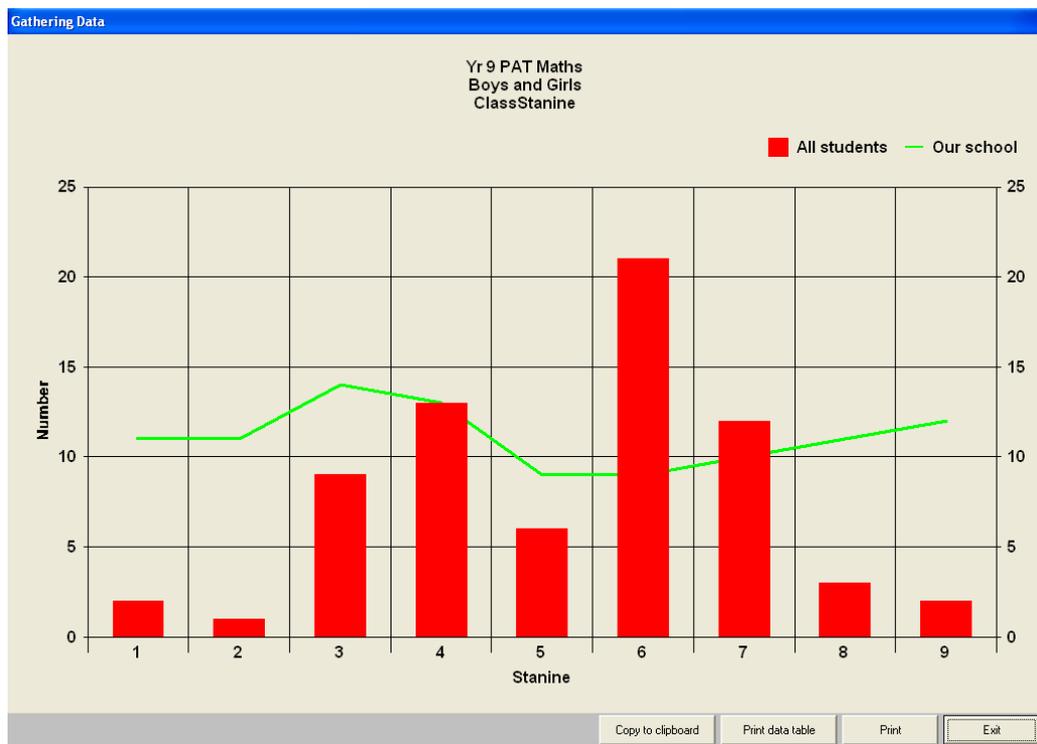
Figure 931: The background custom distribution

Finally, lets return and look at some of the other 2D bar graph possibilities.

The basic '2d bar graph' allows you to request a 'stacked names graph' and an example is shown below.

Number
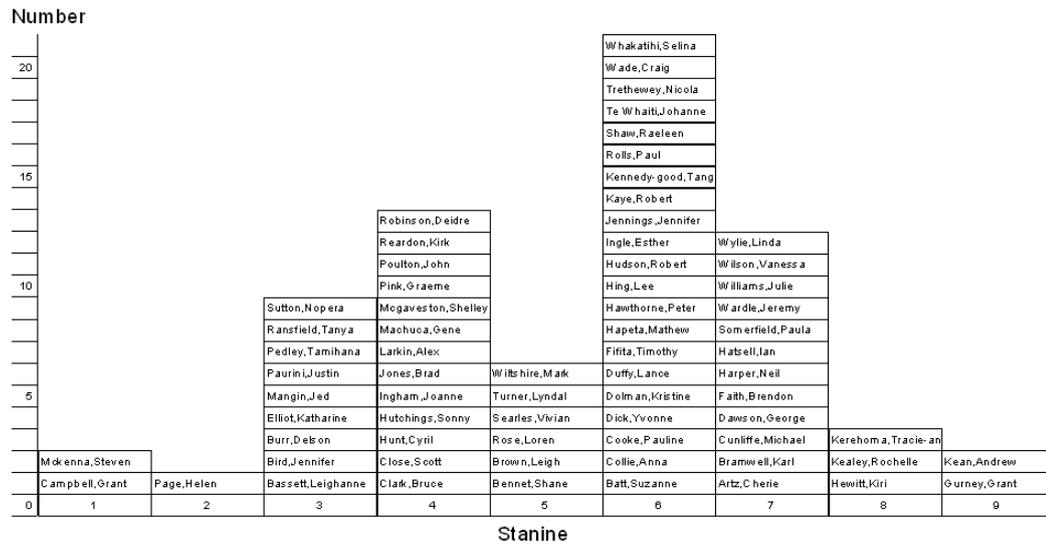
Figure 932: A stacked names graph

Turning to the 'Horizontal 2D bar graph' we can request :

A 'custom' graph (requested by one school – hence 'Custom')

Score	Freq.	%	21
1	2	2.90	
2	1	1.45	
3	9	13.04	
4	13	18.84	
5	6	8.70	
6	21	30.43	
7	12	17.39	
8	3	4.35	
9	2	2.90	
Totals	69	100	

Figure 933: The 'Custom' version

A 4-per line names graph with the scores in ascending order.

Figure 934: Horizontal names – 4 per line - ascending

A '1 name per line' names graph in descending order

Along the way, because we have requested 'descending' order, we should stop at the definition of the X-axis and use the button to reverse the order of the X-axis, as displayed below.
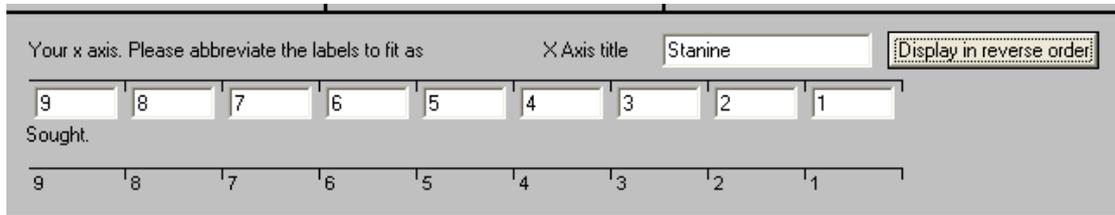
Figure 935: Reversing the display order

A portion of the resulting graph is shown below.

Student	Score	
SCOTT CLOSE	4	
CYRIL HUNT	4	
SONNY HUTCHINGS	4	
JOANNE INGHAM	4	
BRAD JONES	4	
ALEX LARKIN	4	
GENE MACHUCA	4	
SHELLEY MCGAVESTON	4	
GRAEME PINK	4	
JOHN POULTON	4	
KIRK REARDON	4	
DEIDRE ROBINSON	4	
LEIGHANNE BASSETT	3	
Jennifer BIRD	3	
DELSON BURR	3	
KATHARINE ELLIOT	3	
JED MANGIN	3	
JUSTIN PAURINI	3	
TAMIHANA PEDLEY	3	
TANYA RANSFIELD	3	
NOPERA SUTTON	3	
HELEN PAGE	2	
GRANT CAMPBELL	1	
STEVEN McKENNA	1	

Figure 936: Horizontal bar – one per line - descending

For the final histogram we shall return and redesign, this time selecting a 2D Lines graph of stanines, and we shall also request the inclusion of the background 'National Norms' graphs. The result is shown below.
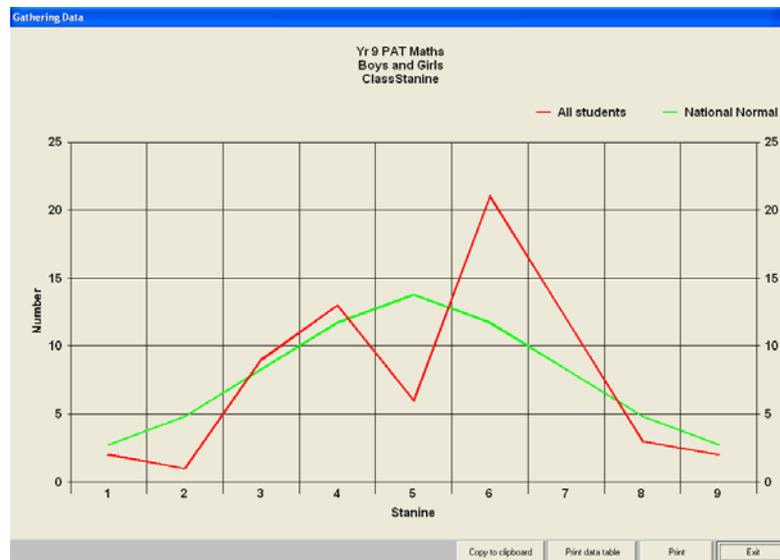
Figure 937: Line graph or stanines with background national norms

28.3 Data Cube

The Data Cube is really an alternative way of filtering students. It generates two dimensional tables which can be used to identify students which fall into particular categories. It can also be accessed via one of the main CM buttons.
Click on the button labelled 'Data cube', and the following screen will be displayed.

Figure 938: The Data Cube screen

At the top of the screen you can select the display format, and two criteria which will be used to analyse the students. In the example below, Gender and Level have been selected.

Figure 939: A simple data cube setting

Following the selection, click on the 'Generate' button and the table below will be populated with the results of the analysis, as shown below.

	6	7	8	9	10	11	12	13	Totals
Female			1	31	18	31	38	15	134
Male			3	39	23	47	33	9	155
Totals	0	0	4	70	41	78	71	24	289

Figure 940: The generated table

If you click in a selected cell, e.g. males x Year 8, then those students in the selected cell will be listed in the second grid on the right hand side of the display.

Figure 941: The students in a cell

You can click on a student in the right hand table and their cell on the main grid will be highlighted.

Figure 942: Identifying a student

You can remove students in a particular cell from the display by right-clicking on the cell.

Figure 943: Removal of a cell

At the top of the screen are several menu items.

28.3.1 The File menu
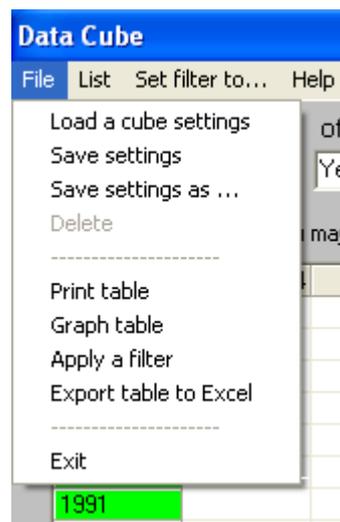
Figure 944: The 'File' menu

The second and third items in this menu allow you to save the current settings of your cube, giving a suitably descriptive name, and the first item allows you to subsequently reload a saved 'cube'.
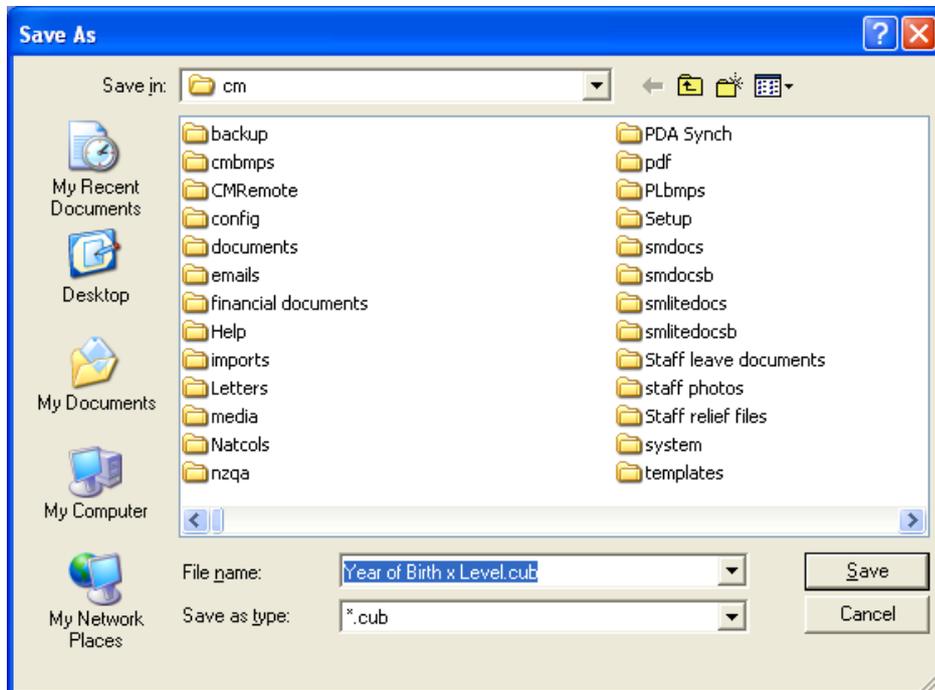
Figure 945: Saving a cube

… reloading a previously saved cube's setting.
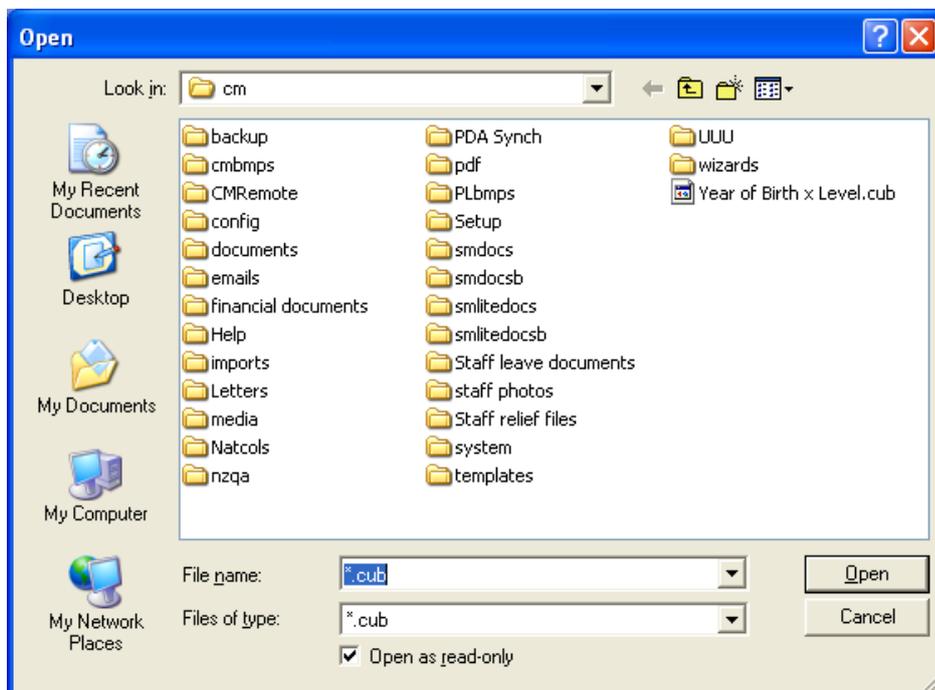
Figure 946: Reloading a cube

- You can print the cube as a table.

- You cannot (yet) graph the cube as this part of the process has yet to be added.
- You can apply a further filter to the students displayed in the cube.
- You can export your current cube to Excel, as shown below.

Figure 947: A cube exported to excel

28.3.2 The List menu
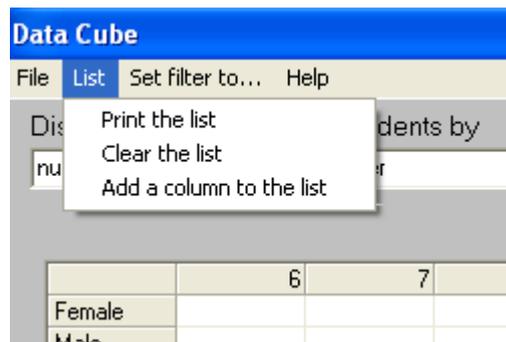
Figure 948: The 'List' menu

This menu has three possibilities :

1. You can print the list (displayed on the right hand side of the screen)
2. You can clear the list, in order to select different cells for your display.
3. You can add a further column to the list which will display the data in the selected column(s) relating to the displayed students. You may add several columns by repeated use of this menu item. In the example below, the students' Age percentile in Year 9 PAT Maths has been added as a third column.

Figure 949: An added column

28.3.3 The 'Set filter to' menu

Figure 950: Setting the CM filter

This menu has but one item. It allows you to reduce the students currently belonging to your CM filter to just those in the list currently displayed on the right hand side of the screen. It is in this manner that the data cube acts as a refining filter.

28.3.4 The Help menu

This menu also has but one item and it causes the following screen to be displayed.

This screen shows some notes relating to the use of the cube.
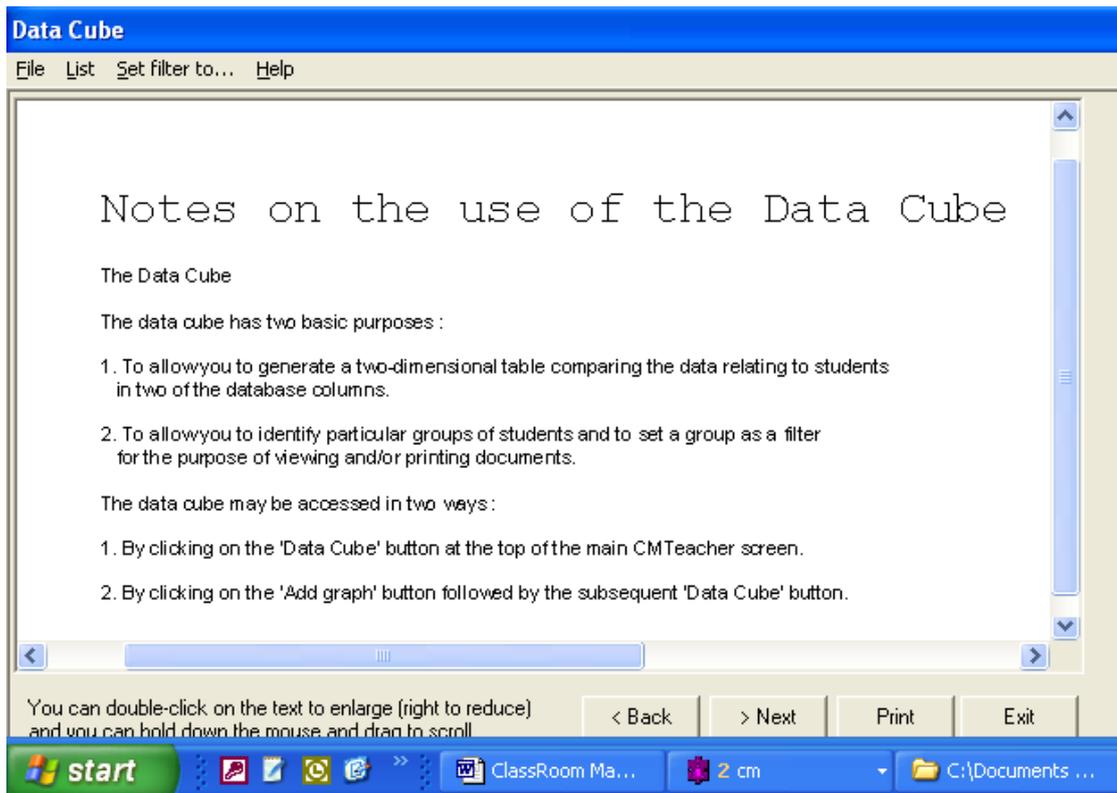
Figure 951: The 'Help' notes

Returning now to the basic possibilities for the cube….

In the first display at the beginning of this section we showed numbers of students in each cell. There are three other options, all displaying percentages in various ways – by row, by column and overall. The following three screen captures illustrate these.
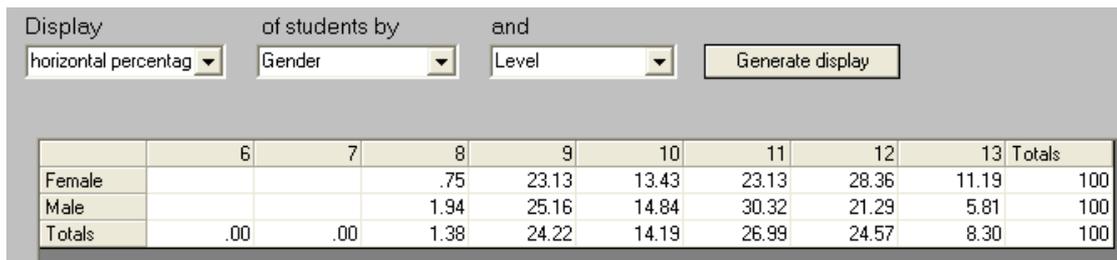
Figure 952: Horizontal percentages
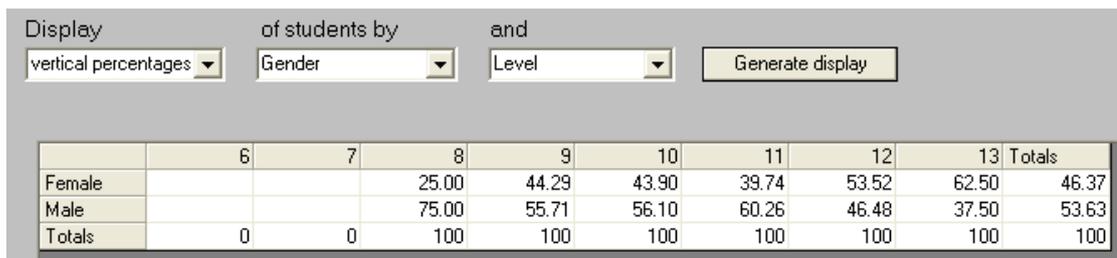
Figure 953: Vertical percentages
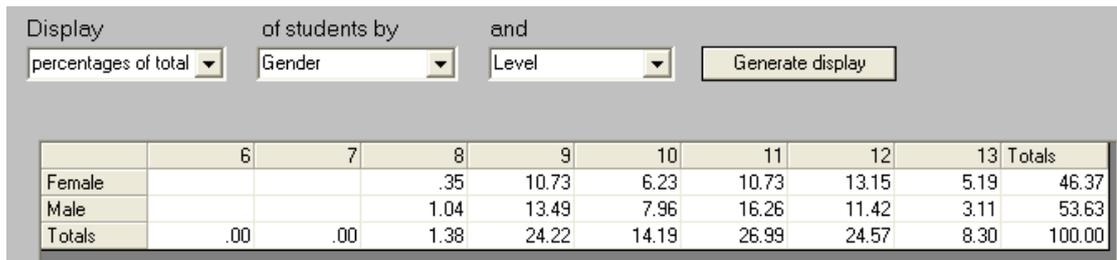
Figure 954: Overall percentages

The next possibility is found in the list of column options. The drop-down list (shown below) includes several basic choices. It also includes 'Select a column' via which you can base the analysis on any CM column.
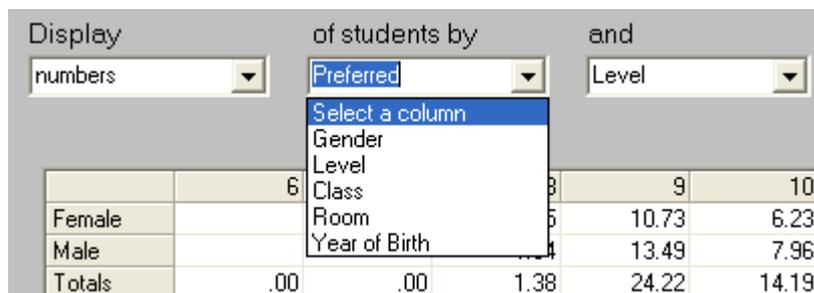
Figure 955: Selecting a column

To illustrate this, rather facetiously (*one of the few words in the English dictionary which uses all of the vowels in alphabetical order!), I have elected to analyse by the students' preferred names. A small part of the results of this analysis are shown below.

Figure 956: Preferred name by level

We can use this to find all of our Andrews….

Figure 957: All of the Andrews

If we choose to analyse by 'Year of Birth' then the results are as shown below.

Figure 958: Year of birth by Level

The green colour of the entries in the left hand column indicate that you can click on an entry here for further analysis based on the selected entry. As a result of clicking on a particular year, the students' months of birth are listed ...

Figure 959: A selected year

... and you can further refine these to the dates of a month by clicking on the month required, as shown below.

Figure 960: A selected month

28.4 Designing a scatter graph

The third section under the heading of graphs is the scatter graph. This is used to compare the results obtained by a particular group of students in two tests, generally in order to establish whether or not there is a relationship between their scores in the first test and their scores in the second test.

If a strong relationship is proven then the first can be used as a predictor of the second. In our example we shall compare the year 9 students class percentiles in PAT Reading Vocab and PAT
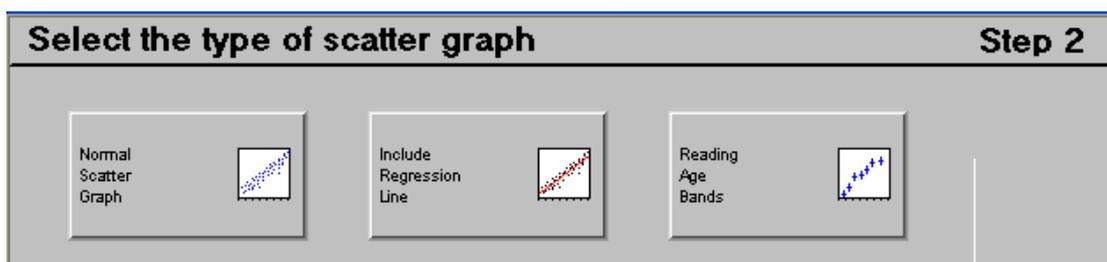
Figure 961: Selecting the type of scatter graph

Step 2 of design a scatter graph is to choose the type of graph required. There are three types of scatter graphs available. The first two are the same, except that the second includes the linear regression line on the graph. The third is a special case which plots students chronological ages against their reading ages.
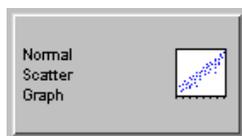
The first step is the specification of the X axis. This is much simpler than for a histogram. All you have to do is to :
- select the column holding that data
- indicate whether it is numeric or popup data
- set the minimum and maximum marks and the step size

An example of these is shown below.
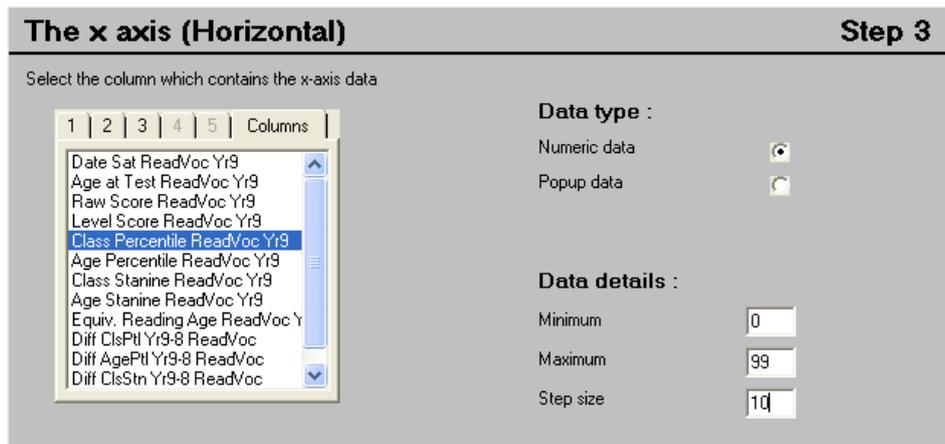
Figure 962: Selecting the X-axis

The second step is to specify the Y axis.
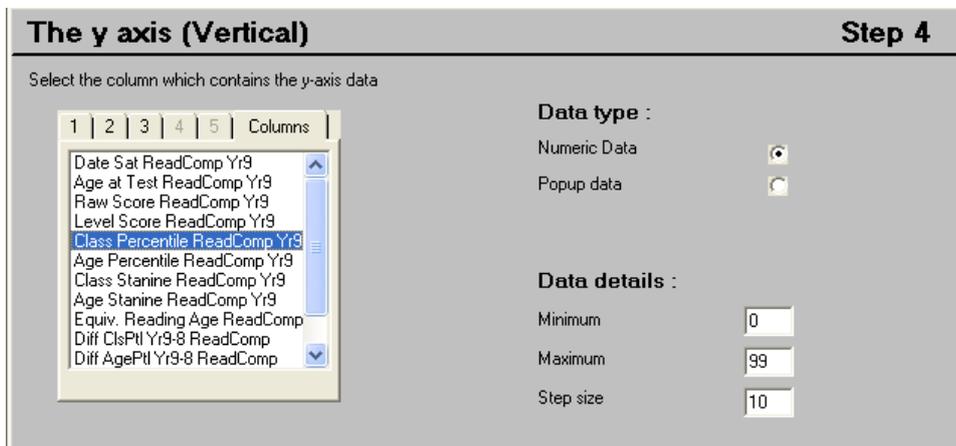
Figure 963: Selecting the Y-axis

This is exactly the same as for the X axis above.

The fifth step is to select the student whom you wish to appear on the graph using the student selection tool, as shown below.

Figure 964: Selecting the students

Finally, give your graph a name and a heading.

Figure 965: Giving the graph a name and title

An example of a resulting graph is shown below.
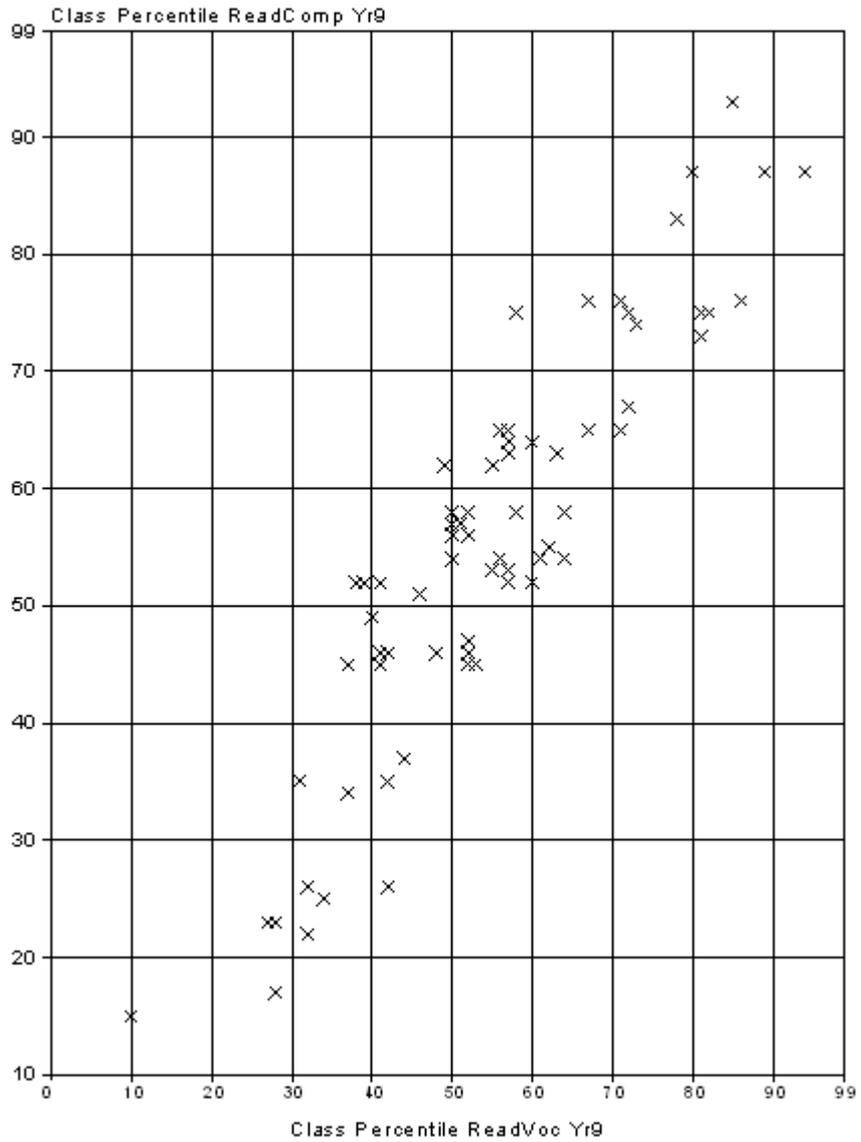
Figure 966: A scatter graph

Each cross on the graph represents one or more students, and you can identify which student or students are behind each cross by clicking on it. An example of such a 'click' is shown below.
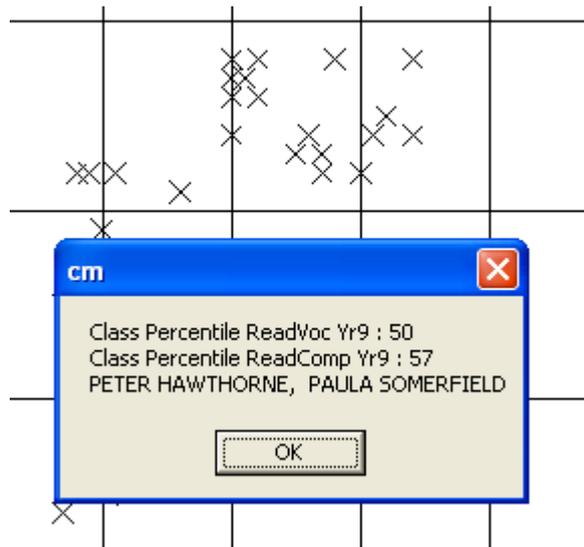
Figure 967: An individual spot on the graph
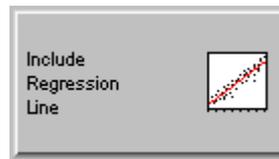
The process of designing a scatter graph with its regression line is exactly the same as for the scatter graph above. A reduced section of the equivalent graph is shown below, along with the statistical details at the bottom of the display.

Column	Number	Mean	Std.Dev
Class Percentile ReadVoc Yr9	70	54.99	16.83
Class Percentile ReadComp Yr9	70	55.49	17.78
Coefficient of Correlation : .91	Line of best fit : y = 0.96x + 2.48		
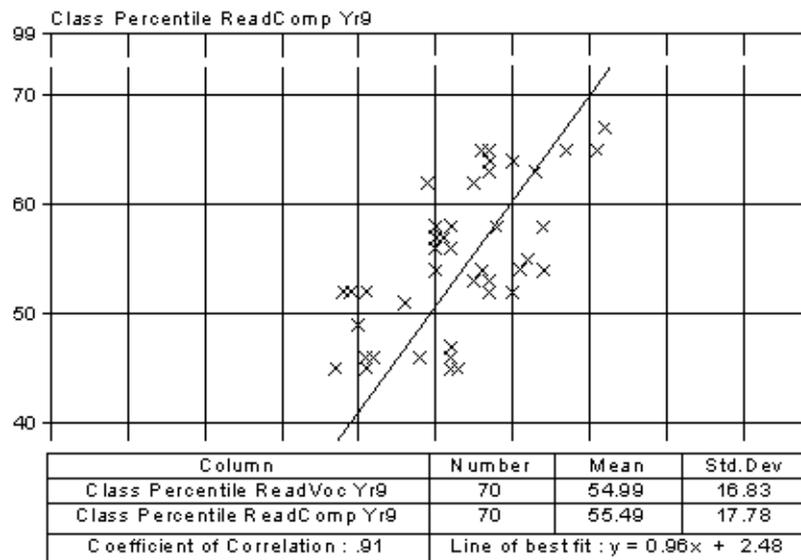
Figure 968: Scatter graph with regression line
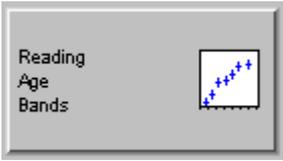
The third alternative is the special case of the students' reading ages vs chronological ages.

The specification of the X axis is shown below, where there are three alternative ways of determining the chronological ages. You select from :

1. You can set the date at which their chronological ages are to be determined
2. You can nominate a column which holds a date – perhaps different for each student – at which their chronological ages are to be determined
3. You can tick the third box which will cause the program to retrieve the students 'Age as at date sat' for the corresponding PAT test.

The screen for this is shown below.

Figure 969: Selecting the X axis calculation method

An example of the resulting graph is shown below. Each vertical line on the graph represents the reading age band, with a small circle at its center. The result of clicking in one of the small circles to identify the student(s) concerned is also shown below.
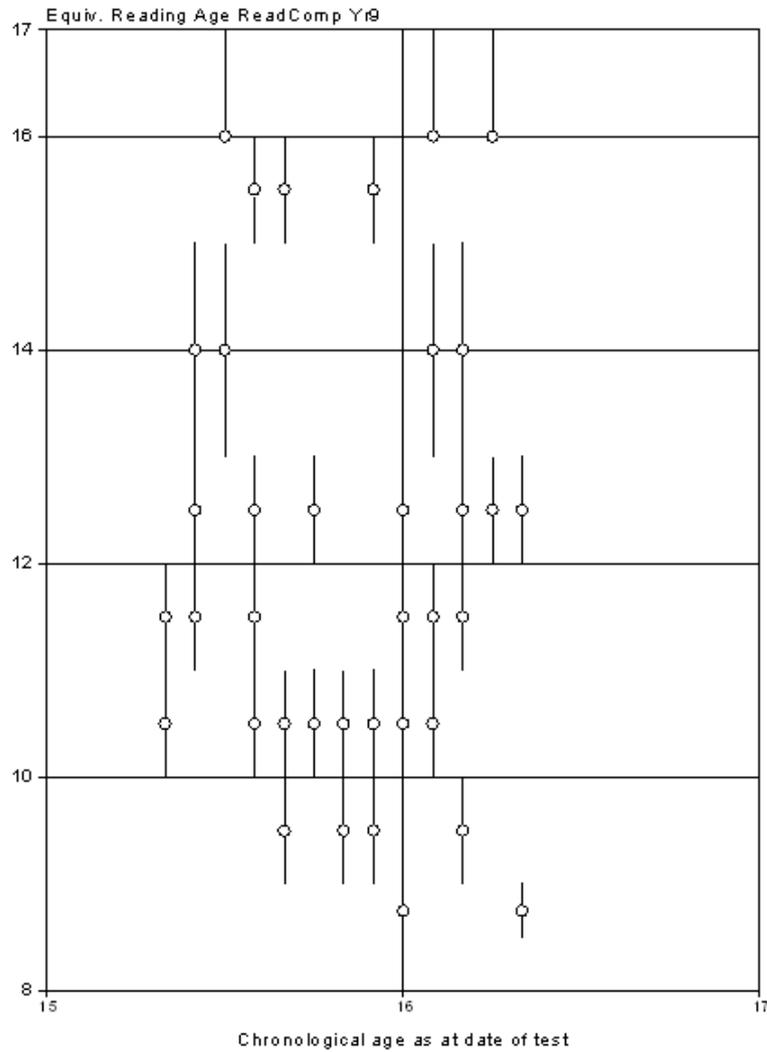
Figure 970: The reading age band scatter graph
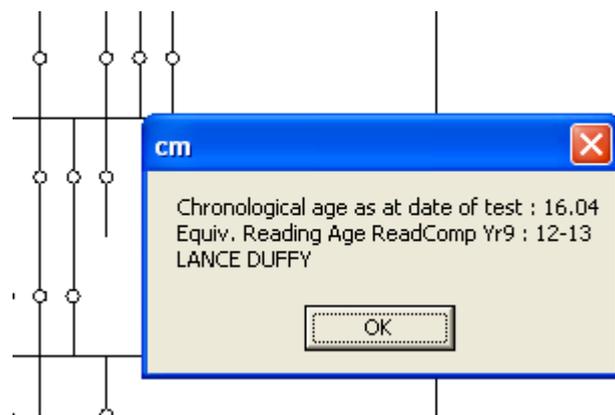
Figure 971: An individual's spot on the graph

28.5 Individual student graphs

This type of graph illustrates the progress of individual students through one or more tests in one or more subjects. There are three different versions available, the design process for which is accessed by one of the buttons shown below.
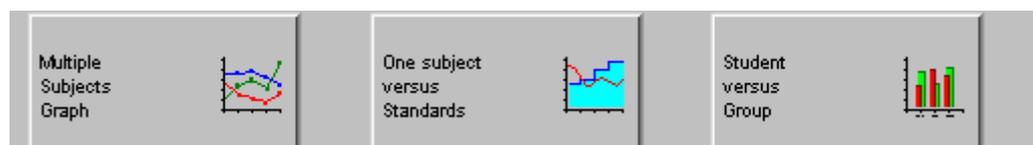
Figure 972: The three individual graph options

The individual graphs are a little different from the histograms and scatter graphs. Since they are based on the results for an individual student you cannot view them as a graph in their own right. They must be placed on a document before they can be viewed for a particular student.
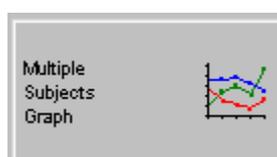
The first, the Multiple Subjects graph allows you to track the progress of one student through several tests in several subjects.

The first step in the process of designing this graph (which is actually step 3 – having decided on a type of graph, then the type of individual graph) is the specification of the Y-axis. This is done via the screen below, which has five options.

1. **Stanines** – possible values are from 1 to 9
2. **Percentiles** – possible values are from 0 to 99
3. **Percenatges** – possible values are from 0 to 100
4. **Custom numerical** – set up your own number range and step size
5. **Custom other** – set your own number of steps and step value
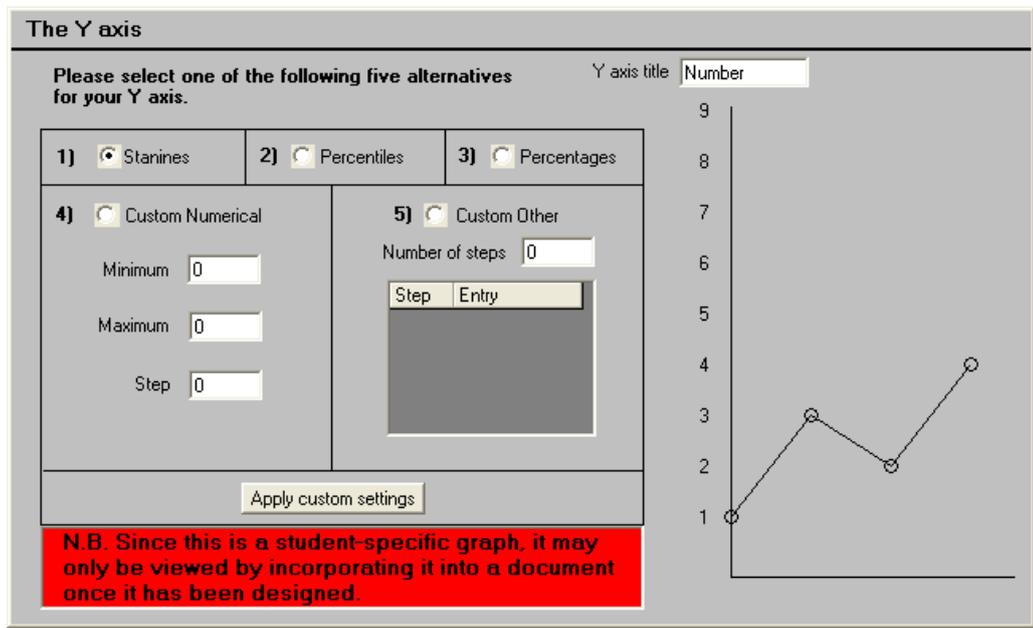
Figure 973: Defining the Y-axis

The example above shows the configuration for the first option – stanines, and that below shows a custom numerical selection.
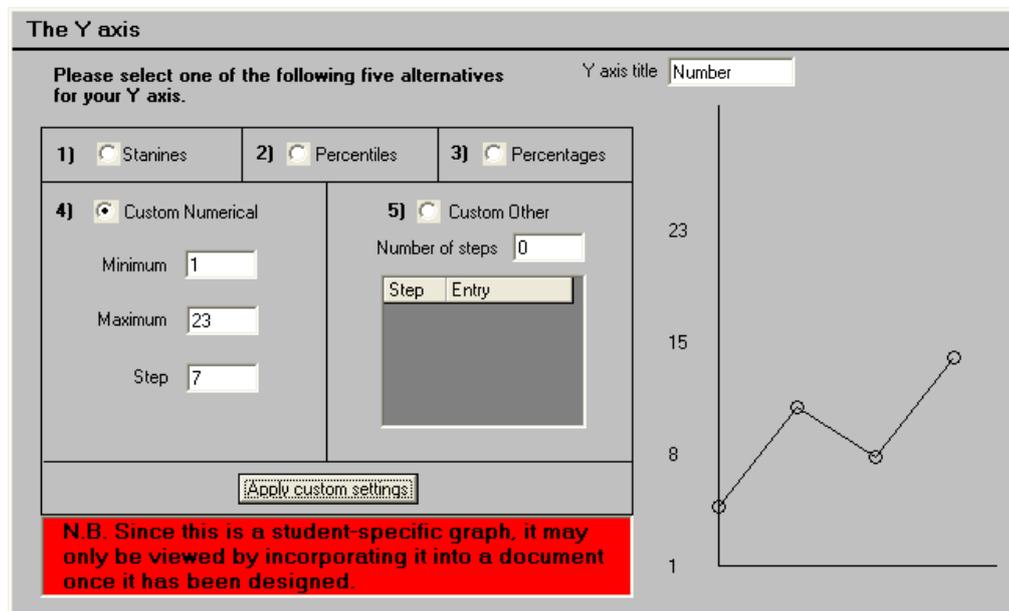
Figure 974: The 'Custom numerical' version

The next step is the specification of the X axis, the screen for which is shown below.
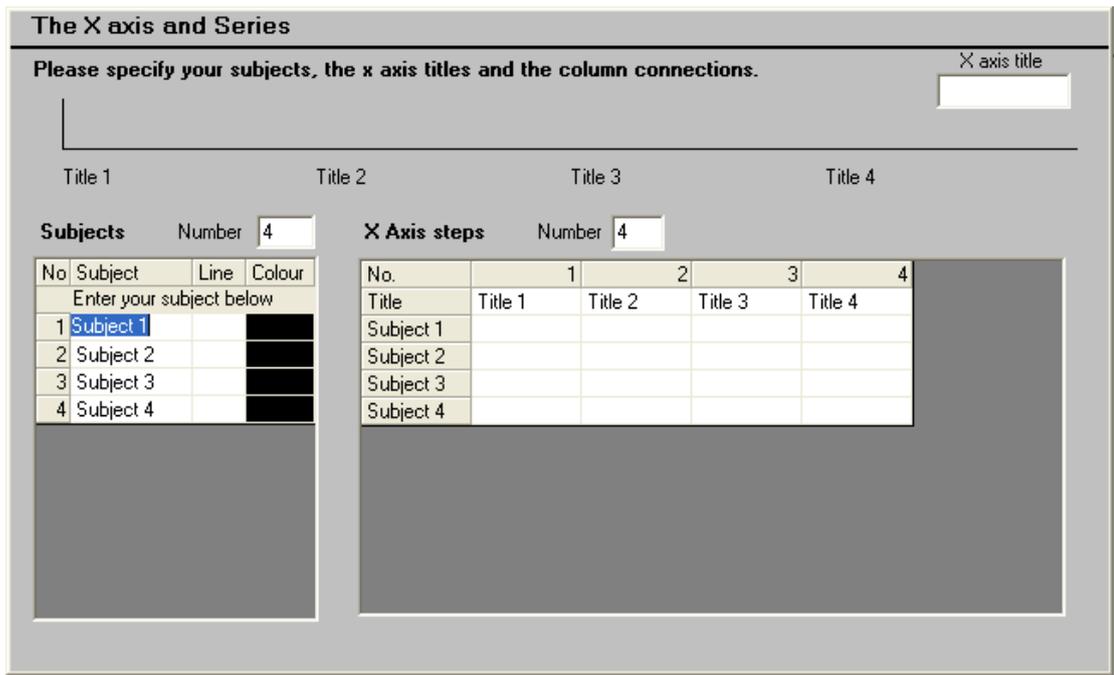
Figure 975: The X-Axis screen

In the left hand panel you must specify your subject names, their colours and their line formats. In the example for this user guide four PAT subjects have been nominated and, in the illustration below, their colours are being allocated. To allocate a colour, click in the colour cell then select the required colour from the resulting popup palette.
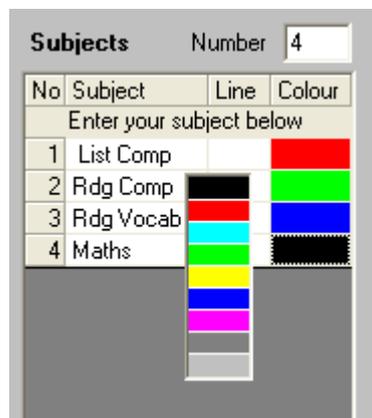
Figure 976: The subjects and colours

To select their line formats, click in each line format cell, then select from the range which is subsequently displayed. In the example below, three formats have been selected and the fourth is about to be selected.
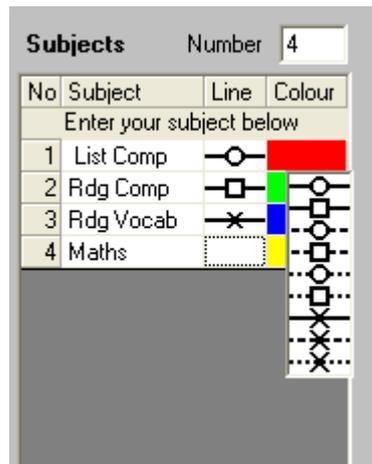
Figure 977: The line choices

Next, in the right hand panel, you must click in each cell, then select the column which holds the students' results which are to be used for the display. In every case, in this example, the column is a Class Stanine from a different PAT test / year.
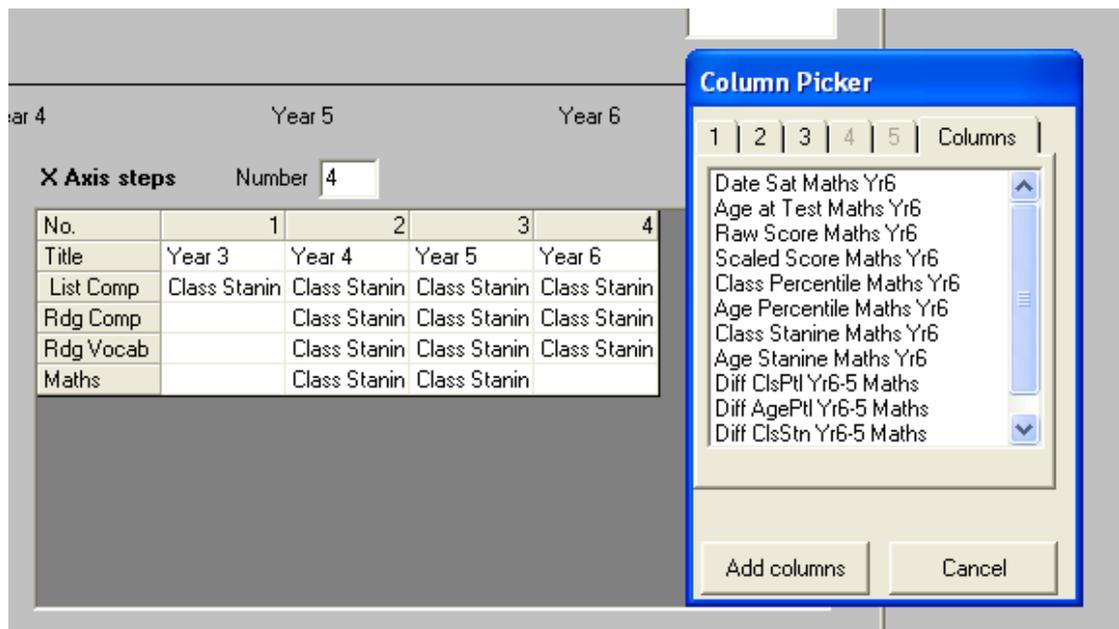
Figure 978: Connecting to the columns

The completed specification, including the X-axis title in the top right hand corner, is shown below.

Figure 979: The completed X axis specification

In fact, the program objected when an attempt was made to save these settings, as three of the cells are empty. It happens that no tests exist for these cells, so a solution was found – each was connected to a null column, created for the purpose, which would never hold any values.

This brings us to the final step, which, as usual, is to give the graph a name.

Figure 980: The graph gets a name

Now that the graph has been designed, you are naturally keen to select it, to see its presentation. If you do so, the result will be rather puzzling, as shown below.
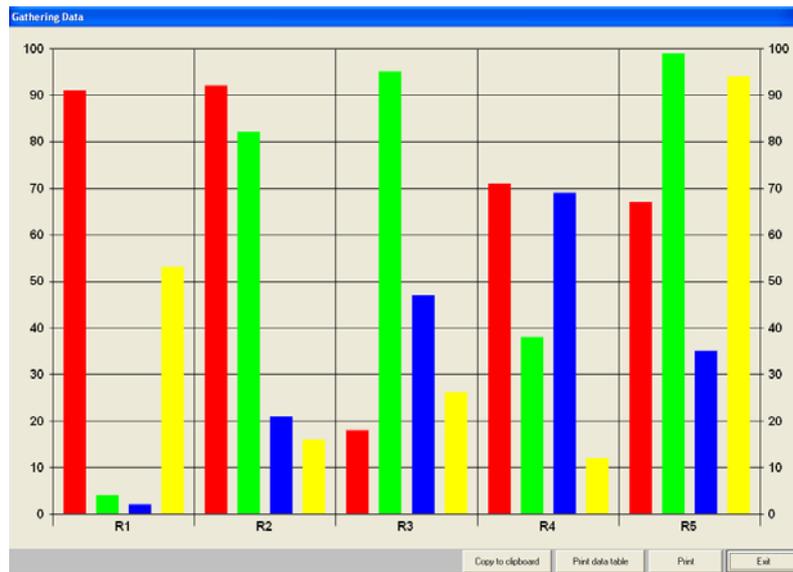
Figure 981: The – 'blank' graph with random results

This is the result of attempting to view a graph which is not designed for this type of display – it is a 'sample' histogram of random data. To implement our graph we have to embed it in a document, so we shall return to our base document, change its second title, drag out a 'graph' object, and connect it to our graph. All of these steps are displayed in the illustration below.
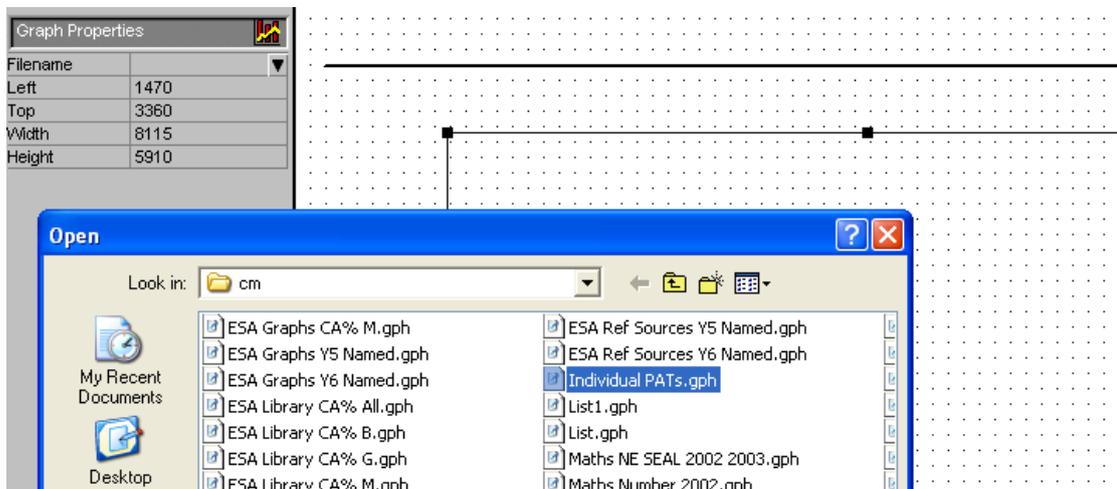
Figure 982: Including the new graph in a document

Now we can view the document for a particular student, and the results are there to see.
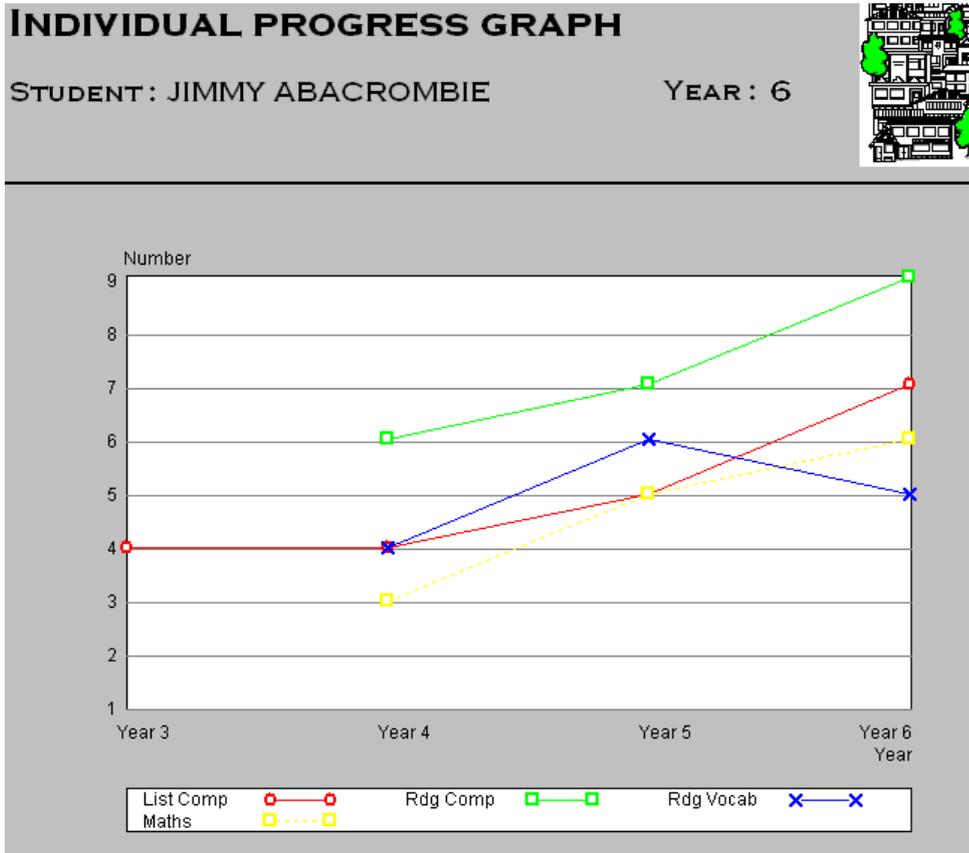
Figure 983: The individual graph – version 1
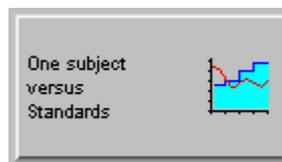
The second type of individual graph is the 'One subject versus standards' version. The graph will, for each test in the chosen subject, display both the student's score (in the foreground) and a 'group' result (in the background).

Its design process is very similar to that for the previous version, with the exception of the specification of the X-axis. This process is shown in the following illustration, where you will see that there are five possible alternatives to have displayed as the 'background' information.

Figure 984: Setting the X-axis for version 2

In the example above the axis title has been set (to 'List Comp'), the four year titles have been set, and the four column connections to the four Class Stanines for the four years have been set.

The first option has been chosen, to have the 'background' result for each year to be the mean result for the whole dossier (i.e. the current filter) for each test concerned.

The alternatives are :
- The mean score for all students in the current filter in each test
- A 'Standard' result, which you must supply, as shown below

Figure 985: Setting the 'standard results

- The mean result for all students in the current student's Form or Class
- The mean result for all students in the current student's Group or Room

The mean result for all students in the current student's Option class – available only if the results have been extracted from an Electronic Markbook column

Once designed, the graph must be saved, then attached to a document in the same way as the previous version was. It can then be viewed for a particular student and an example of this is shown below.
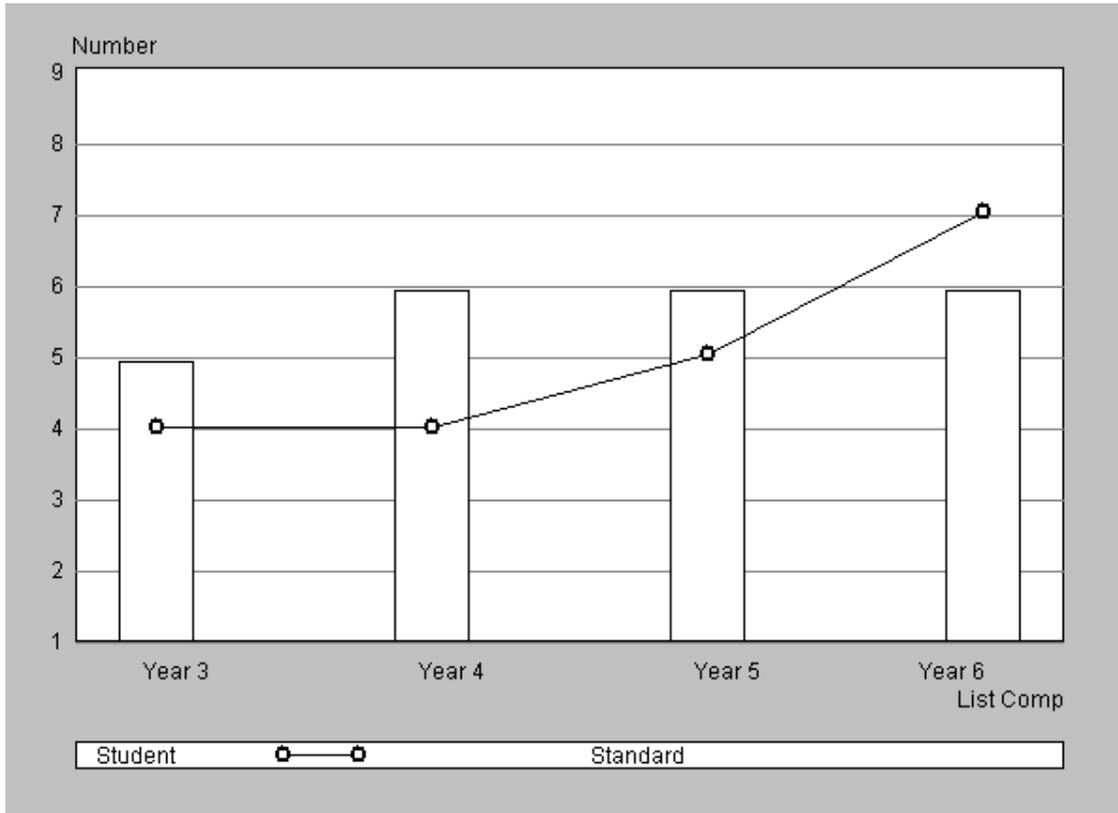
Figure 986: An example Individual graph version 2

The third and final version is the 'Student versus Group' graph which shows a snapshot, presumably at one time, of a student's result in several subjects against the group average results in the same tests. The method of specification is, again, virtually identical to that for the first two versions.

An example of the third version is shown below, where the students results are shown in the small circles and the group results are shown by the background bars.
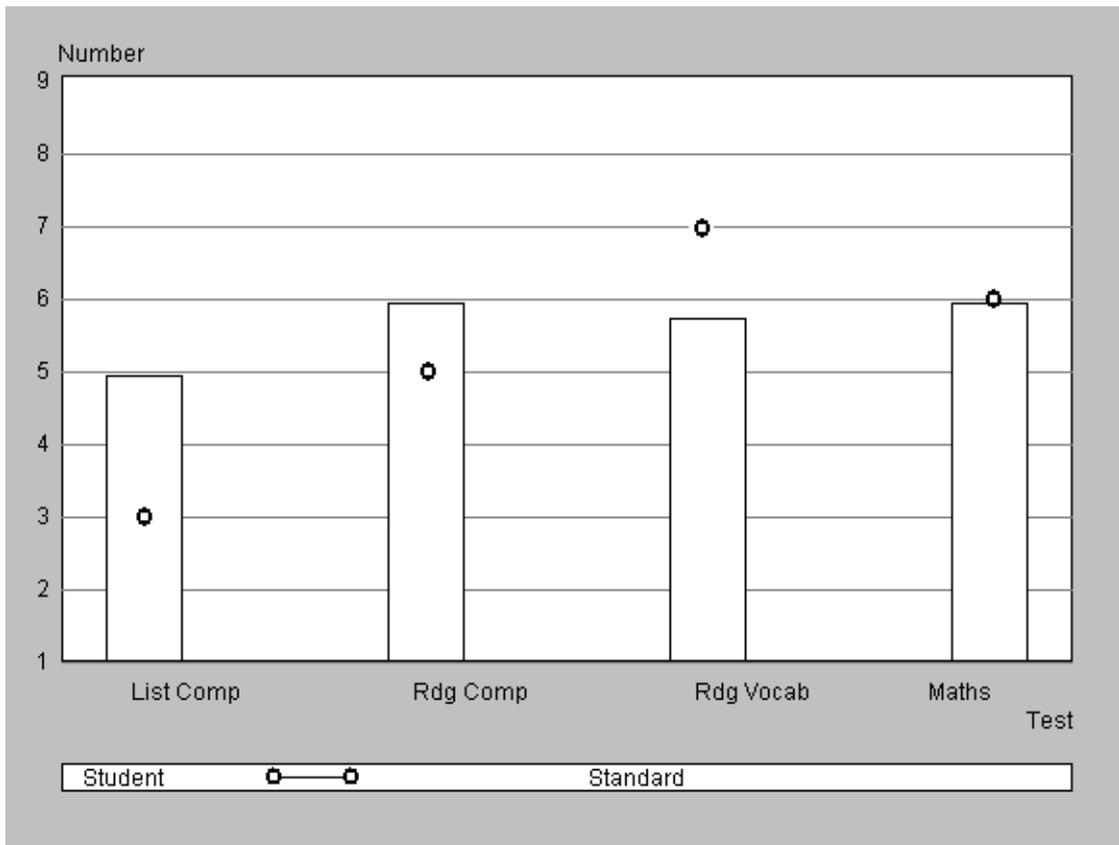
Figure 987:Individual graph version 3

28.6 Designing data tables

This type of 'graph' is a two dimensional table which presents the cross-referenced results of the entries in the row and column headings. These charts are very popular, particularly with our Auckland agents (Edtech Ltd) who use them extensively with their schools.

The text originating from the CMTeacher guide covers a few selected possibilities provides sufficient guidelines to enable you to generate them all.

Before we begin, look at a simple table below which we'll design as an example. This table is used to analyse the progress of students through a particular area of the curriculum. In this example we will be looking at Mathematics : Number, one of the Curriculum Framework Mathematics strands.

	1	2	3	4	Total
Yr1	10				10
Yr2	7	3			10
Yr3	2	7	1		10
Yr4		8	2		10
Yr5		3	7	1	11
Yr6			9	2	11

Figure 988: A table of results

This table displays the progress of a few of our Year 6 students as they moved through the various levels during their first six years of schooling.

Before we begin designing the table, let's explain how the Curriculum Framework Best Fits columns can be used to record the progress of some of the students at each level. Data on roughly ten students at each level has been entered, as this is sufficient to produce meaningful results.

The Best Fit columns are provided as part of Curriculum Framework for you to use if you so wish. They are categorised as follows.

Curriculum Framework
        Subject (e.g.) Mathematics
                Strand (e.g. Number)
                        Best Fits 1
                                Year 0
                                Year 1
                                . . .
                        Best Fits 2
                                Year 0
                                Year 1
                                . . .

Each Strand has two sets of Best Fit columns, each set containing nine columns ranging from year 0 through to year 8. Each column may be used to record the LEVEL at which each student is studying the strand of the subject for the particular year in question.

The following diagram shows a quickly generated data entry document which, while not particularly beautiful, serves the purpose of data entry. You will notice the 'primitive' use of databoxes at the top to display the student's name and year etc.
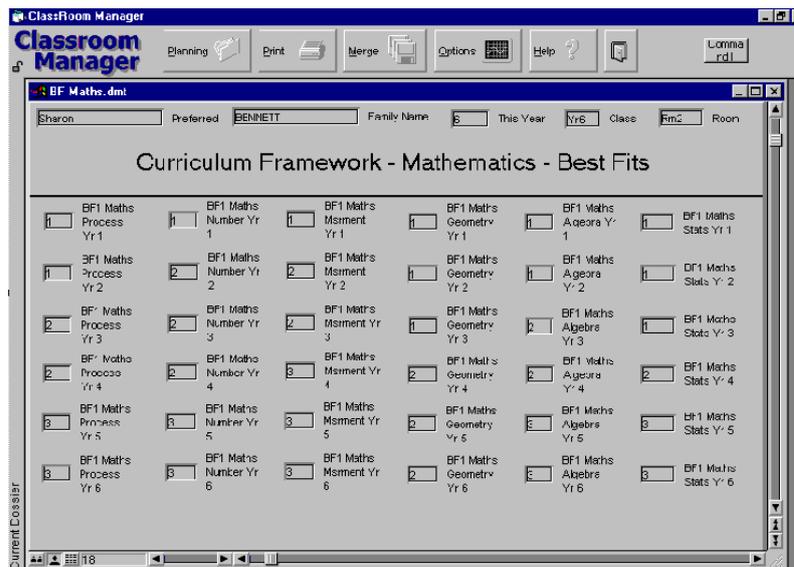
Figure 989: A data entry document

On the document you can see six years have been included for each of the six mathematics strands.

You can also see the progress of this particular student, who, if you examine the first column (Process), you can see spent two years studying at each level. This is the normal rate of progress. She moved ahead a little faster in 'Measurement' but, apart from that followed a very typical pattern of progress.

It is possible, instead of just using the entries 1, 2, 3 etc as the level being studied, to break these down into eg. 1Bg, 1Ac, 1Ms (for 1-beginning, 1-Achieved, 1-Mastered) or any other means of measurement which you might prefer.

Figure 990: Data entry via grid mode

Entry was done via grid mode to simplify data entry, narrowing the columns and inserting spacer columns, as shown above. Again, as you can see, data has been entered on only about ten students at each level. (To enter the data, I began at level 6 (filtered applied to 'Class'), entered the data, then filtered for Year 5, and hiding the last columns in each group, before entering the second bunch…. and so on.)

Finally, before we move on, let's take a quick look at the final results of data entry.

Here we have all students visible again and you can see, in the illustration below, that year 1 students have a single entry, year 2 student have 2 entries, and so on.

Configure	This Year	Class	Room	BF1 Maths Process Yr 1	BF1 Maths Process Yr 2	BF1 Maths Process Yr 3	BF1 Maths Process Yr 4	BF1 Maths Process Yr 5	BF1 Maths Process Yr 6
AFAMASAGA, JENNY	6	Yr6	Rm2	1	1	1	2	2	3
ALLAN, JIMMY	4	Yr4	Rm15	1	2	2	3		
ANDERSON, Naire	4	Yr4	Rm14	1	1	2	2		
ANDERSON, Sammy	4	Yr4	Rm15	1	1		2		
ARCHER, Ron	6	Yr6	Rm2	1		2	2	3	3
ARCHER, Jeff	4	Yr4	Rm14	1	1	2	2		
ARCHER, Kendal	2	Yr2	Rm11	1	1				
ASHDOWN, Ken	1	Yr1	Rm8	1					
ATTEBURG, Sandy	3	Yr3	Rm13	1		2			
ATUTAHI, Tim	1	Yr1	Rm6	1					
AUGUST, Matt	4	Yr4	Rm14	1	1	2	2		
BANG, Graham	4	Yr4	Rm15	1	1	2	2		
BANG, Kieran	2	Yr2	Rm10	1	1				
BARKER, William	3	Yr3	Rm12	1	1	1			
BARKER, Hiraina	2	Yr2	Rm10	1	1				
BARRACK, Sonja	2	Yr2	Rm10	1					
BARRETT, NICHOLAS	1	Yr1	Rm8	1					
BENNETT, Sharon	6	Yr6	Rm2	1	1	2	2	3	3
BENNETT, Claire	2	Yr2	Rm9	1	2				
BEST, Harry	2	Yr2	Rm11	1	1				
BEYERSBERGEN, Rory	5	Yr5	Rm3	1	1	2	2	3	
BILSBORROW, Sheely	4	Yr4	Rm15	1	1	2	2		
BILSBORROW, Anneke	6	Yr6	Rm1	1	1	1	2	2	3
BRADNOCK, Fiona	3	Yr3	Rm12	1	1	1			

Figure 991: Data entry using grid mode

Now let's return to the process of designing the table.

Step 2 The type of table

(Step 1 was when we chose to design a Table)

The first screen offers you a wide range of types of tables to produce. There are three main types of table :

1. **Progress Tables** - These tables illustrate the progress of a group of students measured against the possible levels of attainment as they move through their years at school.
2. **Current Attainment Tables** - Current attainment tables illustrate the current levels of attainment of all levels of the school.
3. **Current Attainment (1 year) Tables** - These tables illustrate the current levels of attainment of a particular year group.

Each of these is available in four alternative presentations :

1. Frequency tables
2. Percentage tables
3. Quartile frequency tables
4. Quartile percentage tables

There is a fifth type of table – the 'Cell by cell' table, which we shall meet at the end of this section.

The choice of table type is made via the following screen.

Figure 992: The choice of table type

28.6.1 Progress Tables

Our first example is a simple Progress Table.

You can produce **Frequency Tables** (which display the head count of students in each cell) or **Percentage Tables** (which display the percentage of students in each cell. If you select the latter then you may also nominate the basis on which percentages are calculated : either as percentages of the entire group of students or of just those who have been displayed. (Some students in the group might not have results). To design a frequency table select from the left hand side, and to design a percentage table, select from the right hand side of the window.

You may also elect to generate **Standard Tables** where you specify the column headings (choose from the top half of the window) or you might prefer **Quartile Tables** where the column headings are the four quartile groupings and the headings are set for you (choose from the lower half of the window).

Step 3   The cell details

The row and column headings, and other details, are specified via the screen in step 3, as shown below.

Figure 993: Specification of rows and columns

The screen is divided into two. The top half relates to the column headings for our table and the bottom half relates to the row headings.

The column headings

Referring back to the sample shown at the start of this chapter, you can see that the column headings are the levels at which students are studying our topic.

Figure 994: The column headings

For our example, four headings have been set in the top row. The second row is where you specify what is sought in each column (we'll specify the columns shortly) in order for a student to be counted under that heading. The four possibilities are, of course, the scores 1, 2, 3 and 4.

To specify the score 'sought' click in a 'Sought' cell and a small panel appears, allowing you to enter simple or complex possibilities. In the example below, the single score of '4' has been entered but, as indicated at the top of the panel, you can also enter a range or a series of possibilities.
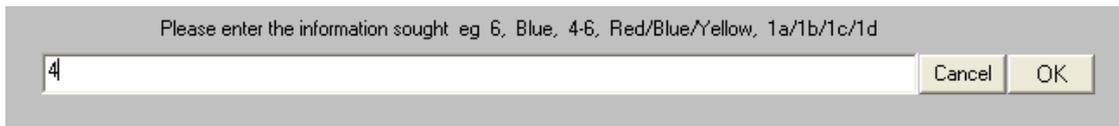
Figure 995: Entering the score(s) sought

The contents of a 'Sought' cell might be quite complicated. In our case, of course, we are looking for just a single digit, but you might wish to enter :

- a range: e.g. 5-7
- a string of possibilities: e.g. red/blue/green/yellow

When you have made each entry, click 'OK' and the left hand end of your request will be visible in the cell.

The row headings

The second half of the screen is where you specify the row headings, and the column in which to search for the scores specified in the 'Sought' cells above.
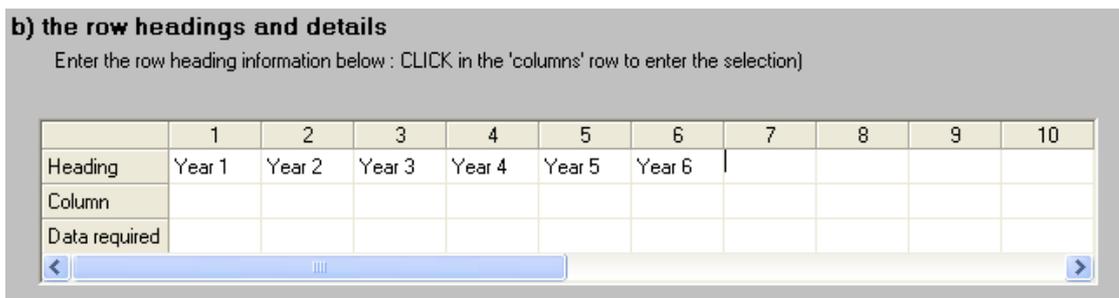
Figure 996: Specifying the row headings

In our case the headings are straight forward. We wish to see where our group of students were when they were in each of the Year levels 1 through 6, as they progressed through their years at school.

The scores corresponding to each of these years are now held in the corresponding columns. When you click on a column cell, the **top** half of the screen is replaced with our column selector tool, as shown below.
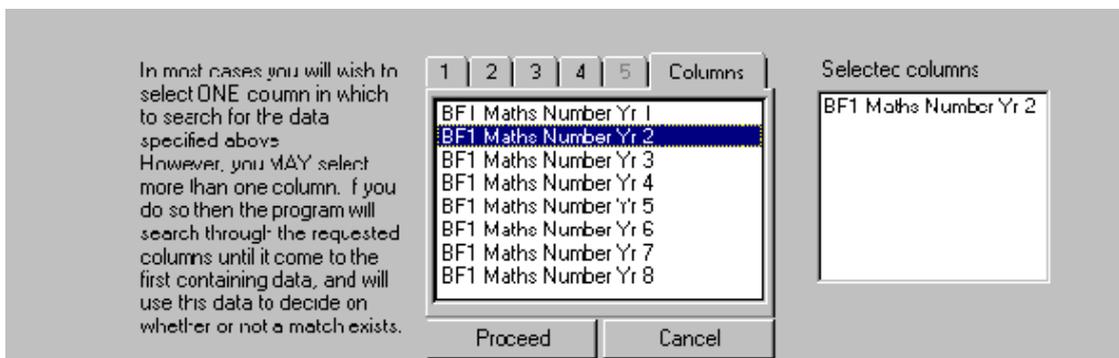
Figure 997: The column selector

A message to the left of the wizard indicates a rather special possibility - requested by one school in Auckland through our Auckland agents - EdTech. You MAY specify more than one column! You may wish to scan through each of the columns until you come to one containing data. If this is your case, then enter the columns which you require.

We, however, just require one for each possibility. For those scores applying to students when they were in year 1, the column below ahs been selected.

Curriculum Framework
        Mathematics
                Numbers
                        Best Fits 1
                                BF Maths Number Year 1

and the corresponding other columns have been selected for the corresponding other five possibilities.

There is a further row title 'Data Required'. Discussion of this will be postponed until after we've viewed the table currently being designed, at which point the purpose of the 'Data required' option will become clear.

b) the row headings and details
Enter the row heading information below : CLICK in the 'columns' row to enter the selection)

	1	2	3	4	5	6	7	8	9	10
Heading	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6				
Column	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math				
Data required							☐			

Figure 998: The completed row specifications

Before leaving this area, you might like to click on the 'View Example' button which results in an explanatory overlay on the screen where the purpose of each entry is explained in some detail. When you have finished viewing this screen, click on the 'Cancel' button and it will be hidden.
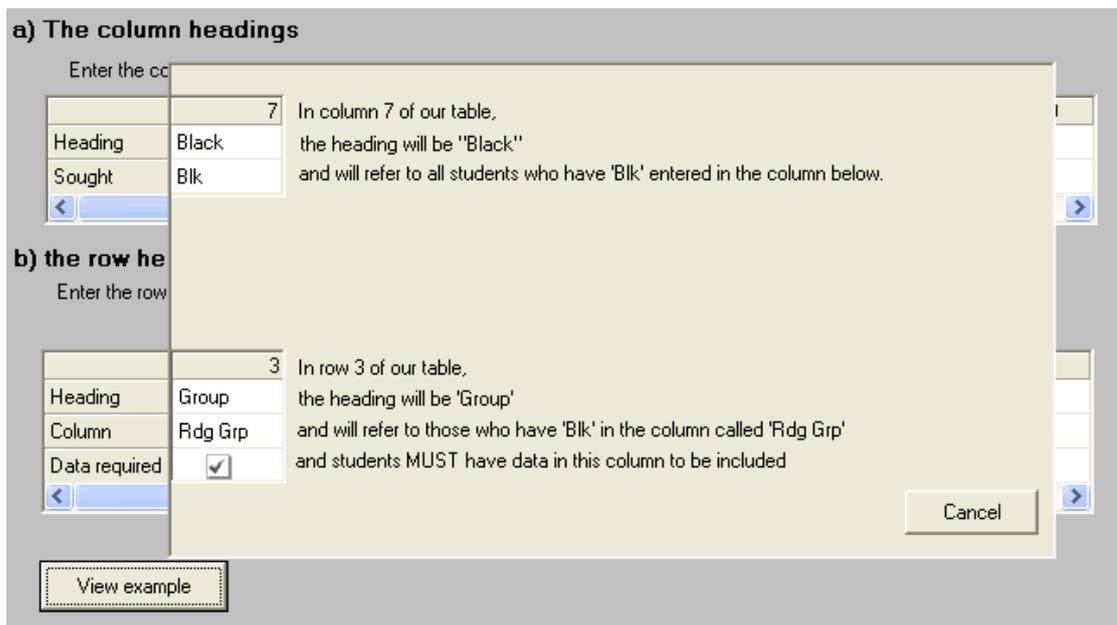
Figure 999: The explanation screen

That completes the specification of the rows and columns.

Step 4   Selection of the students

We are interested in just the Year 6 students, so, on the student selector which appears, 'Year 6' has been selected, as shown below.
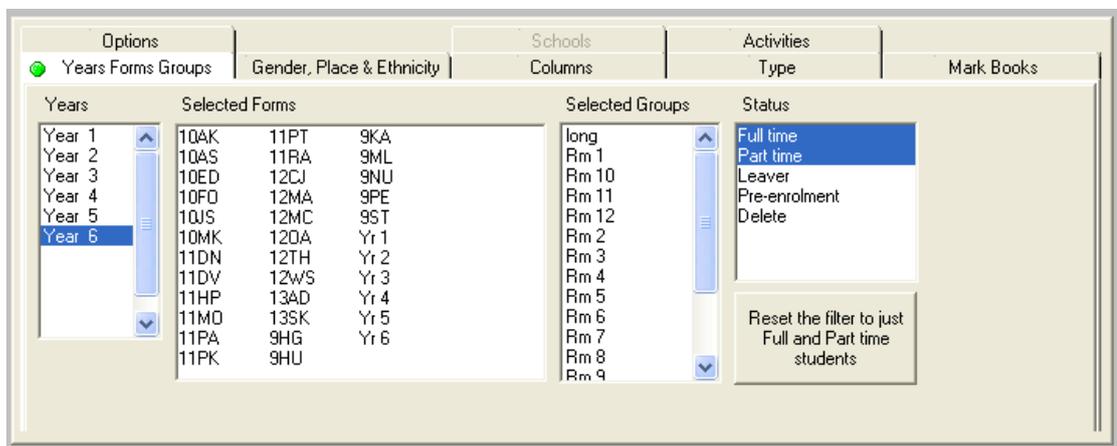
Figure 1000: The selection of students

Step 5   The Table name and headings

The final screen is similar to that in other areas of the design wizard which we've already met.

The first line is the file name of the table under which it will be saved (as a 'graph') by which you will recognise it on the slide menu.

Figure 1001: Naming your table

The rest of the lines are for your use to describe your table. It is possible that you do not enter a description, as you wish to embed the table directly into another document which will, itself, provide the description of the table.

Save the table (or 'View without saving', and select the new graph from the menu list. A typical result, albeit for a very small group of students, is shown below.

Figure 1002: A progress table

When the students were back in Year 1 there were only 10 of them and they were all studying at level 1.

By the time they'd reached year 3, two of them were still at Level 1, seven had progressed to level 2, and one had reached level 3.

In Year 5 a further student joined the group. If you had wished to include in the table only 'those who had been there all the time', ie. those who had data in every year, then you must use the 'Data Required' cells. To demonstrate this we must edit the existing table. Right-click on the new graph in the menu list and select 'Edit'. Next, proceed through to Step 3 again. Now click on each of the 'Data Required' cells. As you do so a check box appears indicating that each student must have data in this cell in order to be included in the table.
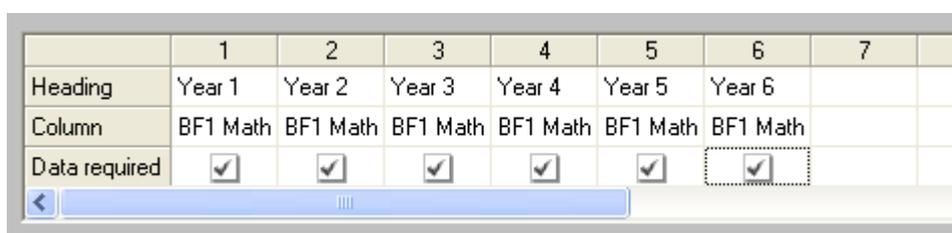
	1	2	3	4	5	6	7
Heading	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Column	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math	
Data required	✓	✓	✓	✓	✓	✓	

Figure 1003: The addition of the 'data required' option.

Save the table again, this time, perhaps, giving it a slightly different name. The result of the 'data required' specification is shown below.

Progress in Numeracy

	Lev 1	Lev 2	Lev 3	Lev 4	Totals
Year 1	10				10
Year 2	7	3			10
Year 3	2	7	1		10
Year 4		8	2		10
Year 5		2	7	1	10
Year 6			8	2	10

Figure 1004: Progress, with 'Data required'

This time, we have ten students throughout as the extra student was omitted from the later rows as he or she had no data in the earlier ones.

28.6.2 Current Attainment Tables

In the previous example, Progress Table, we were concerned with examining the progress of a particular group of students, our year 6 students, as they moved through the school. We reported on where these students were at when they were in each year group.

This time we are interested in looking at the whole school, seeing where each **CURRENT** year group is working now.

Let's edit the previous table, as we did a few moments ago when we changed the 'Data Required' status. We will have to turn these OFF again this time, as all but the Year 6 students will NOT have data in each column.

Returning to Step 2, select 'Current Attainment', the second button in the top row. As you do so you will be asked whether or not you wish to 'forget' all of the row/column specifications which went with the previous definition.
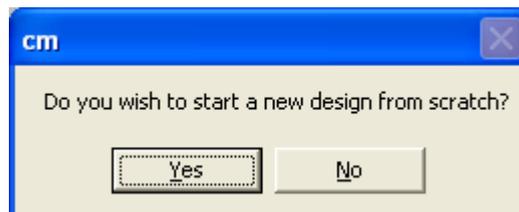
Figure 1005: Are you designing a completely new table?

The answer is 'No', as we wish to retain the previous design. In Step 3 a new line appears in the column design area. This new bottom row asks which Year Group you wish to include when counting each combination of row/columns.

In the example below the year levels have been entered, indicating that the first row, which checks attainment in Year 1, should only include those students actually currently in year 1, and so on.

b) the row headings and details

Enter the row heading information below : CLICK in the 'columns' and 'Data required' rows to enter the selection

	1	2	3	4	5	6	7	8	9	10
Heading	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6				
Column	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math	BF1 Math				
Data required	Data required is not applicable to Current Attainment tables									
Year	1	2	3	4	5	6				

Figure 1006: Specification of row headings.

You will notice that the 'Data required' boxes are no longer visible as they are not relevant to this version of the table.

In Step 4 we are no longer interested in just Year 6 students. This time we wish to check the whole school (bearing in mind of course that data has been entered for only about ten students at each year level.) In the illustration below the selection of a particular year has been cancelled – leaving the selection as 'All students'. In fact, the default setting has been accepted which is 'All full- and part-time students.)
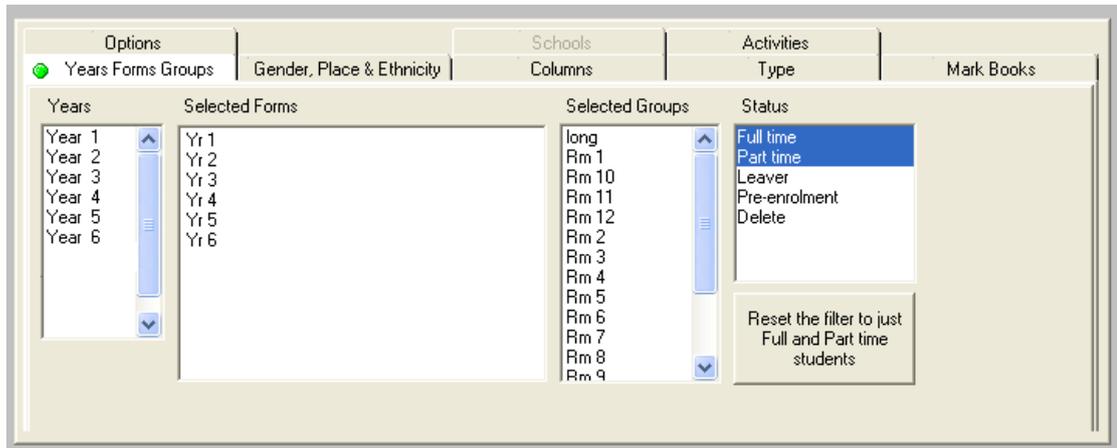
Figure 1007: Selection of 'All' students

In Step 5 the table has been given a new name, and one of the rows of the heading has also been changed to read 'All Students' instead of just 'Year 6 students.'
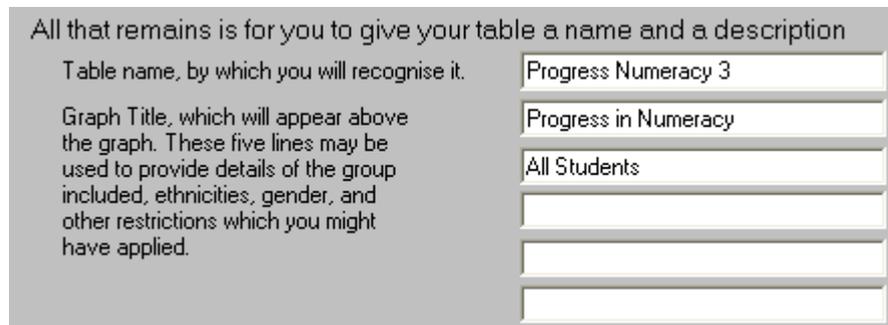
Figure 1008: The changed headings

Finally, after saving and selecting, the new table appears, as shown below.

Figure 1009: The Current Attainment table

In the table, it can be seen, for example, that the current year one students are all working at Level 1. Eight of the Year 2 students are also at level 1, but one has progressed to level 2.

28.6.3 Current Attainment (1 year)

The third and final type of table enables you to examine, for example, all of the mathematics strands on one table, reporting on where each of one particular year level is currently working.

Step 2   This time we select the third button, Current 'Attainment (1 year)' and, again, we'll retain the existing design, in order to make some changes to it.

In Step 3 we must make some major changes.

The first changes are to the row headings, which are changed to the strand titles, as shown below.

Figure 1010: The new row headings

Selecting the columns turns out to be a little awkward, as you must fuirst remove the existing selections – either by reselecting them or by using the cancel button to remove them. Fior the example, we shall examine the Current Attainment of the Year 4 students in each area of Mathematics. Consequently, we must select the columns by navigating to :

Curriculum Framework
       Mathematics
              Process
                     Best Fits 1
                           Year 4

for the first column, then to the corresponding column for Number for the second column, to Measurement for the third, and so on.
In step 4 the table requires a new name and a new heading.

Figure 1011: The table headings

The resulting table appears as shown below.

Figure 1012: Current Attainment (1 year)

The table indicates that, in Process, eight of the Year 4 students are currently working at Level 2 and two have progressed to Level 3. When you get down to Statistics one student is still at Level 1, while the rest are working at Level 2. None have yet reached Level 3.

This completes our examination of the three main types of table. Now we shall look at the other two variations of these, the percentage versions and the quartiles versions. As these are all rather similar, we shall just deal with Progress Tables and will produce one example of each.

28.6.4 Percentage Progress Tables

To demonstrate this we shall return to the example, edit it, and change the s Step 2 selection to the first button in the top row on the right hand side, as shown below.

Figure 1013: Percentage tables

All other details (except perhaps the headings) remain the same. And the final result now displays the percentage of each year level working at each level (in Number).

Figure 1014: The completed percentage table

28.6.5 Quartiles Progress Tables

To demonstrate this one we must refer to different data. Quartiles Tables report on the number of students in each quartile, assuming that the results are percentiles! To find some percentiles we shall refer to PAT results / Listening Comprehension/ Class percentile.

Figure 1015: Selection of the Quartiles table

When we arrive at step 3 you will find that the rows and columns have already been specified, reflecting the four quartile ranges.

For the columns we use the column selector to find two columns which contain percentiles….
- PAT / Listening Comprehension / Year 3 / Class Percentile
- PAT / Listening Comprehension / Year 3 / Age Percentile

… and the row headings are labeled accordingly, as shown below.

Figure 1016: Row and column headings for a quartiles table

In step 4 just the Year 3 students have been selected and in step 5, suitable headings have been entered.

Progress in Listening Comprehension
Quartiles
Year 3

	Lower Quartile	Below Median	Above Median	Upper Quartile	Totals
Class	6	15	31	25	77
Age	29	24	12	12	77

Figure 1017: A quartiles table

The distributions are not similar, the first being skewed towards the top and the second towards the bottom. Again, this is probably a reflection of the fact that the data was entirely fictitious.

28.6.6 Cell by cell tables
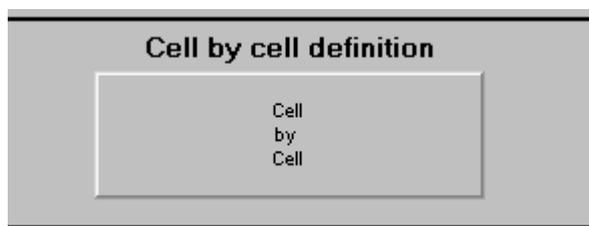
The 'Cell by cell' version of the data table allows you to specify a separate filter for each cell of the table. Along the way you can shade individual cells and customise the table to your own needs. The illustration below shows the basic cell by cell screen.

For the demonstration we shall analyse the performance of the basic five ethnicity groups (the ones used for many years by the Ministry of Education) in their Year 9 PAT Maths Class Percentile.
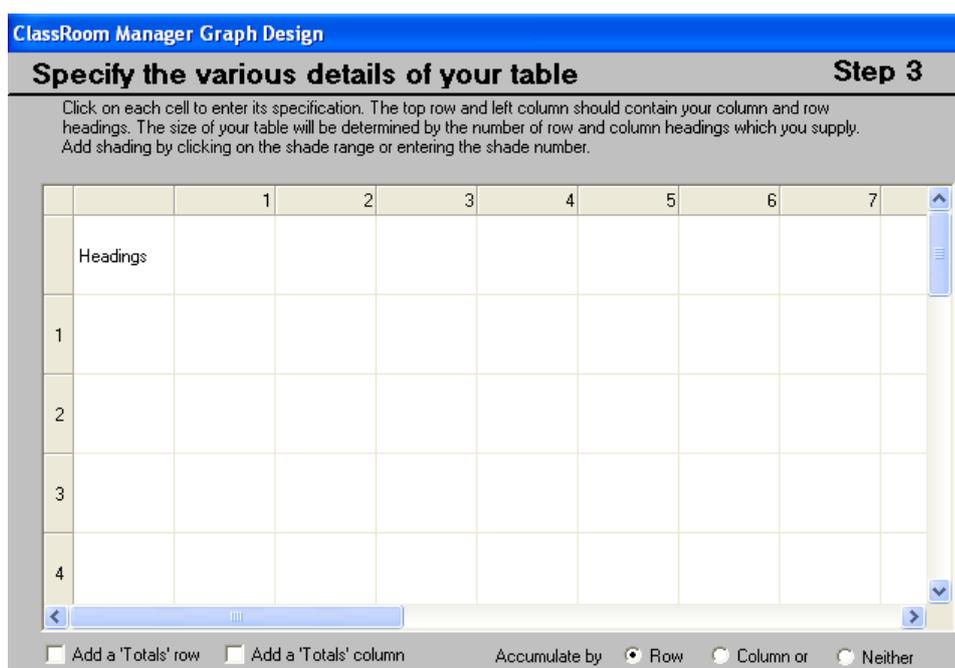
Figure 1018: The basic cell by cell screen

The first row and first column are reserved for the headings. At the bottom of the display you can see the choices you have concerning the addition of a totals row and a totals column, and how you wish to have the totals accumulated.

To enter a heading, click in one of the empty cells in the top row, and the following panel will appear below the display.

Figure 1019: Specifying a row or column heading

Type the name of your heading in to the 'heading' area. If you wish to shade the entire column beneath this heading (or the entire row to its right in the case of a row heading) then click in the shaded bar at the point corresponding to the shade colour you require. If you get it wrong then you will be able to adjust it again. Remember, if you select a colour while entering a heading then the colour will apply to the entire row or column.

In the illustration below, all of the column headings have now been specified.
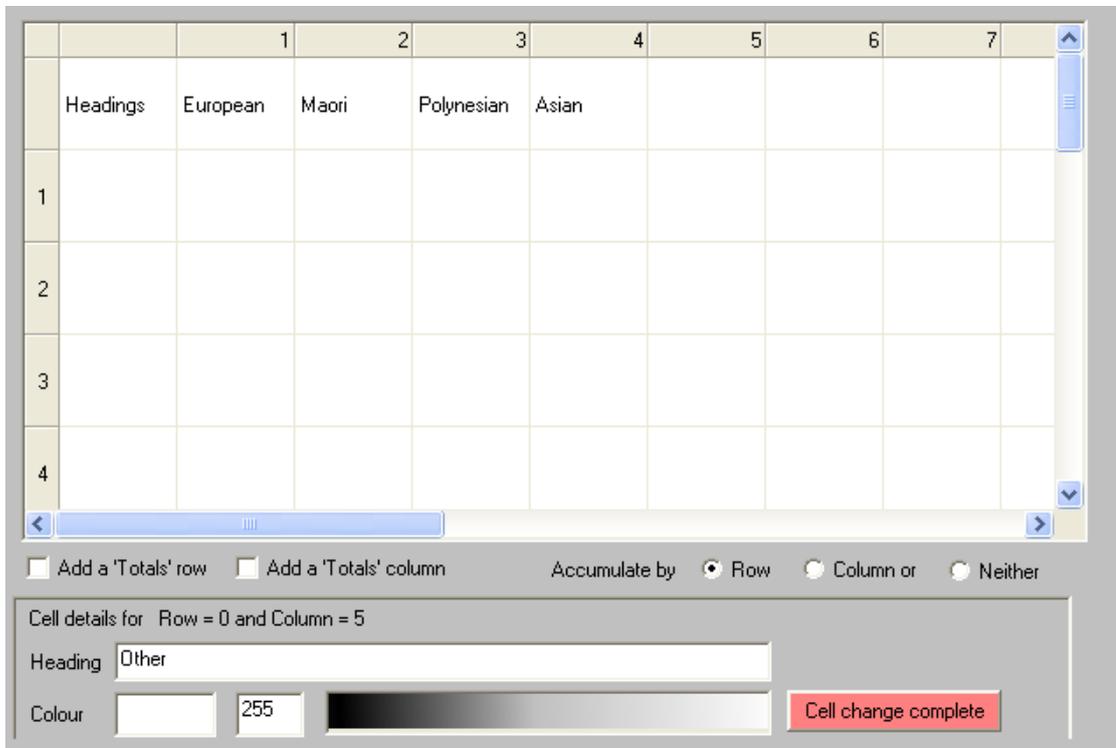
Figure 1020: Column headings in place

Next, add the row headings in the same manner.

Figure 1021: Row headings in place

Now we come to the entry of the filters for each cell. Select a cell (by clicking in it) and the filter dialogue will appear, as shown below.

Figure 1022: Ready for the entry of a filter

Click in the 'Filter' area and the usual CM student selector will appear. Our task is to filter those year 9 European students who scored less that 26 in their Year 9 PAT Maths class percentile. Select 'Year 9' from the first filter screen, then click on the tab labelled 'Gender Place and Ethnicity', where you can select 'European' from the 'MOE Five' list.
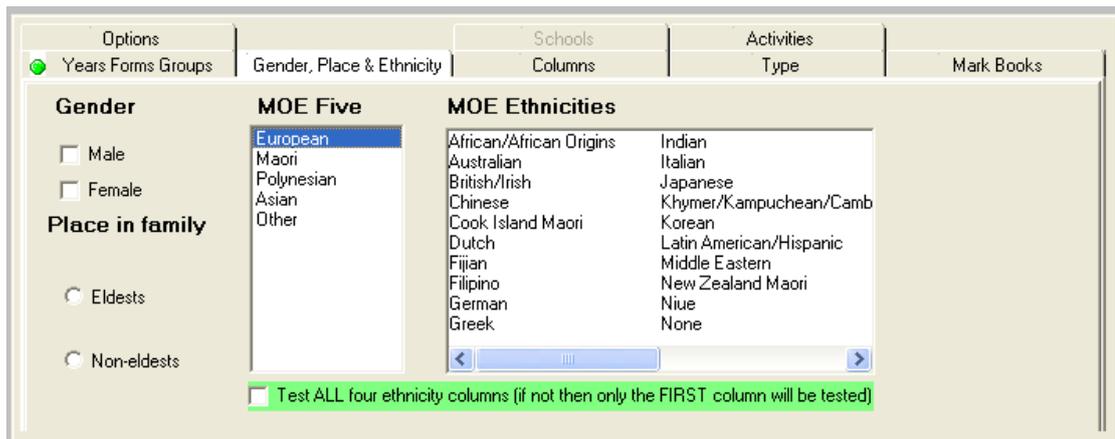
Figure 1023: Selecting 'European'

Next, click on the 'Columns' tab as we wish to have the filter also apply to the contents of a column. Click in the first area under 'Column' then use the column selector on the left to navigate to PAT / Maths / Year 9 / Class Percentile. The 'Condition' column offers a pull-down menu of several possibilities and '<' has been selected. Finally '26' has been entered in the 'Expression' column. This completes the filter, as shown below.
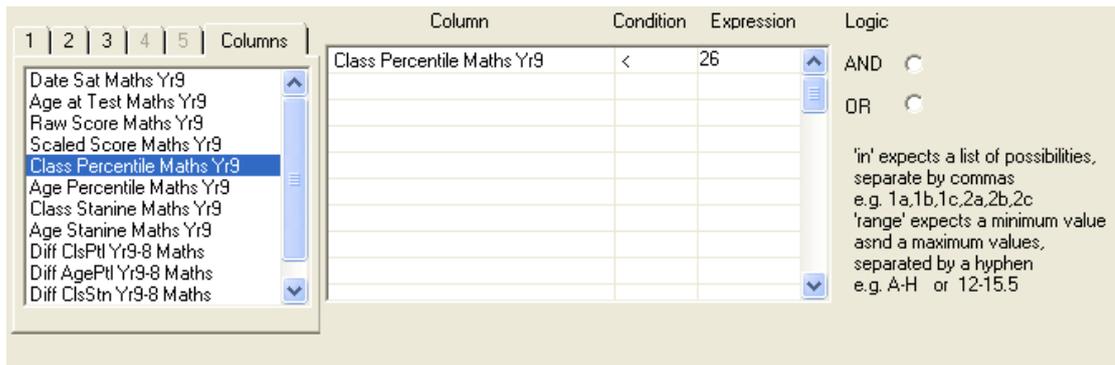
Figure 1024: Selecting Class percentile < 26

Returning to the cell by cell display, the first filter is in place.
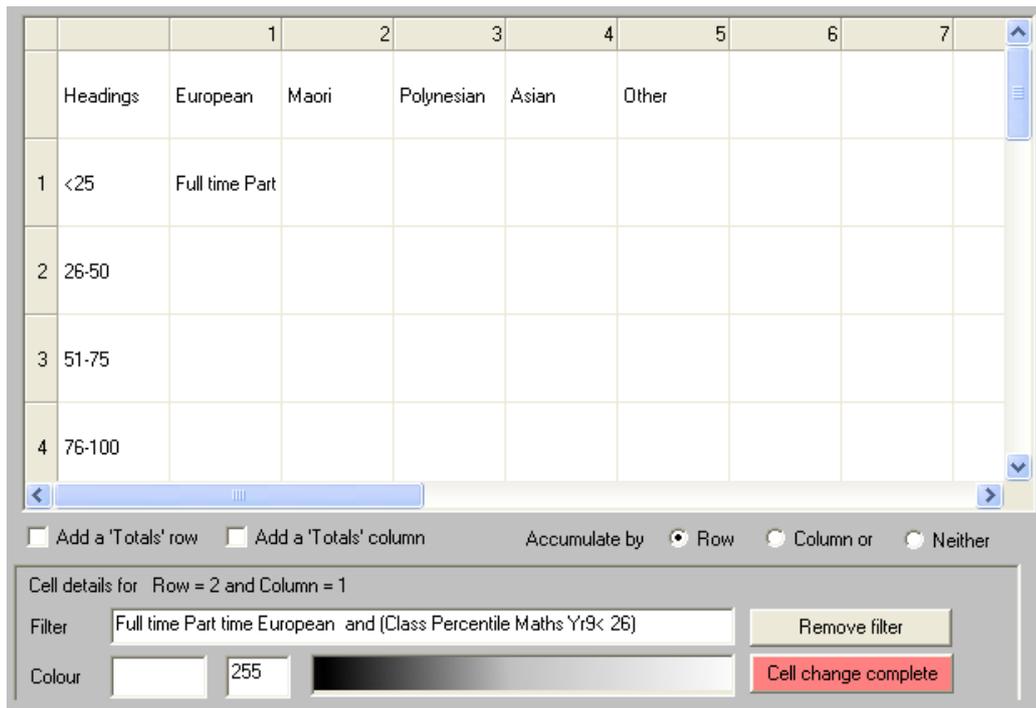
Figure 1025: The first filter in place

It is now a relatively easy task to apply similar filters to each of the cells in the table. In the example below, the 'Column' part of the filter has been modified for the entry in the second row in the first column.
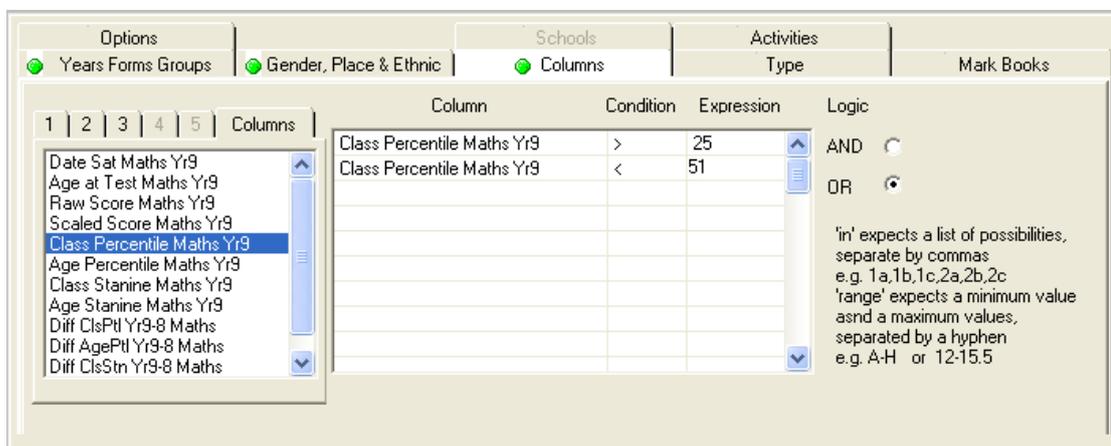
Figure 1026: A second filter is prepared

Once all of the filters are in place, the cell by cell screen will appear as shown below. You can check each filter by clicking in the relevant cell. A description of the filter is displayed in the 'Filter' area below the table.

Figure 1027: All of the filters are now in place

The final step is to shade the top row and first column. This is done by clicking in the top left cell and selecting the required colour from the colour bar at the bottom of the display. You will note that both row and column totals have been requested.

Figure 1028: The row and column shadings

Save the results, giving it a suitable name in the usual way, and the resulting table will look somewhat like that shown below.

Figure 1029: The resulting table

Returning to edit the previous example, let's change the request to display percentages. This must be done row by row, as it is possible to have a combined table partly displaying numbers and partly percentages. The specification is shown below.
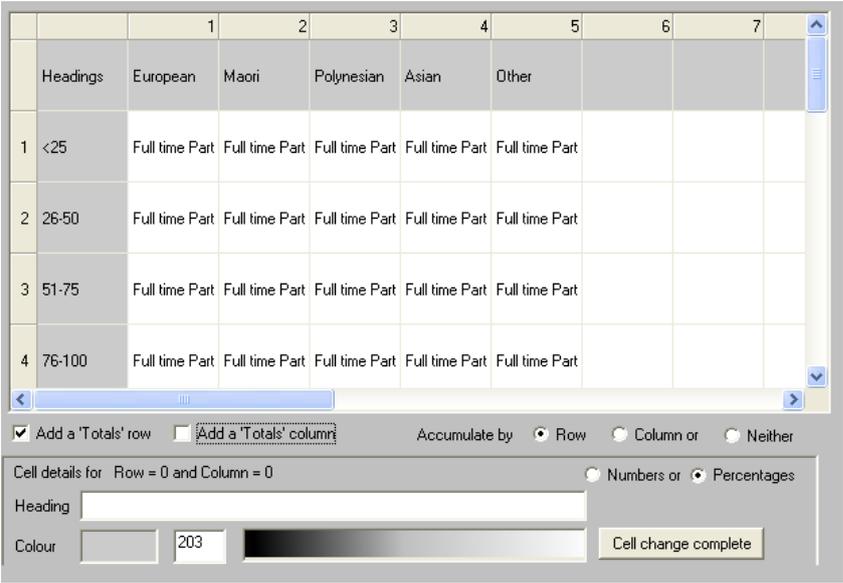
Figure 1030: Switching to percentages

The final result now appears, similar to that shown below.

Cell by Cell demonstration

Ethnicity by percentile band

	European	Maori	Polynesian	Asian	Other	Total
<25	43%	19%	14%	9%	14%	100%
26-50	28%	19%	26%	9%	18%	100%
51-75	29%	22%	16%	22%	11%	100%
76-100	28%	17%	10%	31%	14%	100%

Figure 1031:The percentages option

This brings us to the end of Data Tables. All that remains in the area of graphs is detailed in section 9.7.

28.7 Designing Curriculum Framework graphs

This is our sixth type of graph and, as its title suggests, relates to graphs and tables of Curriculum Framework data. These are particularly easy to use as there is only one step in their creation. Mind you, there are several smaller steps in that step!

The screen below displays the process.

It is divided into four quarters, each reflecting a different aspect of the specification of the graph. For each graph you must specify :
- The type of graph required. There are nine types visible in this situation but, if you embed a CF graph into a document, five further individual types become available. We shall see these later in this chapter.
- Select the subject
- Select the strand or strands to be included in the graph
- Select the level or levels to be included in the graph.

For most of the examples herein we shall select a single strand, in order to keep the illustration to reasonable sizes.

Below the four areas are several further specification details:
- Some graphs require one date, while others require two.
- You may, if you so wish, include sub-objectives in the graph. (Each Curriculum Framework objective can have up to eight subobjectives. See an appendix for further details.
- You have the choice of Black and White (and shades) or colour.

Figure 1032: The Curriculum Framework Graph design screen

28.7.1 Single date graph of available objectives

Select this first listed option in the first list box.

The second box (At the bottom on the left hand side) lists learning areas for which columns have been installed. We'll select 'Mathematics'.

Once selected, the available strands are displayed in the third box. For this example, we'll just select one : 'Algebra'.

'Algebra' is found to have columns available at both 'Level 1' and 'Level 2'. You may select one or more levels. For the purpose of this user guide, we'll just select 'Level 1'.

We've selected a graph which recognises a single date. That will be the first of the two shown. Results will be graphed as they were (or are) at the date you enter. To ensure that we pick up all of the data, we'll leave the date as the default - the current date.

Once you have made your entries you may either 'Save and View' or 'View directly'. The first will record your design and proceed directly to display it, and the second will proceed directly to display without recording.
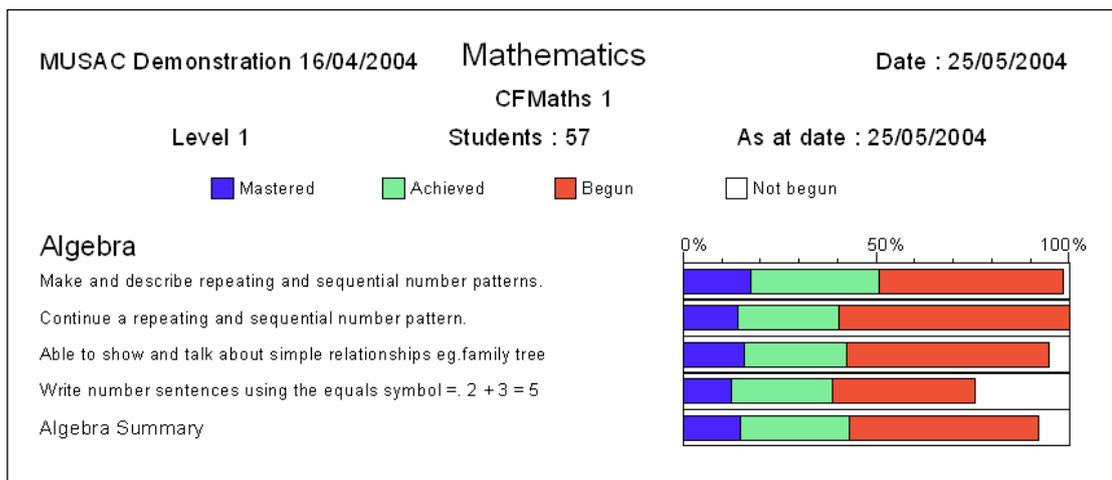
Figure 1033: A single date graph of available objectives

Here then is our example of the first of the eight Curriculum Framework multi-student graphs. The graphs are always drawn by scanning ALL students in the current dossier.

The key to the graph is printed at the top of the page with blue or black shading representing the highest level of achievement.

You can see that the objective which is least complete is the second to last one where roughly ten percent of students have mastered and twentyfive percent have not yet begun (unshaded).

28.7.2 Two-date graph of available objectives

The second graph is extremely similar in purpose, except that it illustrates progress between the two nominated dates.

Figure 1034: Specification of a Two-date graph of objectives

For this graph you must specify two dates, and the graph will illustrate the students' progress as at both of these, allowing you to visually measure progress made between the two.

In the example below you can see that varying degrees of progress have been made.
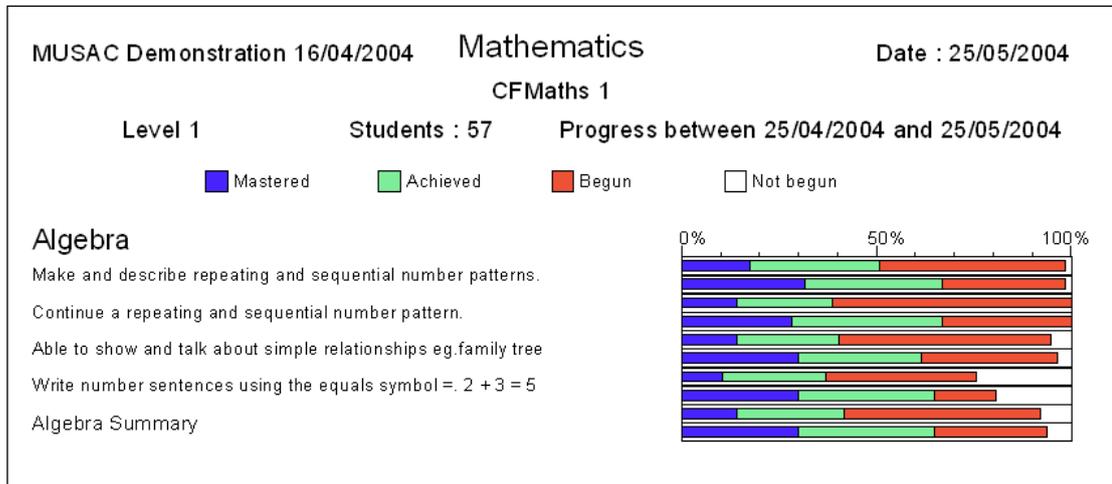
Figure 1035: A two-date graph of objectives

28.7.3 Single date table of available objectives

The specification screen is as shown below.

Figure 1036: Specification of a single date table of objectives graph

This table reports the information in the first graph above in table form.

Figure 1037: An example of a single date table of objectives graph

If we return to edit the graph, changing its display to percentages, via the following screen…

Figure 1038: An example of a two-date table of objectives graph

… then the result is as shown below.

Figure 1039: The same table, displaying percentages

28.7.4 Two-date table of available objectives

This is the two-date version of the above table. Its specification involves the addition of a second date.

Figure 1040: Specification of a two-date table of objectives graph

Just as the second graph above was similar to the first, with the exception that it reported at two different dates, so this table is similar to that above.

Figure 1041: An example of a two-date table of objectives graph

28.7.5 Single date graph strand summary

This graph amalgamates each strand into a single line, and shows each strand. For this demonstration all of the Level 1 strands have been included as shown below.

Figure 1042: Specification of a single date strand summary

Figure 1043: An example of a single-date strand summary graph

28.7.6 Two-date comparison graph stand summary

The earlier pattern follows, with the second alternative of each pair reporting on two separate dates. To fit the example on the page we shall dispense with the illustration of the specification screen.
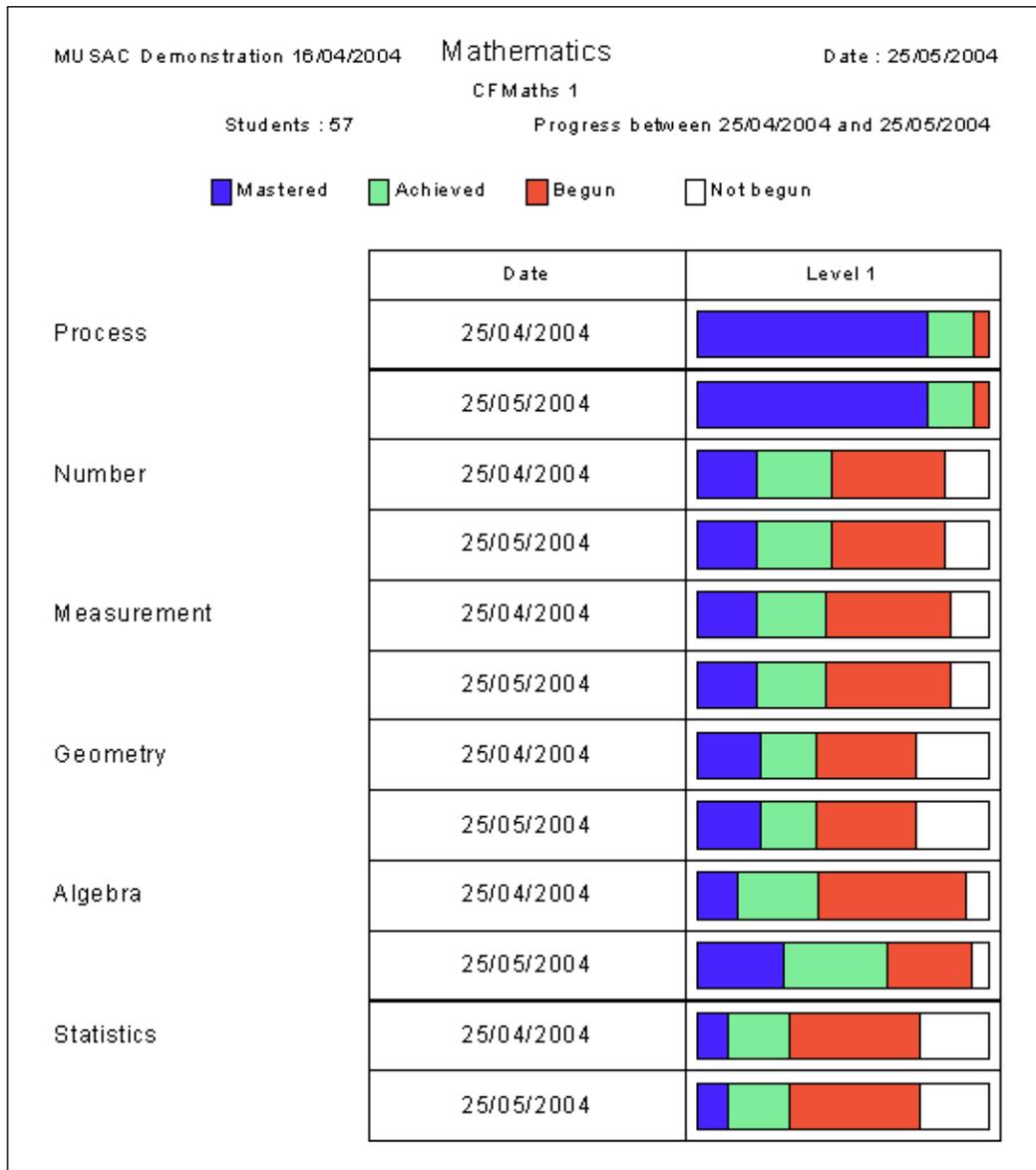
Figure 1044: An example of a two-date strand summary graph

28.7.7 Single date table strand summary

These two possibly require no further explanation.

Figure 1045: An example of a one-date strand summary table

28.7.8 Two-date table strand summary

Figure 1046: An example of a two-date strand summary table

28.7.9 Gender or ethnicity analysis

This graph enables you to analyse the results for selected objectives (from anywhere in the entire collection!) either by all students, by gender, or by ethnicity.

Selecting this option leads to the following version of the CF graph design screen.

Figure 1047: Designing a gender / ethnicity analysis

The screen above shows the specifications area after selecting the ninth type of graph – 'Analysis by gender or ethnicity'.

Figure 1048: The graph specifications

The decision has been made to analyse by gender between two rather close dates.

To select the objectives for analysis, click in the empty space on the right hand side of the screen and the following objective selection dialogue will appear.
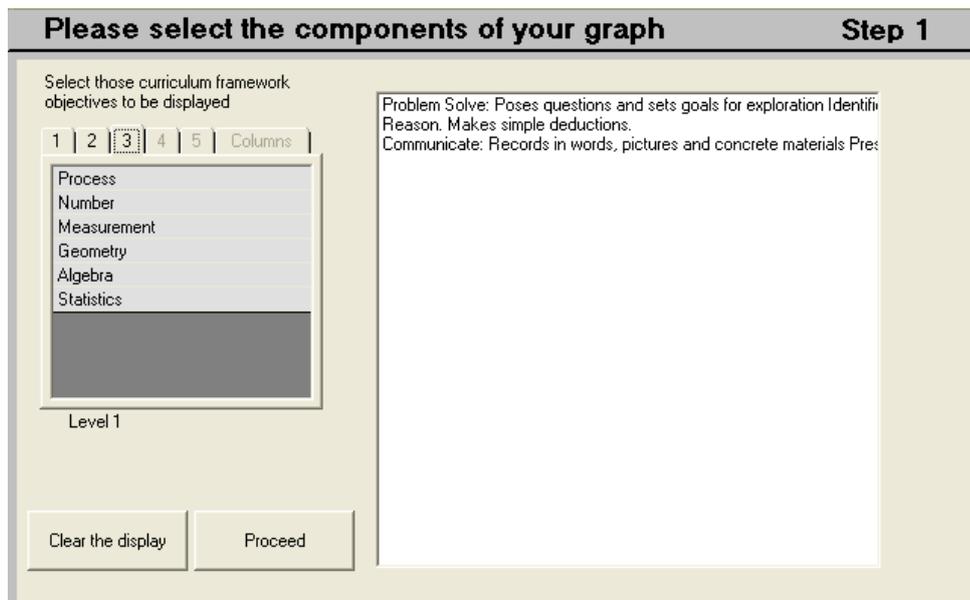
Figure 1049: Selecting objectives for analysis

Select those required. Three have been chosen for this demonstration. If you select a large number then your analysis will take several pages.

Click 'Proceed' when you are ready, then proceed through the other steps of the graph's design as explained in previous examples. An extra line has been added to the title area, as shown below.
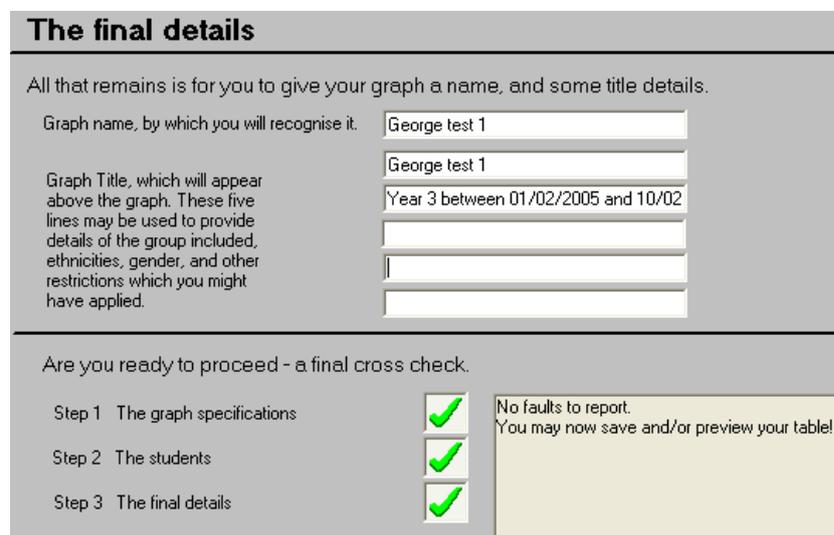
Figure 1050: Giving the graph a name and title

Two examples of the results are shown below.
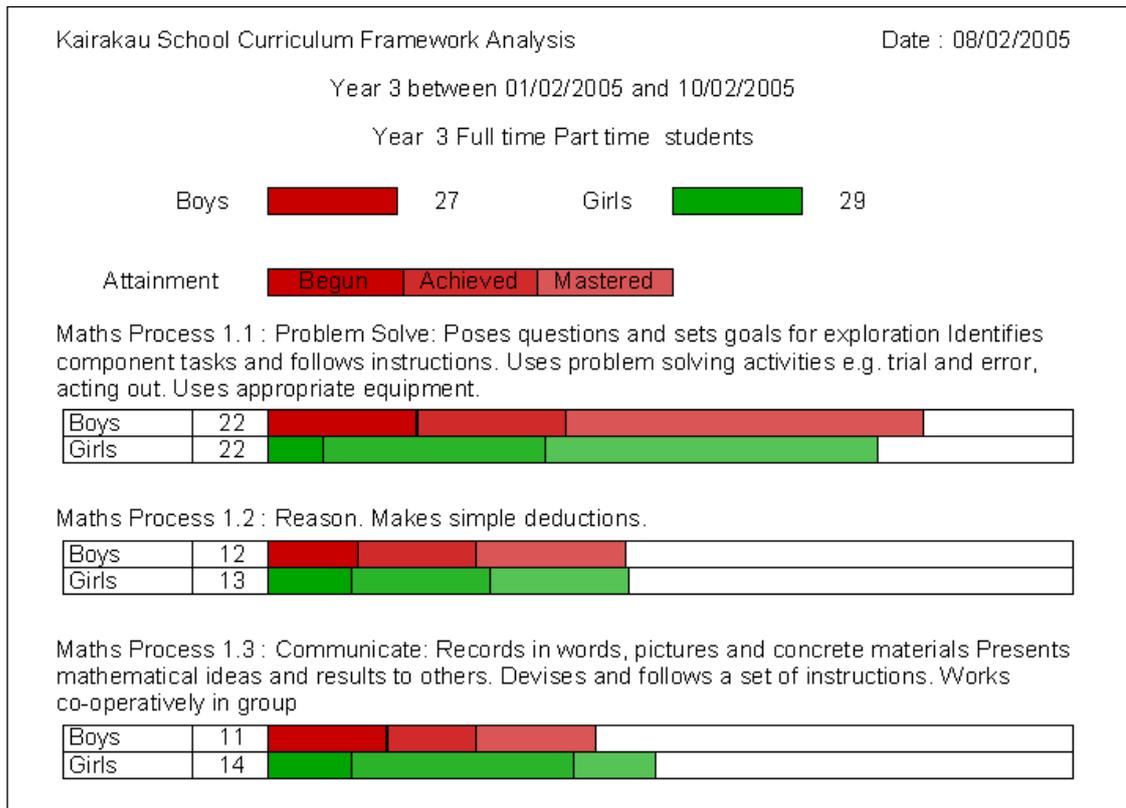
Figure 1051: An example of three objectives analysed by gender
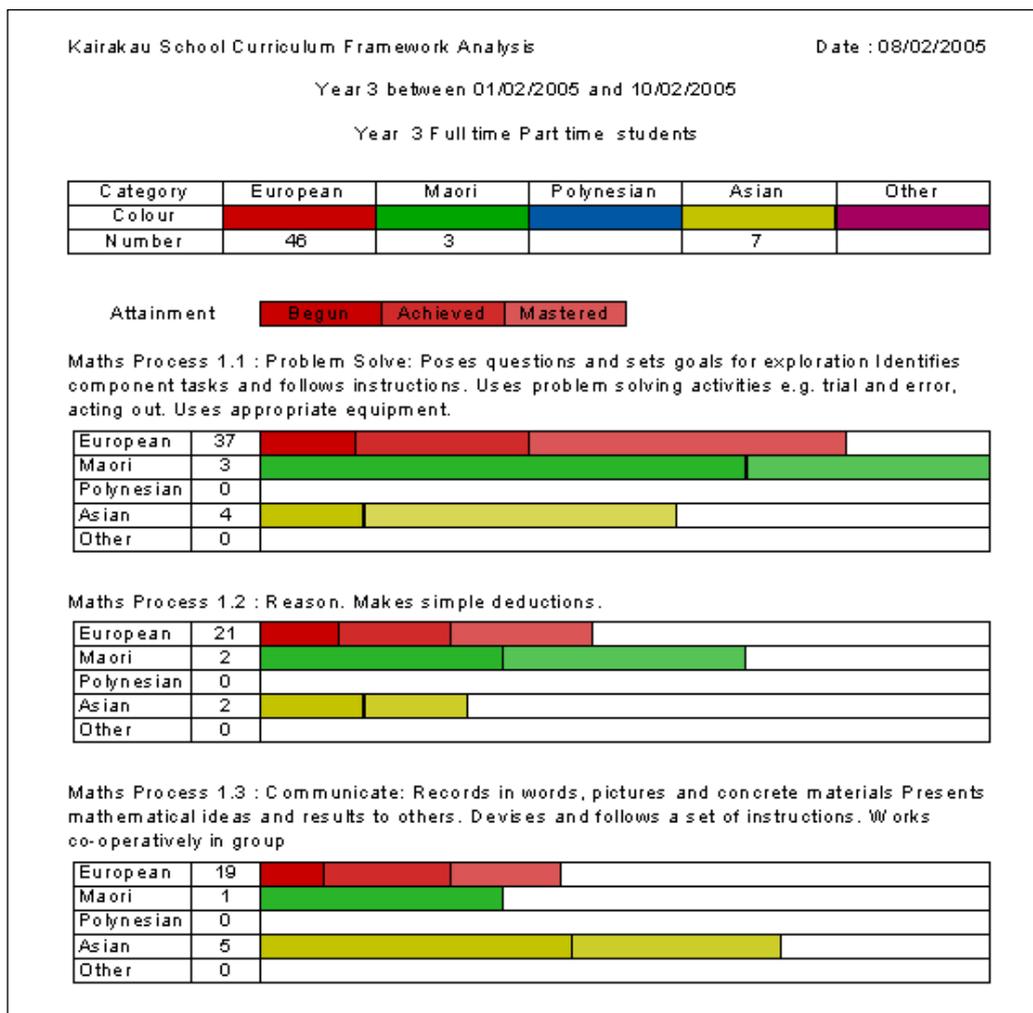
Figure 1052: The same objectives analysed by ethnicity

This brings us to the end of Curriculum Framework GROUP graphs. There are still five individual graphs to go.

These are not available through the graph design wizard as they apply to individual students. If you design a document and place on that document a CF Graph object, and then click on one of the graph specifications, the CF graph design wizard will appear, this time with four extra possibilities. (An extra heading in blue alerts you to their existence)

28.7.10   Adding a Curriculum Framework Graph

Let's return then and edit our base document, this time adding a Curriculum Framework graph – via the CF graph tool.
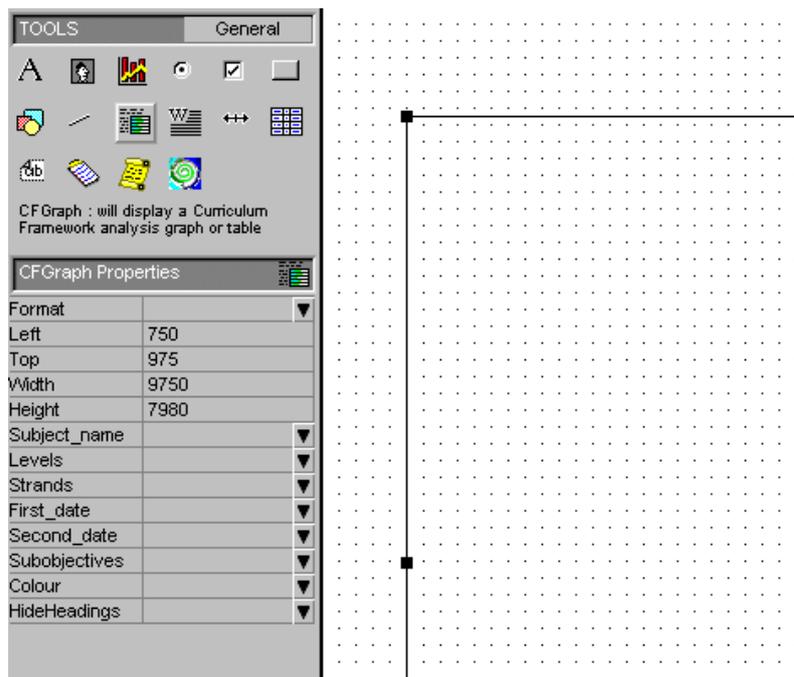
Figure 1053: Our base document with a CF graph in place

There are a number of properties to be specified, however it is much easier than it looks! Simply click on the 'Subject name' property and the following, now familiar, screen will appear. This time, however, it is a little different. Since we are now designing for an individual student there are four further graph types – each designed to display the progress of an individual.

1. **Individual achievements - list of objectives**
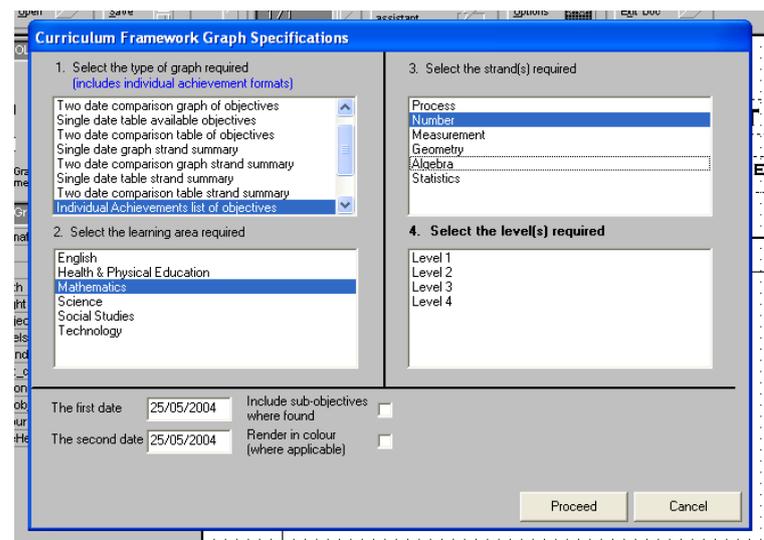
Figure 1054: Individual CF graphs from within a document

The first graph is really a chart listing the objectives which the individual student has reached at particular levels.   Be sure to make your 'graph' large on the document page as it may even run to more than one page. A shortened sample of one such chart is shown below.

Remember that this is a chart placed in a document, rather than a chart or graph in its own right. All graphs may be embedded into documents to accompany descriptive or explanatory text.

The properties, after being set via the above screen appear as shown below.
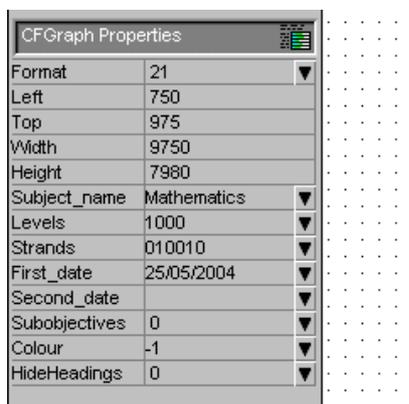
Figure 1055: The CF Graph properties

The resulting individual's graph on a document will appear as shown below.
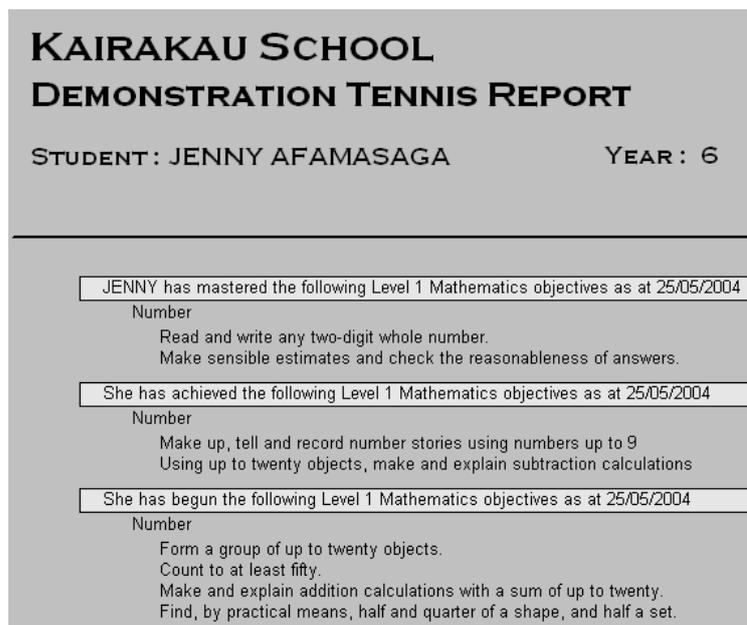
Figure 1056: Individual's list of objectives

Note the use of the lower case versions of the attainment levels embedded in the headings of each section.

2. Individual achievements list with dates

Figure 1057: Selecting the second individual graph

This is a second format reporting on the progress of an individual student. This time the dates at which each level of attainment was reached are shown. This time we have taken the graph through to the printed preview, so it appears as it would on paper – without the screen-coloured background.

Figure 1058: Achievements with dates

3. Individual One-date achievements graph

Figure 1059: The third individual graph

This graph illustrates (in the usual way!) the degree to which our student has achieved the objectives being studied in the nominated strands.
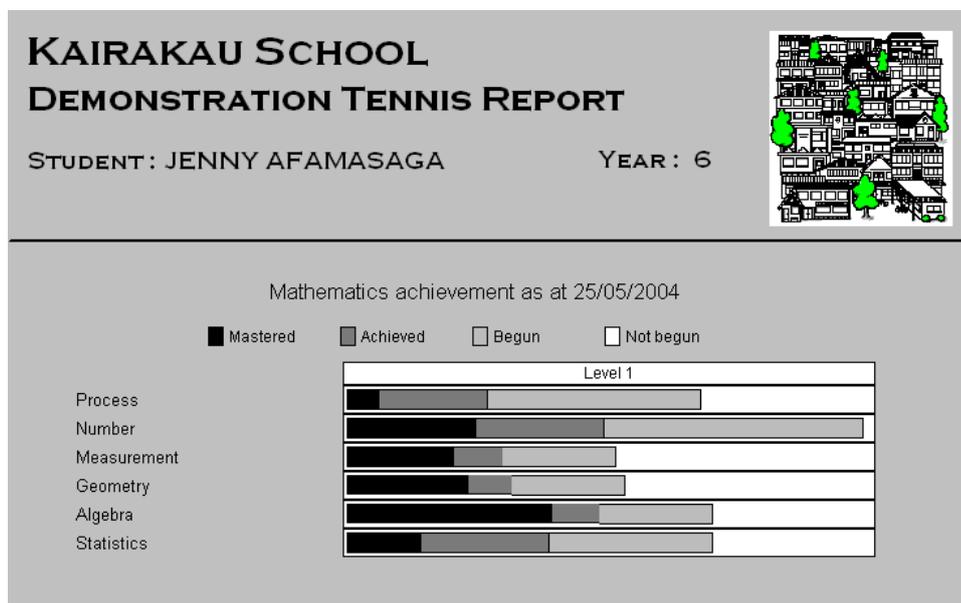
Figure 1060: One-date individual achievement

4. Individual two-dates achievement graph.
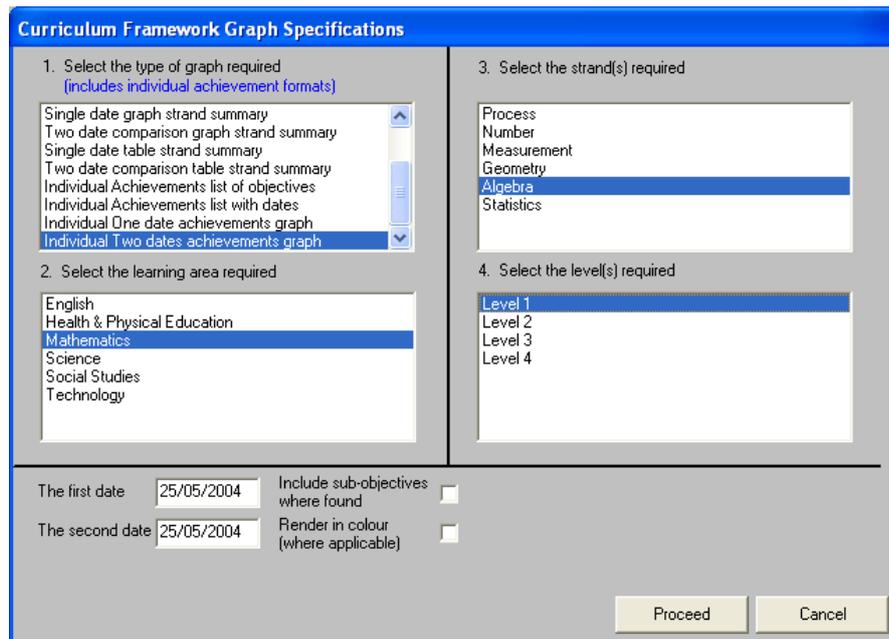
Figure 1061: The fourth individual graph

The fourth individual graph, a very small portion of which is shown below, illustrates the progress each student has made between the two specified dates.
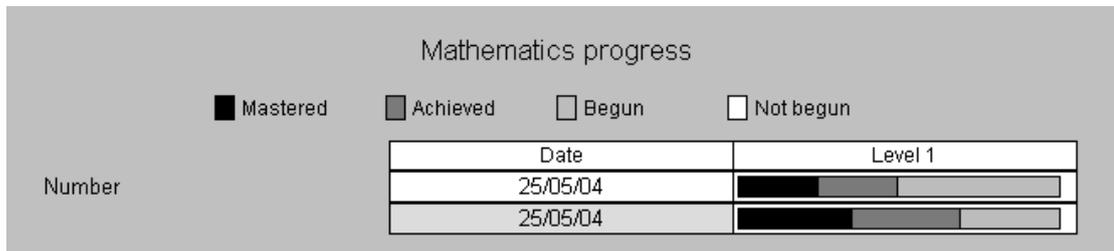
Figure 1062: Individual progress between two dates

The final graph is a little different. It is a report on the students level of attainment in ALL objectives between the two specified dates, and it also allows you to indicate which objectives will be studied by the student in the immediate future.

Selecting the last individual student option, the Individual 'All-progress' graph, leads to the following screen :
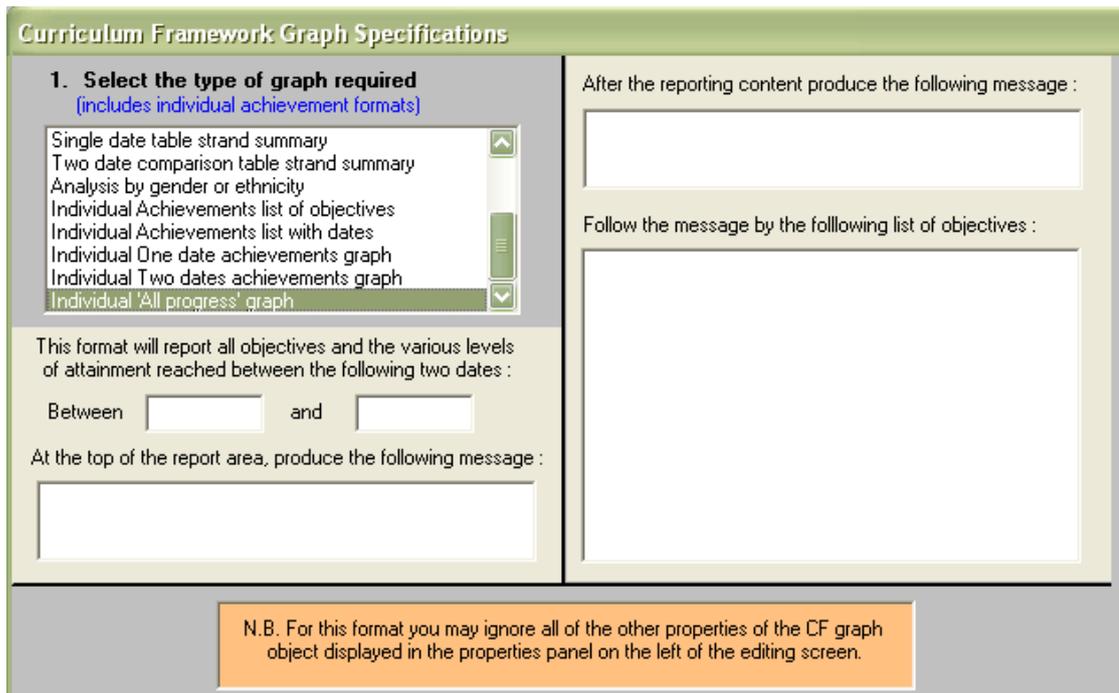
Figure 1063: Designing an Individual 'All progress' graph

Enter the two dates between which you wish to report. This is followed, at the bottom of the left hand side, by an area where you can specify a message which will appear at the top of the report. It is entered via a popup-word processor. Remember that, when in the word processor, you can use Ctrl-N to quickly insert code which will result, when printed, in the student's preferred name.

A second area allows you to enter a message which will appear above the final section of the report, where the objectives about to be studied are listed. In the example below, a suitable comment for this area is being entered.
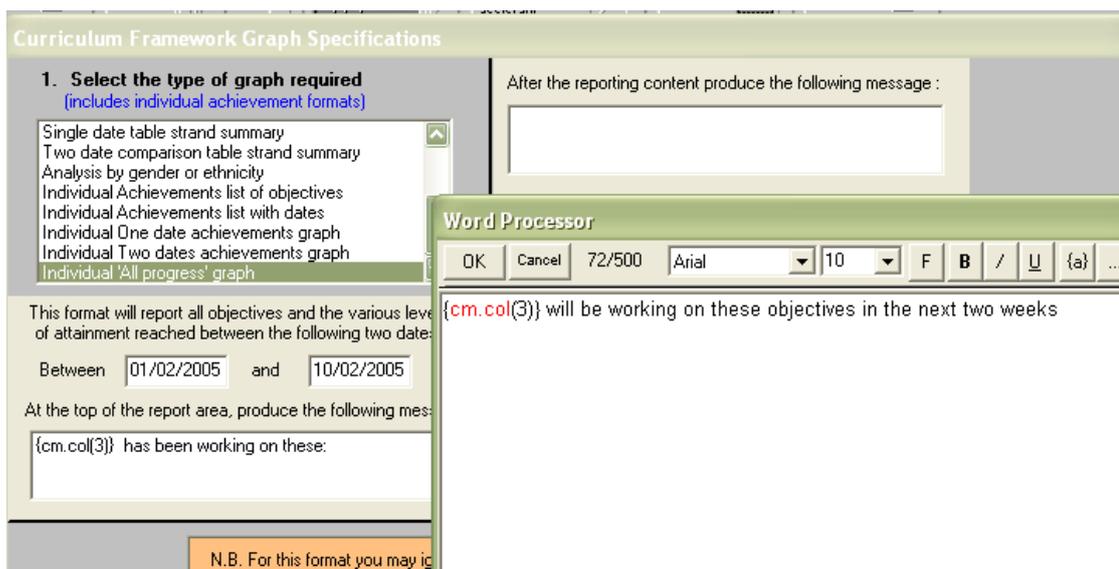
Figure 1064: Entering a comment to appear above the future objectives

Finally, click in the right hand area to enable the selection of those objectives to be studied next. This is the same process as that for the gender/ethnicity analysis detailed earlier. An example of a resulting report follows.

Figure 1065: The completed specifications

Student : Natali

Natalia has been working on these:

Natalia has begun the following objectives.

Mathematics	Reason. Makes simple deductions.
Mathematics	Communicate: Records in words, pictures and concrete materials Presents mathematical ideas and results to others. Devises and follows a set of instructions. Works co-operatively in group
Mathematics	Addition and Subtraction: Solve addition and subtraction problems to 10 in their head.
Mathematics	Basic Facts: Recalls the addition and subtraction facts to five. Recalls doubles to 10.
Mathematics	Measuring: Orders and compares lengths, masses and volumes (capacities) and describes the comparisons using measuring language.. Measures by counting non-standard units.

Natalia has achieved the following objectives.

Mathematics	Problem Solve: Poses questions and sets goals for exploration Identifies component tasks and follows instructions. Uses problem solving activities e.g. trial and error, acting out. Uses appropriate equipment.
Mathematics	Number Sequence and Order: Count forwards and backwards, 0-20. Say the number before and after a number 1-20. Order numbers to 20. Skip count forwards and backwards in 2's, 5's and 10's.
Mathematics	Number Identification: Read the numbers 0-20. Know 1/2 and 1/4.
Mathematics	Grouping/Place Value: Know groupings within 5, eg. 2 and 3. Know groupings with 5, eg. 5 and 1. Know groupings within 10, eg. 4 and 6. Instantly recognise patterns to 10.

Natalia has mastered the following objectives.

Mathematics	Proprtions and Ratios: Share a set of objects equally into ½ and ¼.*,CF Maths Number Lev1 Obj3,6,44,94,110,0,19012,6
Mathematics	Written Recording: Records the results of counting and operations using symbols, pictures and diagrams.
Mathematics	Money: Compares the values of coins and notes and reads prices.

Natalia will be working on these objectives in the next two weeks

Technology	Identifies a technological need within the local environment. Shares ideas and plans a solution. Uses resources to make and evaluate it.
Technology	Discusses the use of familiar technologies.
Technology	Discusses how a group of people uses and promotes technology.
Technology	Says why they prefer a technological activity.

Figure 1066: An example of the resulting report

29   Printing

What's in this chapter?
Overview
Printing from a document
Printing from grid mode
Printing a selection of documents (a booklet)
Using booklets from the menu
CMPrint – the 'standalone' printing option
Emailing students' documents to caregivers

29.1 Overview of printing

Without a doubt the most difficult area of use in ClassRoom Manager is that of printing. It's not that printing in itself is difficult. The difficulty lies in the fact that every school seems to have a different printer. While most use black and white laser printers, some still use dot matrix printers for some things, some use ink jets, some use photocopiers, some use duplex printers, some use colour. Some connect their printer to the machine in use while others print across a network. Some have different drivers (computer files which control how a printer operates) for the same printer connected to different machines…. And the list goes on.

ClassRoom Manager uses a software module (VSPrint) supplied by Component One software from the USA. It was originally developed by VideoSoft – hence the VS part of the name). It is generally an extremely reliable piece of software. You can see it in use when you preview a document. The VSPrint module has a row of small buttons at the top which allow you to view / manipulate / print the documents in question.

Printing can be down in three major areas of CMTeacher. These are :

1. **document mode** – printing a selected document for one or more individuals
2. **grid mode** – printing a table of data entries from selected columns for a selection of students
3. **'booklet'** – i.e. a selection of documents printed for each of a selection of students.

You may also print data extracts from electronic markbooks. This process was covered in that chapter earlier in this user guide.

In all cases, the printing process is accessed via the large 'Print' button at the top of the screen.

29.2 Printing from document mode

If you have a document on your CM screen, and you are viewing it for a single student (i.e. you are in document mode) then clicking on the 'Print' button will cause a printer dialogue to appear.

Normally you would immediately proceed to click the 'Preview' button or the 'Print' button and your document would be printed.

Alternatively you could click on the 'All students in current filter' option and then click on the 'Print' button, to send a copy of the document for each student to the printer.

However, there is a wide range of possible choices, most of which you will never use. We shall go through each of these before, finally, coming to the 'Print' button.
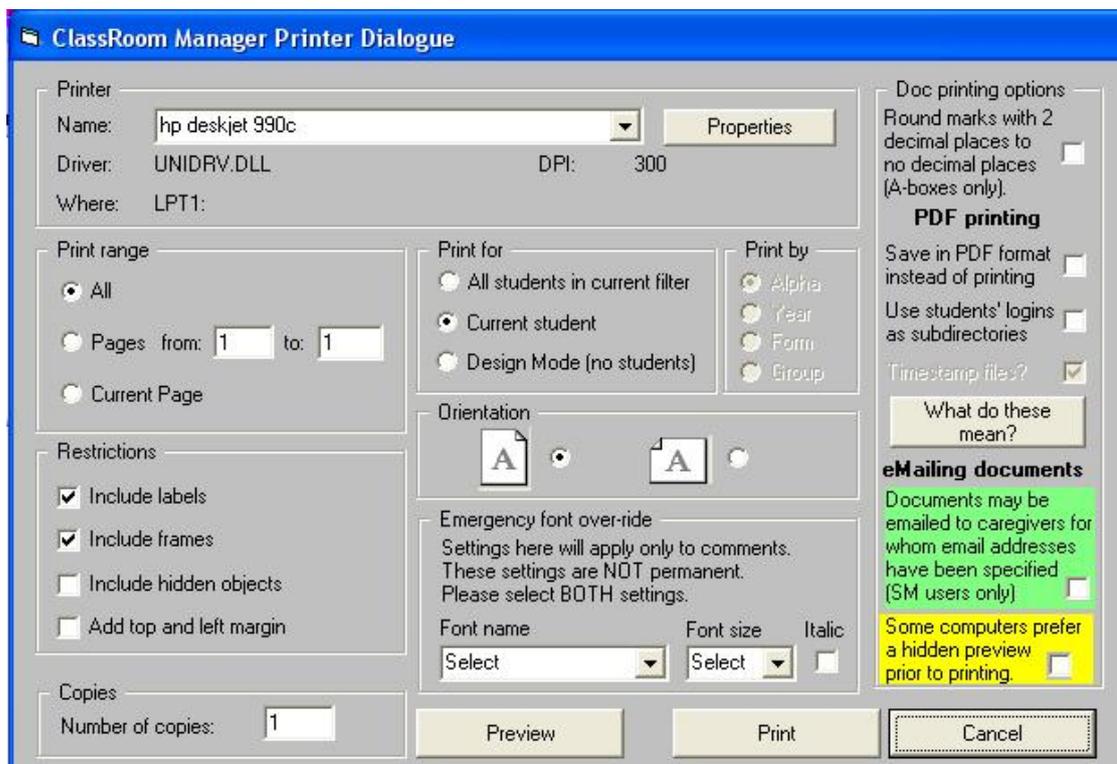
Figure 1067: The print dialogue screen

This screen has several different areas where you can make decisions concerning the way you wish the printing process to occur. Let's take these one at a time.

29.2.1 Printer

Figure 1068: The 'Printer' options

If you have more than one printer attached to your machine you can use this part of the dialogue to indicate which printer you wish to use.
If you click on the 'Properties' button in this area then you will enter a further series of screen relating to the selected printer in particular. The first of these is shown below.
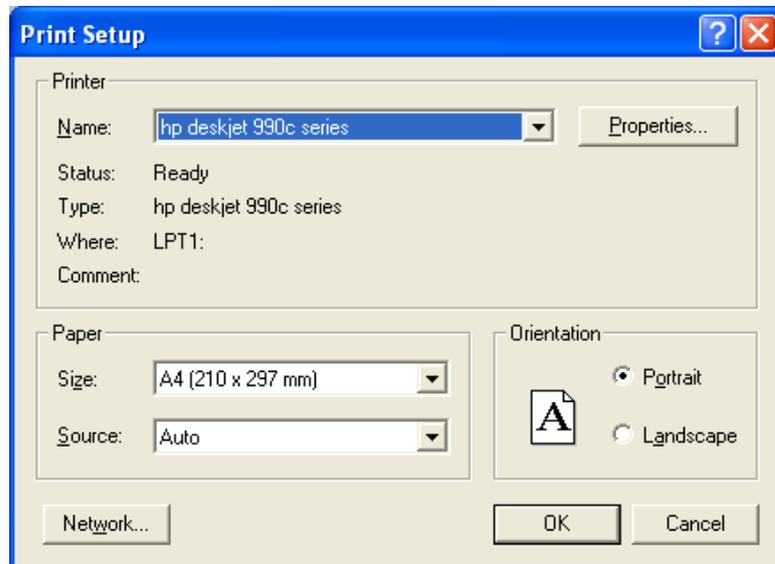
Figure 1069: Print setup

This screen may vary from printer to printer – as do the following screens which can appear if you click the 'Properties' button on the screen above. The first of these (in the case of the printer selected above) is displayed below.
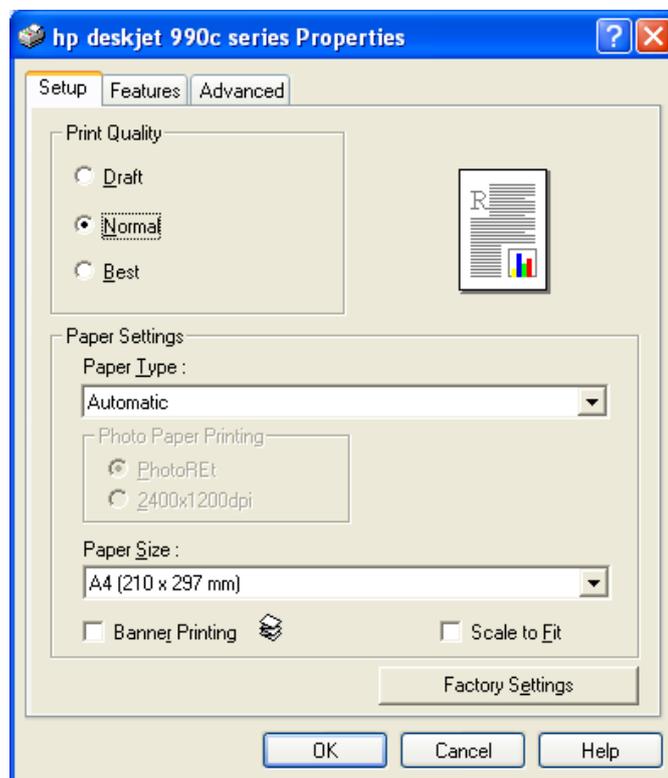
Figure 1070: Printer properties - Setup

The second screen offers further possibilities....
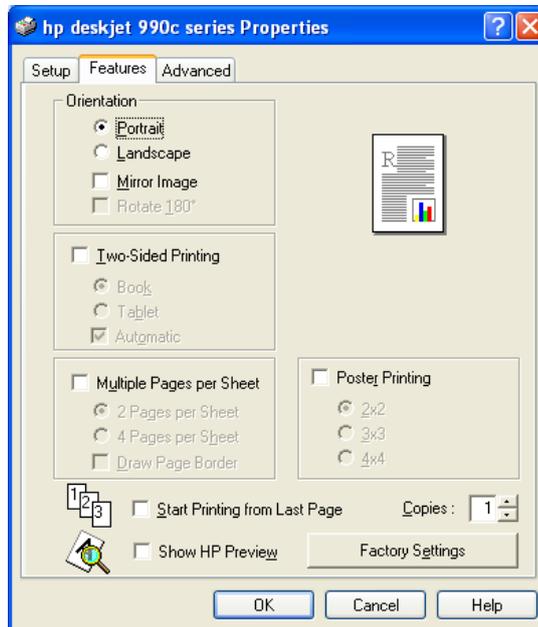
Figure 1071: Printer properties - Features

... as does the third.
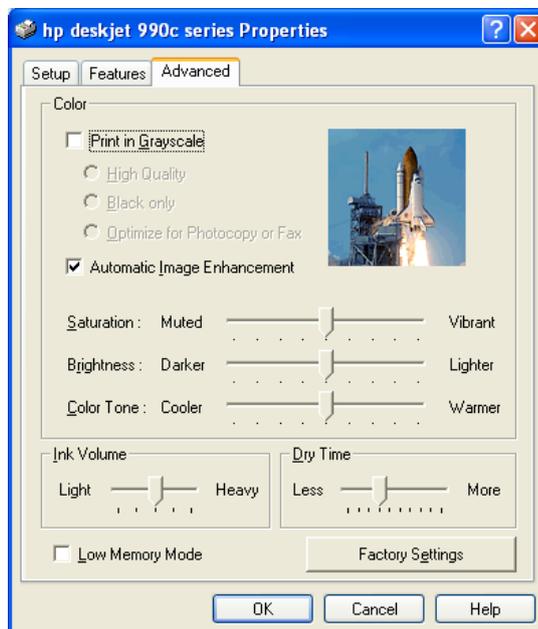
Figure 1072: Printer properties - Advanced

If you click on the 'Network' button (shown above) then the following screen will appear, offering you the option to connect to a further networked printer.
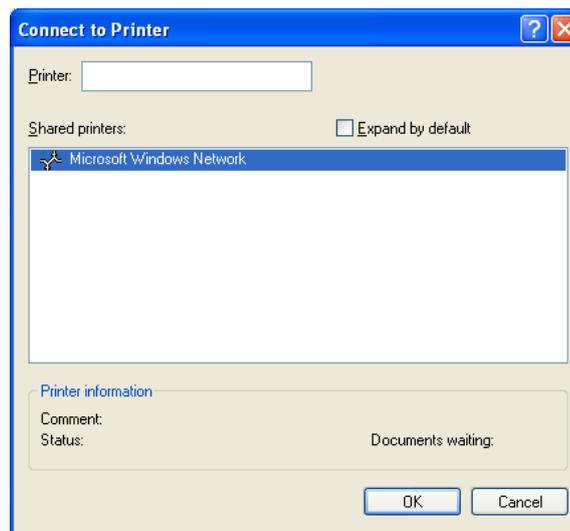
Figure 1073: Other printers available via your network connections

29.2.2 Print range
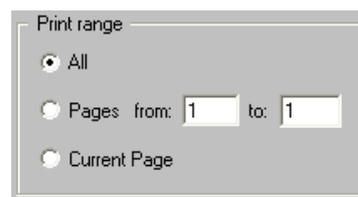
Figure 1074: Print range

This option allows you to indicate which page or pages from the current document you wish to print. Most documents consist of a single page.

29.2.3 Restrictions
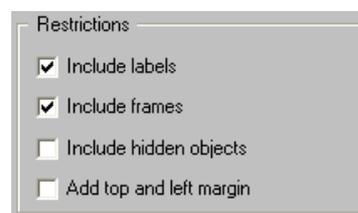
Figure 1075: Restrictions

The settings on this screen are 'remembered' by your computer for each person signing on. They allow you to :

- Include or exclude extra labels from the printed document
- Include or exclude frames which appear around objects from the printed document
- Include or exclude hidden objects (e.g. buttons) from the printed document
- Include or exclude an extra top and left margin from the printed document – some printers have their paper size set at an awkward size for the document you are printing. The following two examples illustrate some of these differences.

Figure 1076: Frames and labels included

Figure 1077: Frames and labels excluded

29.2.4 Copies

Figure 1078: Number of copies

This option allows you to request multiple copies of each document.

29.2.5 Print for

Figure 1079: Print for…

This would be the most frequently used setting on the print dialogue. You have three choices. The first offers you the option to print for all of the students in the currently applied filter. This might be the whole school, or just a dossier, or even a filtered dossier.

If you choose the third option then the resulting document will show the connections between the columns and the objects on the document.

If you select the first option, to print for all students in the current filter then the small frame to the right is enabled, allowing you to have the documents printed alphabetically, by year, by horizontal group (e.g. class or form) or by vertical group (e.g. by room or group).
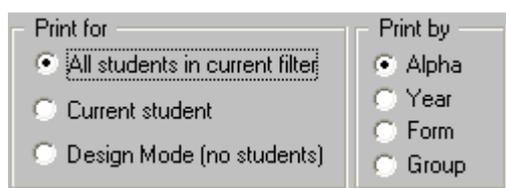
Figure 1080: Print for groups

29.2.6 Orientation

Figure 1081: Printer orientation

Each document, when design, takes its orientation from the paper size which you chose at the outset. You may use the settings in this frame to override that choice.

29.2.7 Emergency font override

Figure 1082: Emergency font over-ride

This area becomes important when several teachers have contributed to a document – usually a report – by cutting and pasting their comments from a variety of word processors using a variety of fonts. The settings specified here will be used to override other fonts when they occur.

Select the required font name, font size and whether or not you wish to have the result in italics.

29.2.8 Document printing options

Some schools make considerable use of the final panel of options.
The first choice is to signal whether or not you wish to have any marks (extracted from markbooks) rounded to whole numbers as they appear on the document. This process will not,

of course, affect the way they are stored in the markbooks. This process also only applies to marks presented in databoxes.

Now we come to the printing options themselves.
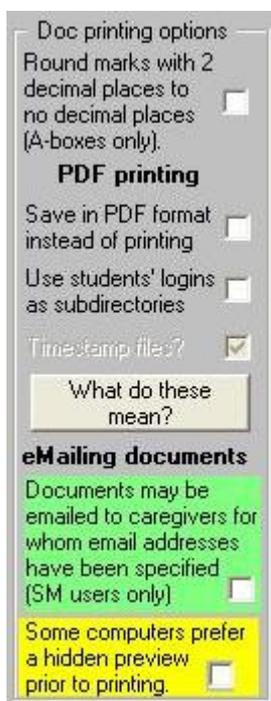
Figure 1083: Document printing options

You have the choice to have the documents saved as PDF documents instead of being printed. PDF stands for Portable Document Format (not 'Pretty Damn Fine' as I'd always assumed) and has become an international standard way of recording documents in a format ideal for electronic transmission e.g. attaching to emails. If you tick the 'PDF' option then others will become enabled, as shown below.

Figure 1084: PDF printing options

If you are wishing to save the students' documents in PDF then each file must have a name. You have two alternatives. The second, (we shall come to the first shortly), involves the combination of a long number based on the student's name, which is then attached to the name of the document. When you proceed to print you will be asked to nominate the directory into which you wish to have the documents stored.

For information on emailing PDF documents to caregivers, see section 10.7 of this chapter.
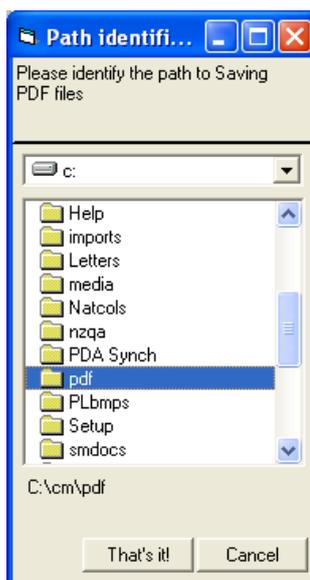
Figure 1085: PDF printing options

Once the documents have been printed you will find them all in the nominated directory. An example of a directory with two such documents is shown below.
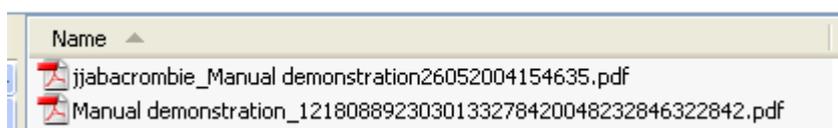
Figure 1086: PDF documents

The better alternative is to use the student's 'User-code' as part of the document name and to have the documents stored in individual sub-directories which use the students' user-codes as their name.

User-codes (login ID's) may be automatically allocated to students using a global process in CMAdmin. The path to this utility is Other utilities > Network Domain User Connector, wherein each student is allocated a unique id based on their name – eg pawsonbk, gravesbs, or other possible combinations.

Students' user-codes, generated by this process, are recorded in a column found under the heading of 'Internet connection details'. These columns (shown below) are automatically created when you run the Network Domain User Connector process in CMAdmin.
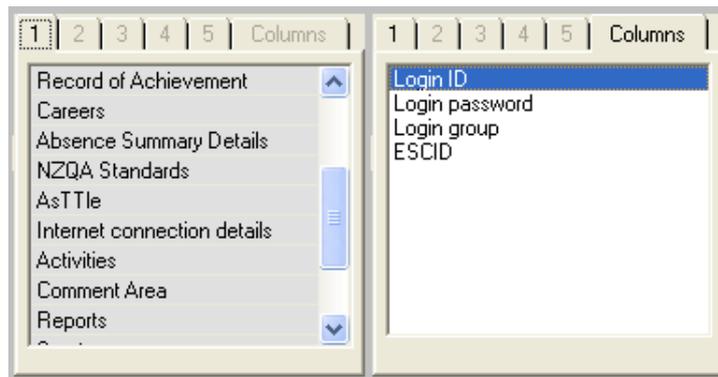
Figure 1087: The column which stores user-codes

Now print a document using this option. Firstly, set the options.
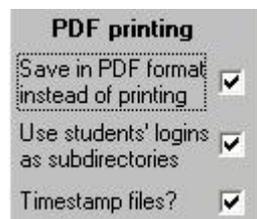
Figure 1088: The best PDF printing options

Then, when you proceed to print, you will again be asked under which directory you wish to have the document subdirectories created, as shown below.
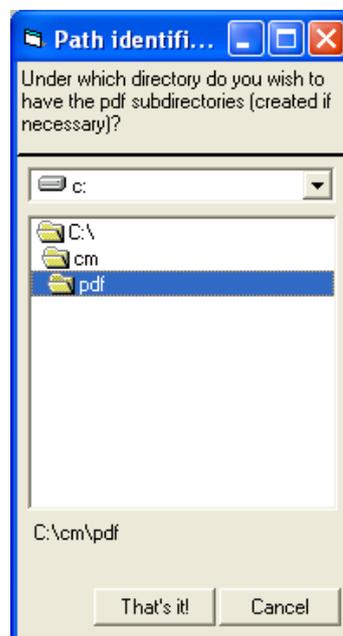
Figure 1089: Where to record the documents in their subdirectories

ClassRoom Manager has an automatically created \pdf subdirectory which you may wish to use, but you may alternatively have the document subdirectories created anywhere else on your network. At the end of the printing process the following message will appear.

Figure 1090: The process is complete

Using Windows Explorer, navigate to wherever you requested the directories be created and you will see the new sub-directory.
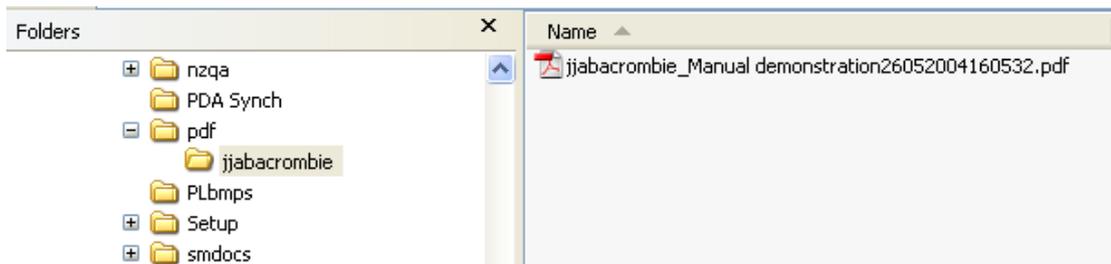
Figure 1091: One new PDF sub-directory

You will notice that the subdirectory is named 'jjabacrombie' – one of the possible user-code formats – and the document itself has a long name which includes the student's name, the document name, and, as we had ticked the timestamp option, it also has the current date and time (down to the second) when the document was printed.

Double click on the document file and, if you have Adobe Acrobat Reader installed, the document will be displayed, as shown below.
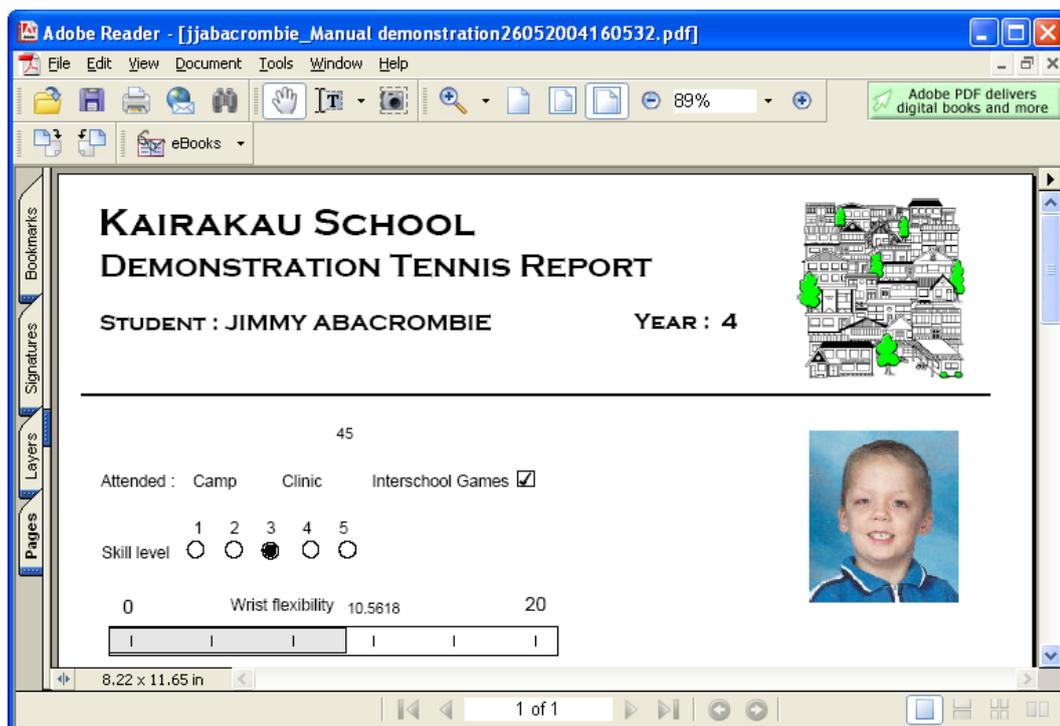
Figure 1092: Our document in Acrobat Reader
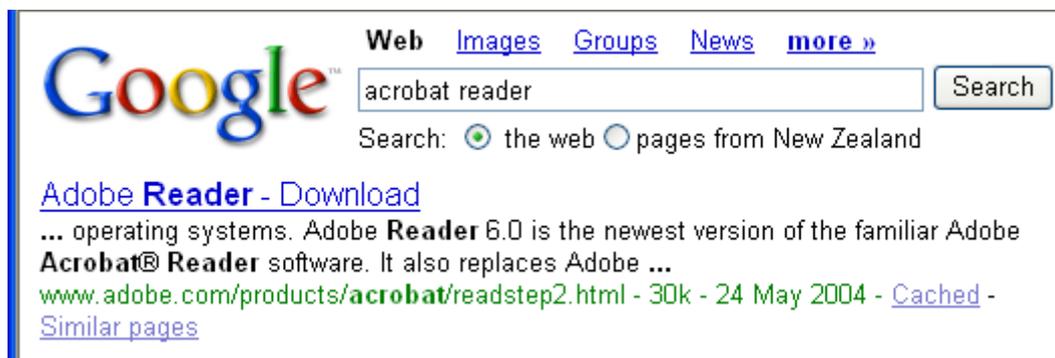
Figure 1093: Finding Acrobat Reader

Finally, in this panel you will have noticed a button entitled 'What do these mean?'. If you click it then the following message will appear.
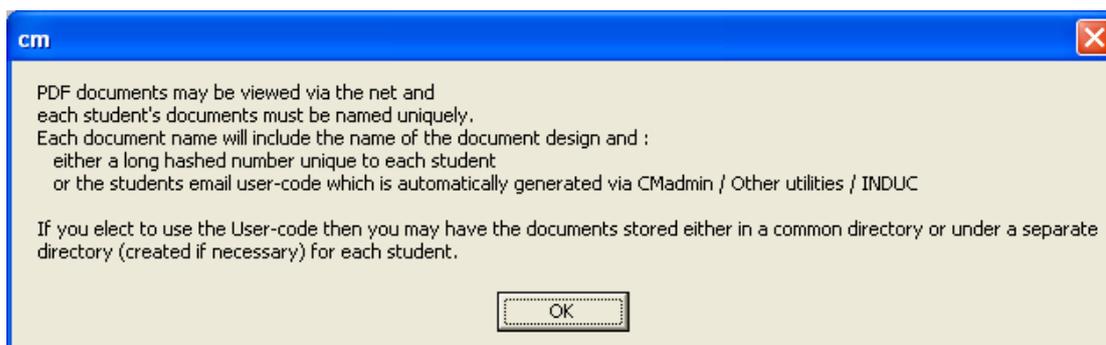
Figure 1094: The explanation

This brings us to the end of the printer dialogue options. All that remains is to click on either the 'Preview' button (which will cause the document to be printed to the screen for your inspection) or the 'Print' button (which will cause the document to be sent directly to your printer without further ado.

The illustration below is of our document in the preview window.

There are some buttons along the bottom edge of the display. You may:
- Print all pages
- Print just the displayed page
- Copy the document to the Windows clipboard
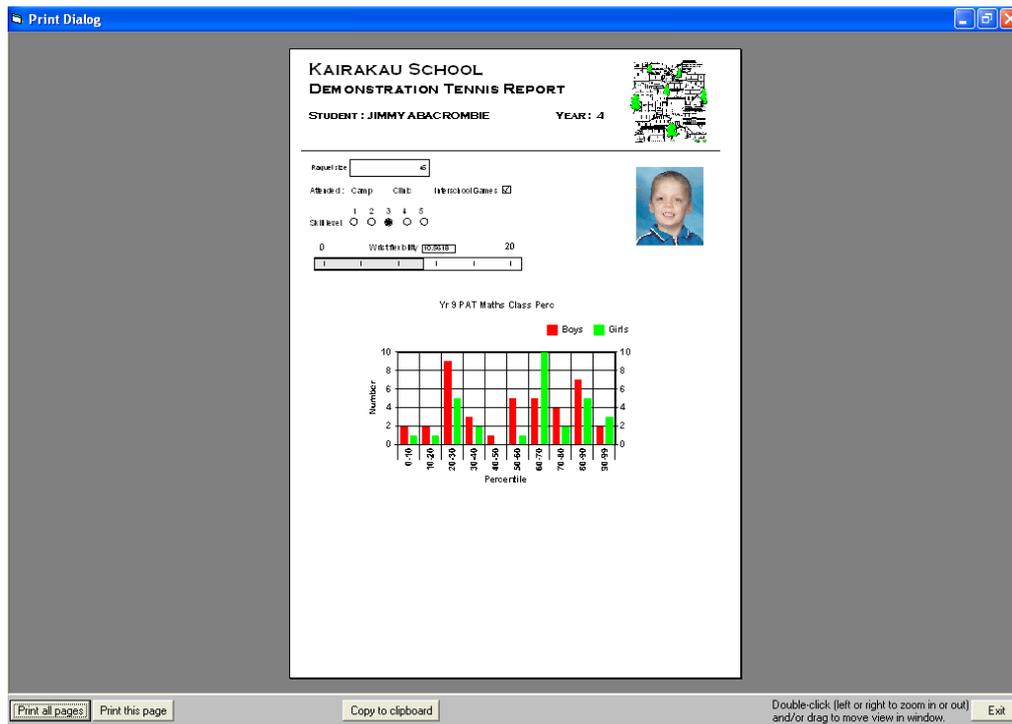
Figure 1095: A print preview

A message in the bottom right hand corner of the screen tells you that you can enlarge the document to make it more readable by double-clicking anywhere on the printed area. You may repeatedly double-click to repeatedly enlarge….
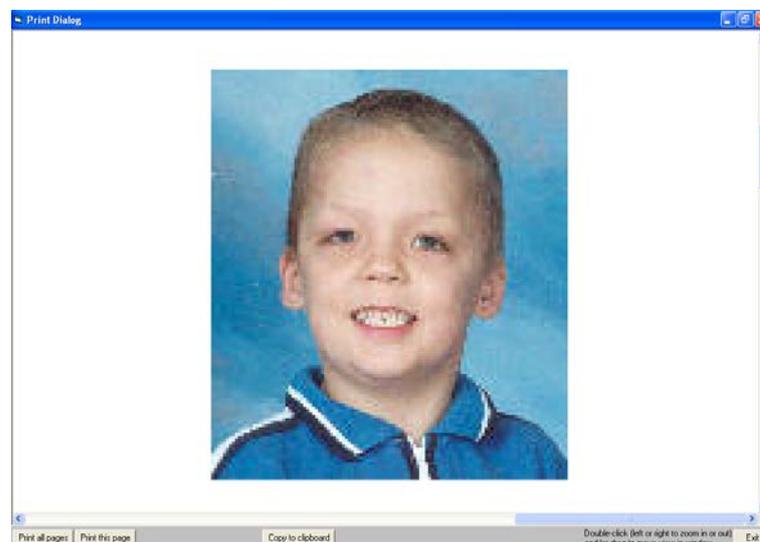
Figure 1096: A print preview – enlarged and dragged to the photo!

Fortunately double-right-clicking reduces the size by one step each time you double-right-click. If the document has been enlarged to the point that it is too big to fit on the screen then you may use your left mouse button to drag the document around enabling you to view different areas.

If you use the 'Copy to clipboard' button then you can open a word document and paste the document directly into Word, as shown below.
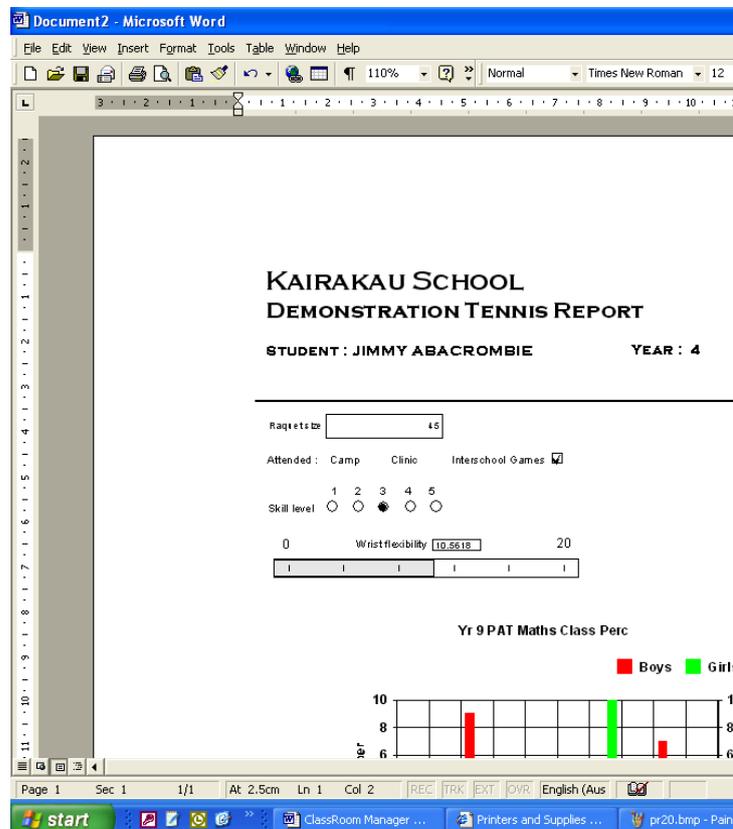
Figure 1097: Copied and pasted to Word

29.3 Printing from grid mode

If you have a document on your CM screen, and you are viewing it in grid mode then clicking on the 'Print' button will cause a dialogue to appear which allows you to select those columns which you wish to include in your printed table, and various other details.

The following display shows the demonstration document in grid mode. This document only had four columns linked to databoxes. It is common for documents to have many more links.

Figure 1098: Grid mode

The screen which appears is shown below. It enables you to select:
- the columns to be included
- the row shading
- the title of the printout
- the font size
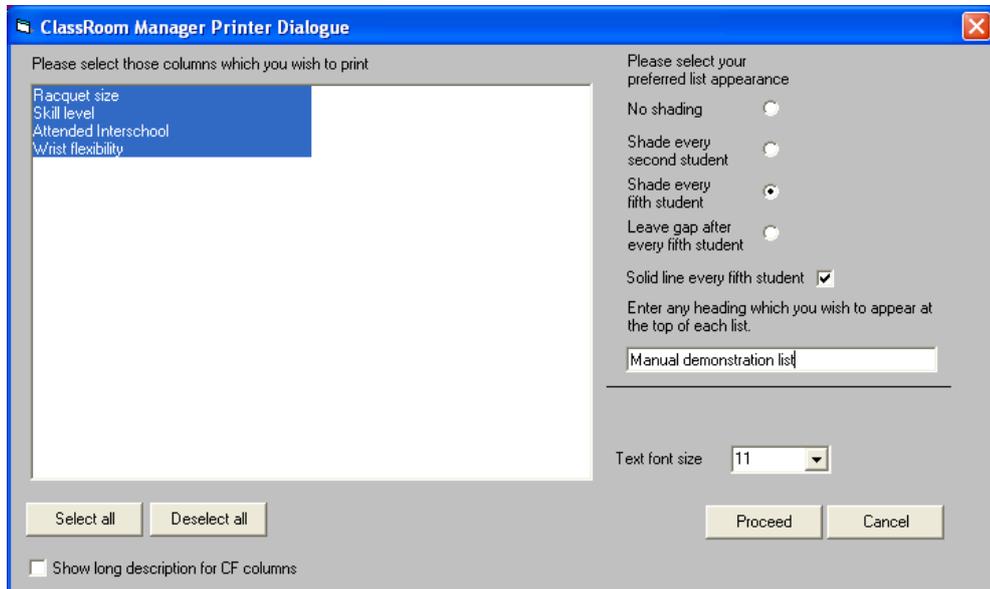
Figure 1099: The grid mode printing options

Once you have made the decision on the screen above, click on the 'Proceed' button and you will arrive at the print dialogue screen which we spent so much time describing in the previous section.
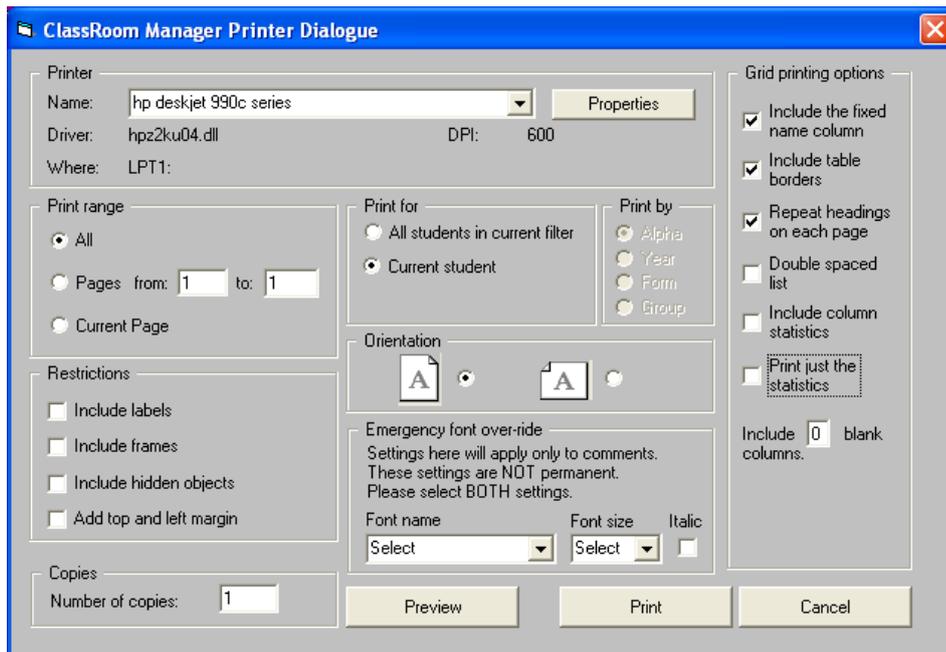
Figure 1100: The grid mode version of the printer dialogue

There is only one new aspect to this screen : the Grid Printing options on the right hand side.
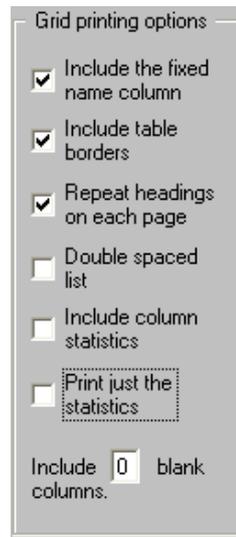
Figure 1101: The grid printing options

The Grid Printing options, shown above, allow you to request a number of aspects of the printout. These are :

- The inclusion or exclusion of the column containing the students' names
- The inclusion or exclusion of borders around the table
- Whether or not you wish to have the headings included on every page
- Whether or not you wish to have the list printed in double spacing
- Whether or not you wish to include column statistics
- If you wish to include one or more blank columns, how many?

An example of such a printout is shown below.

Kairakau Primary School   26/05/2004

Manual demonstration list

Manual demonstration.dmt				
Student	Raquet size	Skill level	Attended Interschool	Wrist flexibility
ABACROMBIE, JIMMY	45	3	1	10.
ABBOTT, KELVIN	12	2	1	7
ALDERTON, KELVIN	32	5		12
ANDREW, MICHAEL	27	4	1	14
ARMSTRONG, JENNY	16	3		7
ARNOLD, TRACEY	28	1	1	4
ARNOTT, LEIGH	37	2		6
ARTZ, CHERIE	24	4	1	12
BAINBRIDGE, GLENN	13	3		14
BARR, CHRISTOPHER	24	5	1	17

Figure 1102: An example of a printed table

The final example illustrates the printing of the column statistics.

Kairakau Primary School   26/05/2004

Manual demonstration.dmt				
Student	Raquet size	Skill level	Attended Interschool	Wrist flexibility
Statistics				
Count	43	53	23	289
Means	26.26	2.62	1.00	12.06
Std.Devs.	9.85	1.10	0.00	1.06

Figure 1103: The statistics for the example

29.4 Printing booklets

Very frequently you will wish to print several documents for one or more students. Many large secondary schools frequently print individual subject reports for all of their students – sometimes amounting to several thousands of documents.

This can be achieved by printing 'booklets'.

To enter booklet printing ensure that you have no documents loaded – i.e. that the screen is clear. (Remember that you can close all open documents by right-clicking in an open document and selecting 'Close all documents'). Once the screen is clear, click on the 'Print' button at the top of the screen and you will enter booklet printing mode.

Figure 1104: The booklet printing screen

On the left hand side of this screen is a list of previously defined booklets. A booklet is simply a selected set of documents which you have decided that you wish to print simultaneously.

The right hand two columns of the screen are used to design new booklets, as we shall shortly demonstrate. You do not have to save a booklet in order to use it. You may, if you so wish, simply make your selection of documents, without giving it a name, and proceed to print it directly.

To design a new booklet, click first on the button near the bottom of the left hand column – labelled 'Add a new booklet'.

Give your booklet a name in the area provided at the top on the centre column.

Next decide whether your booklet will be based on a simple selection of documents or are the documents printed to depend on each students' subjects (i.e. option-dependent). In this first example we shall select the first of these.

Having done so, simply select the documents which you wish to include from the document list on the right of the screen, as shown below.
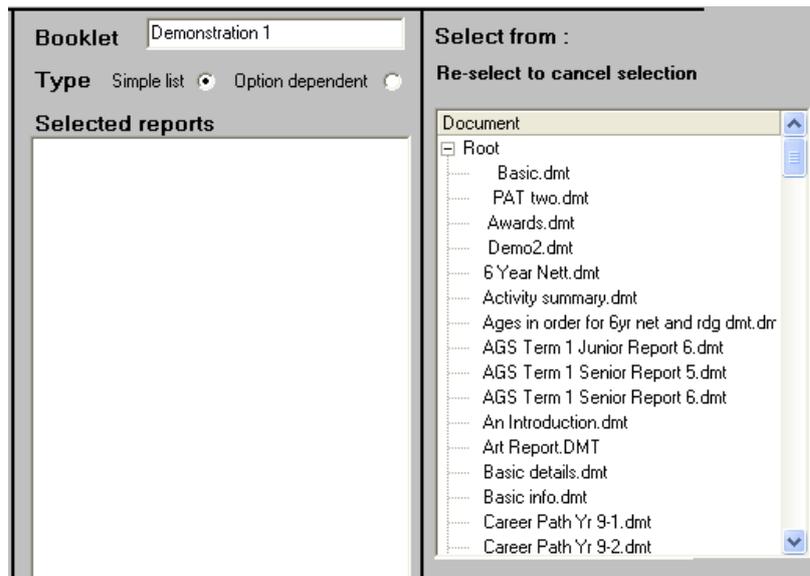
Figure 1105: Selection of documents

In the example below four documents have been selected.

Figure 1106: The selected documents (reports)

When you are ready to proceed, if you wish to have your booklet added to the list for future re-use, then click 'Save changes to booklet'.
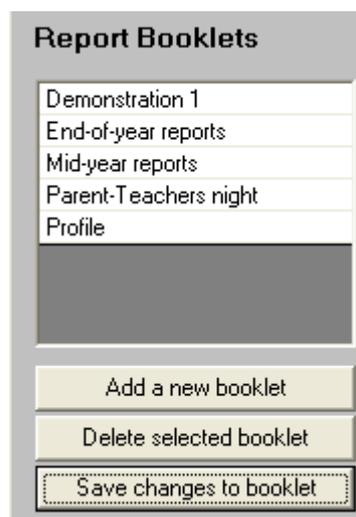
Figure 1107: The addition of the new booklet

As a matter of interest, the booklets are displayed in the menu list on the left of the screen. We shall return to see the purpose of this later in this chapter.
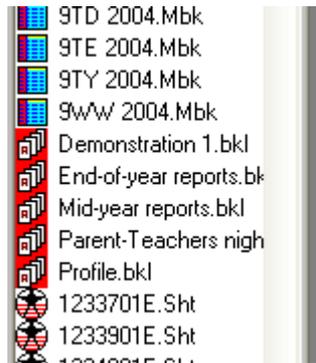
Figure 1108: The booklets in the menu list

Click on the 'Next' button in order to proceed and you will arrive at the student selector screen, as shown below. In the example, Year 9 students have been selected.
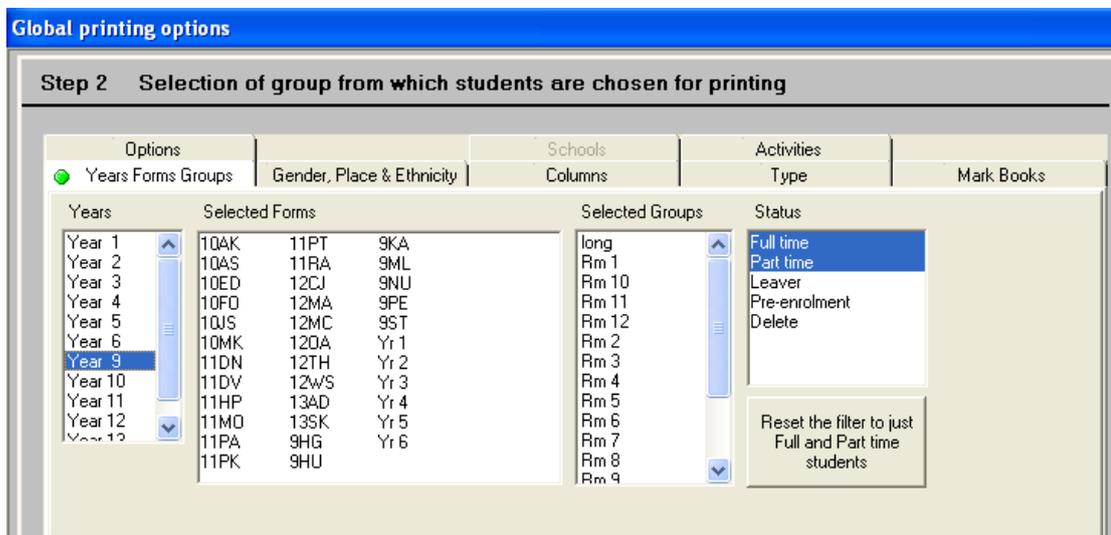
Figure 1109: The initial selection of students

Having set your filter, proceed, and the results of the filter will be displayed on the next screen, from which you may select those student for whom you wish to have the booklet printed. Several names have been selected for our example.
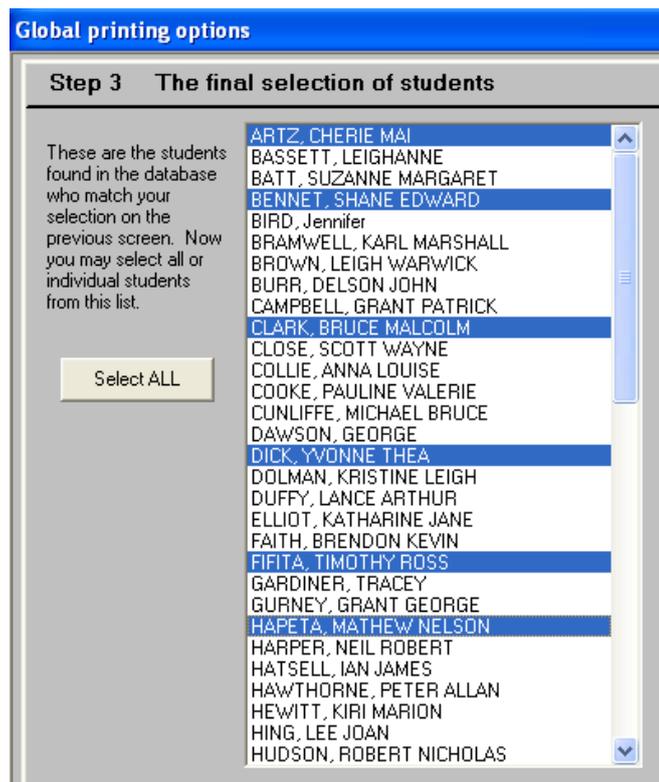
Figure 1110: The final selection of students

Again, click 'Next' and you will arrive at the printer dialogue. And, again, this one is a little different to those met before.
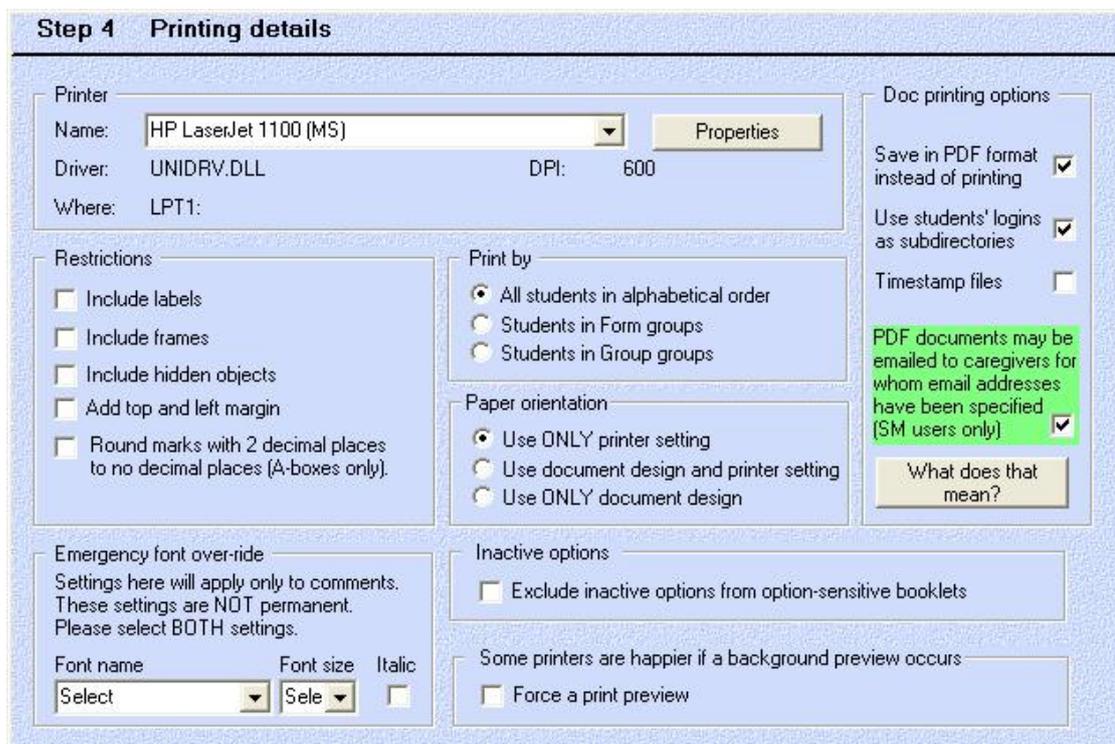
Figure 1111: The booklet printing dialogue

The 'Print by' options have been replaced by three choices relating to the order of printing.

The paper orientation is now a little more specific – as your booklet may contain documents of both orientations.

You can elect to exclude students' inactive options when printing option-dependent documents.

At the start of this chapter the difficulties of printing were discussed. We have found that some printers respond favourably to having the box labeled 'Force a print preview' ticked, while others definitely prefer that it is not ticked. Trial and error is the only way to determine which of the two your printer prefers.

For this example we shall print a single PDF document for each student., each containing all four of the reports to be printed.

Having made the necessary choices on the screen above, click 'Print' and the following screen will monitor the progress of your computer as the documents are generated and sent to the printer.
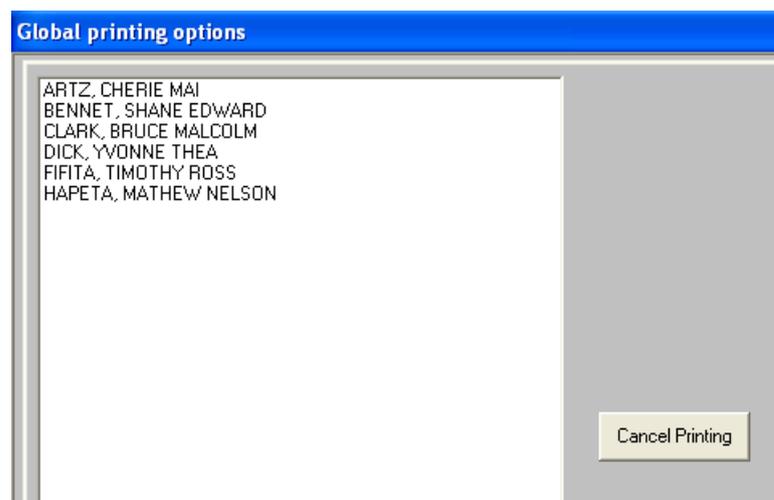
Figure 1112: The printing process progresses

Once complete, you can use Windows Explorer to visit the various sub-directories created during the process. Each will hold one (more) document for each student, as shown below.
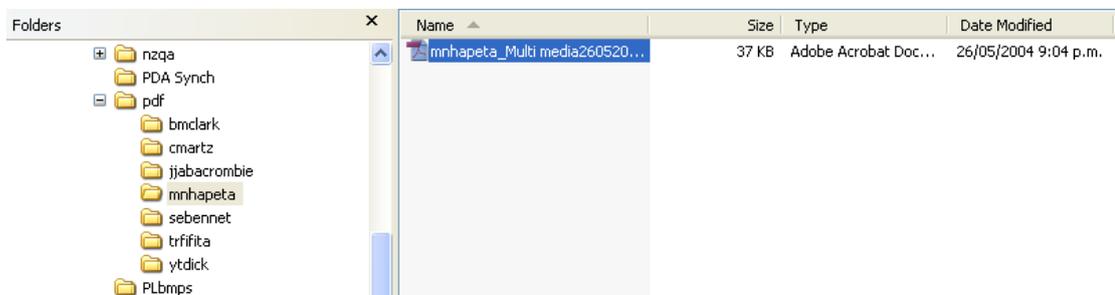
Figure 1113: The PDFs in student-specific subdirectories

An example of a document displayed in Acrobat Reader is shown below. You can see that the document does indeed consist of four pages.
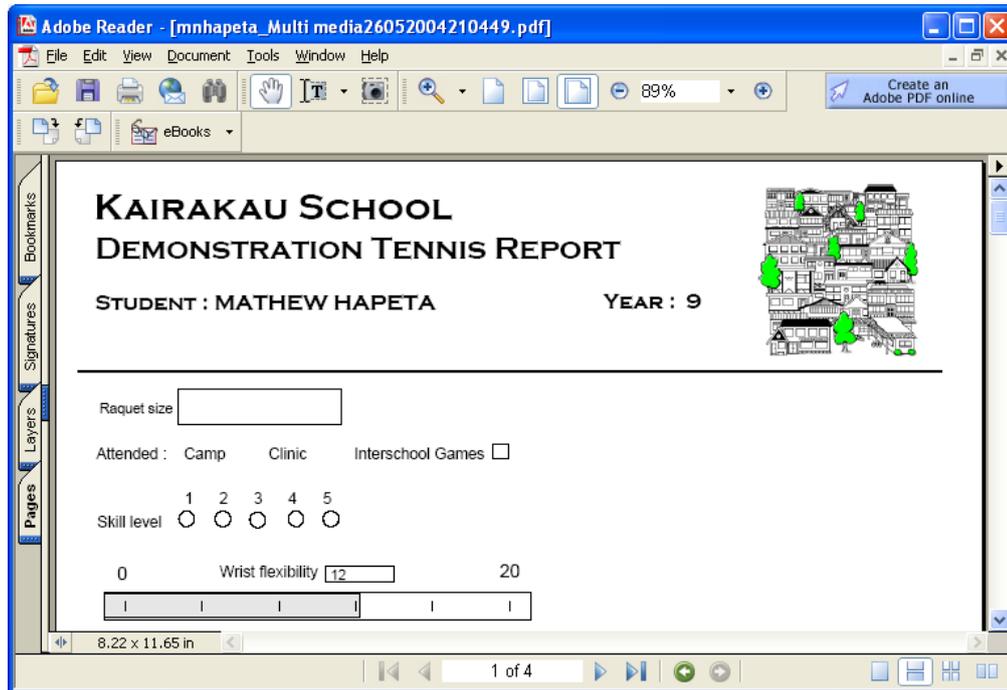
Figure 1114: The resulting PDF document in Acrobat Reader

Before leaving booklet printing we must look at the other alternative for the design of booklets – open-dependent connections. Clicking on the 'Option depenedent'
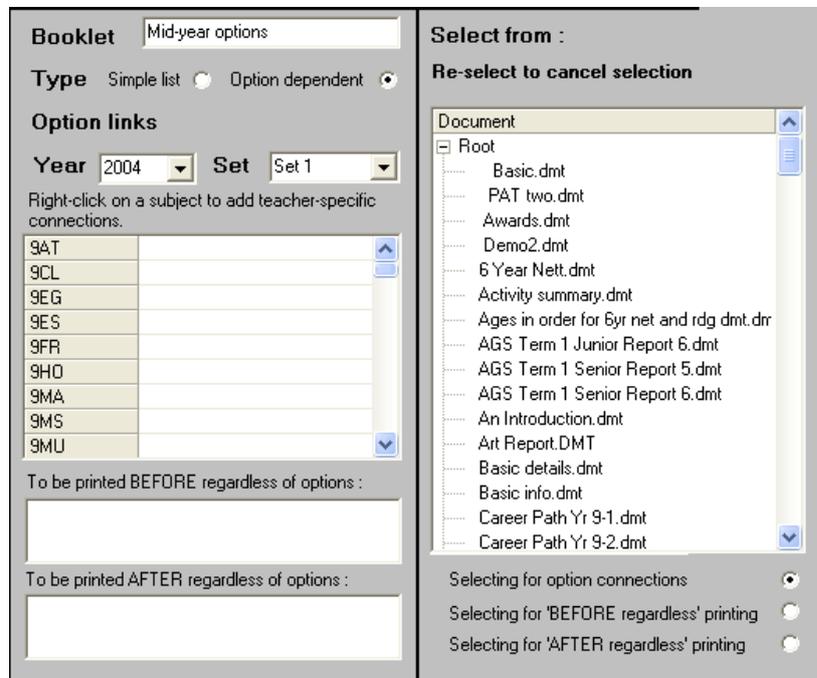
Figure 1115: Designing an option-dependent booklet Reader

choice causes the two panels above to be displayed on the right hand part of the booklets screen. Option-dependent booklets involve connecting a particular report to each of the possible options which students are taking.

Then, when the booklet is printed, the program checks against each students subjects (Core subjects are included in the process too) to determine which reports to print for each student. Besides giving your booklet a name you must :

- Select the year and the option set on which the booklet is to be based.
- Click in the space beside each option in the centre list (to select it) then select the report which corresponds to this option from the list of documents on the right hand side. If you have designed a document based on generic markbooks then the one document will be connected to all subjects.
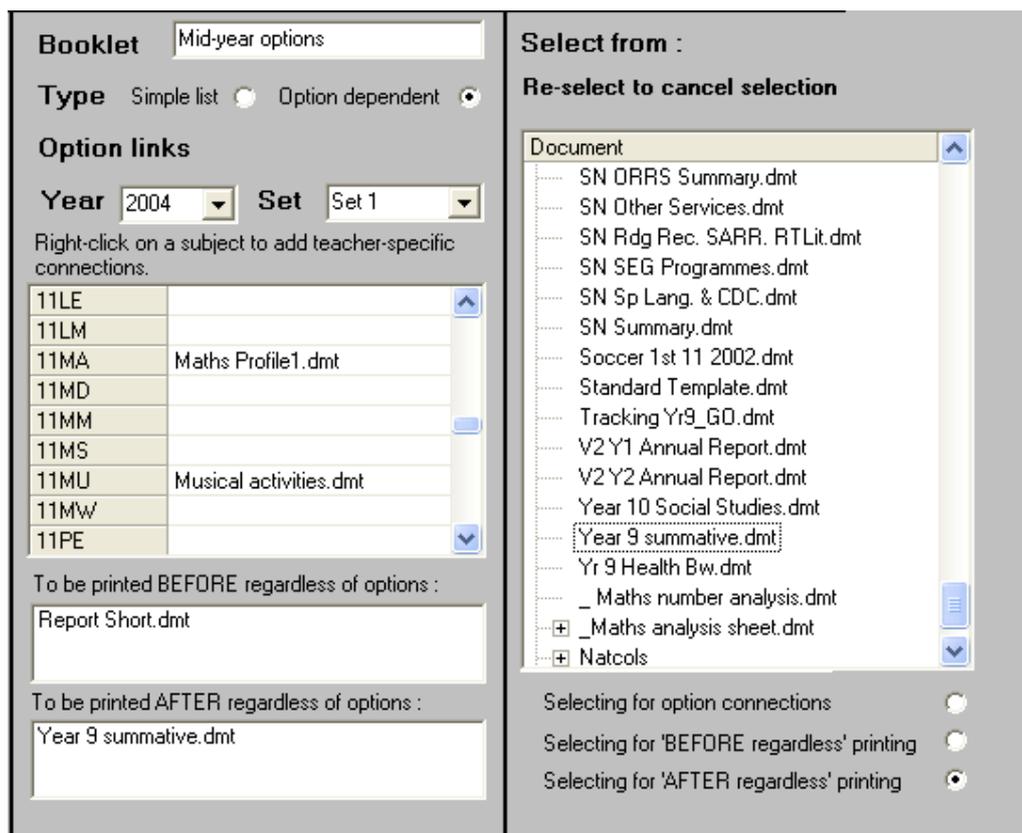
Figure 1116: Connected subjects and top and bottom reports

In the bottom right hand corner of the screen above you can see three possible connection choices. We have dealt with the first, whereby reports were attached to subjects. Now let's deal with the other two. By selecting each of them in turn you can then select one or more documents which are to be printed firstly before and secondly after the option-dependent reports are printed. The 'Before' document might well be a cover page and the 'After' document might well be a summary such as a Class Teacher / Dean / Principal's summary about each student.

From there on to the completion of printing the process is the same as that detailed earlier for 'simple list' booklets.

29.5 Using booklets from the menu

A very useful facility of booklets is the ability to view them on screen without printing them. Booklets appears in the menu list as shown below.
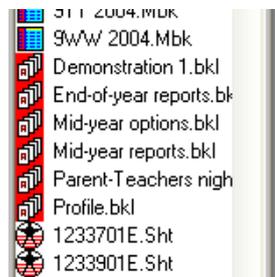
Figure 1117: Booklets listed in the menu

If you select a booklet then all of its documents will load for the current student, as shown below.
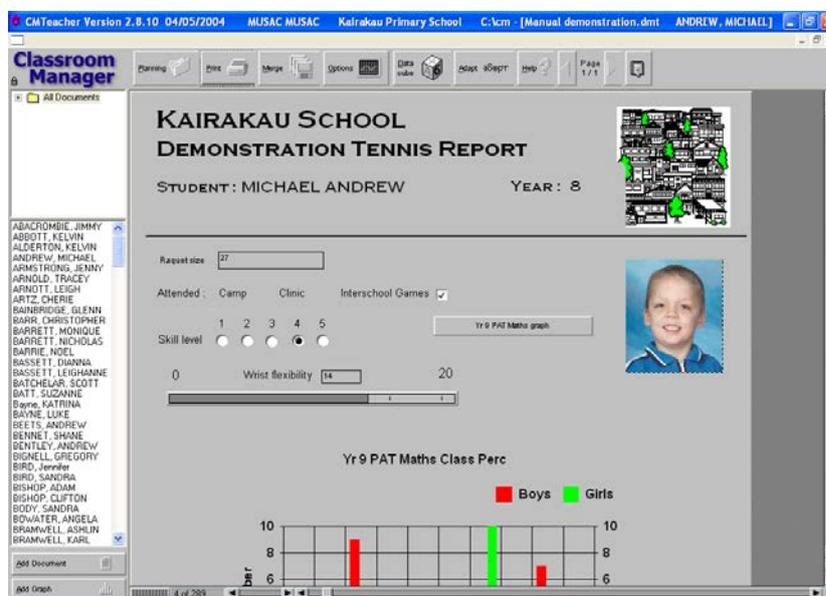
Figure 1118: Viewing the first report in a booklet

On the left hand side of the screen you will notice that the menu has been replaced by a list of the students in the current filter. As you select a student from the list their versions of each of the booklet's documents are loaded.

You can further filter this list by right-clicking in it and selecting the 'Filter' option from the popup menu which appears. This menu is shown below.
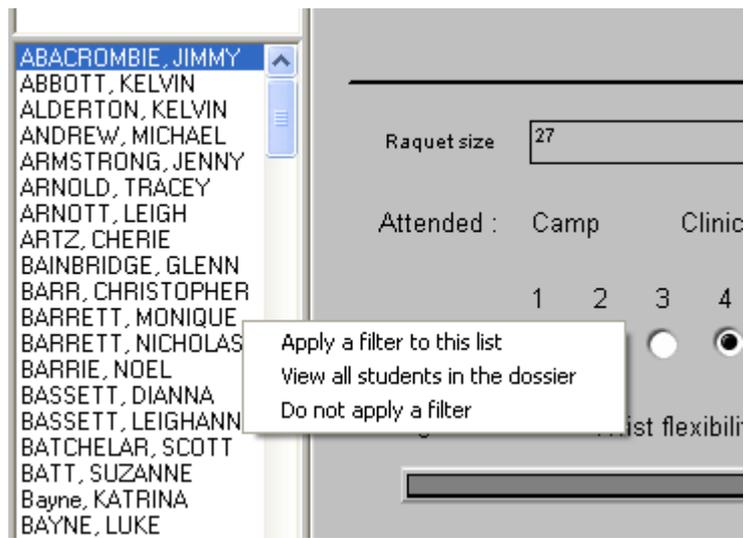
Figure 1119: Filtering the left hand list of students

To view a different document for the student, right-click in the document being displayed and the popup menu shown below will appear, from which you can select the desired document.
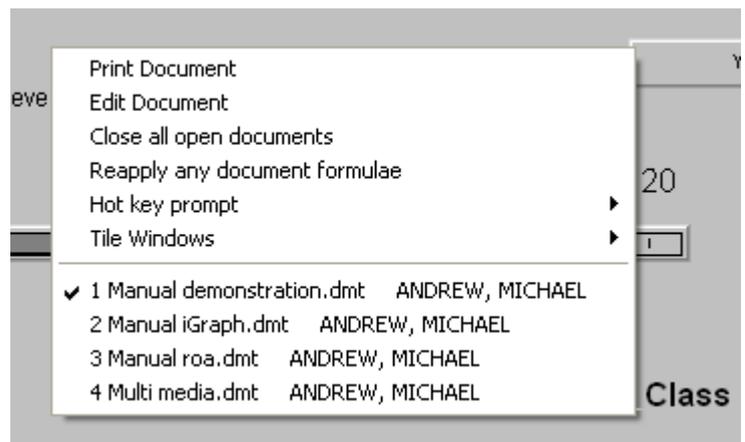
Figure 1120: Selecting another document from the booklet

Once you have finished viewing the booklet, click 'All documents' from the top left hand corner of the screen and your normal list of documents will be redisplayed.
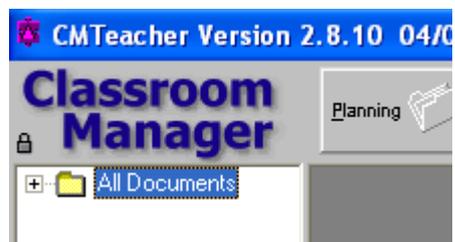
Figure 1121: Selecting 'All documents' when finished with a booklet

29.6 CMPrint

The CMPrint.exe utility is incorporated in ClassRoom Manager in your \cm directory and appears as the first screen of the booklet printing process. You can either select an existing booklet, create a new one, or use the program to prepare a booklet and to print it without saving it. For printing a single document for selected students then this is the easier way to do it.
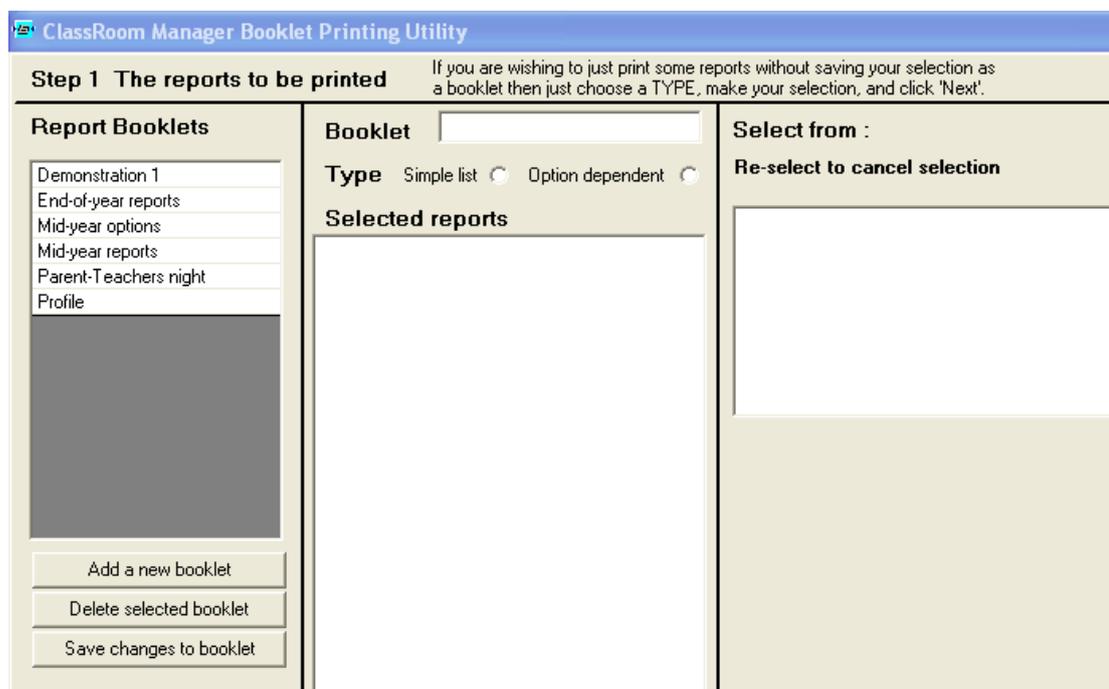
Figure 1122: The main CMPrint screen

29.7 Emailing student documents to caregivers

This facility is only available to those using Student Manager, as the email address for caregivers are obtained from that package.

If you have ticked the green area (see page 10-10 from printing from document mode) then, at the conclusion of the printing process, the following screen will be displayed.

Please note: In order to generate PDF documents suitable for emailing you MUST have allocated students their login ids using the Induct process in CMAdmin. This gives every student a login id, an email address, and a pin number. It is the students' login ids which form part of the pdf document names which are then stored in subdirectories created, one for each student, named according to their login id e.g. 'abacrombiejj'.
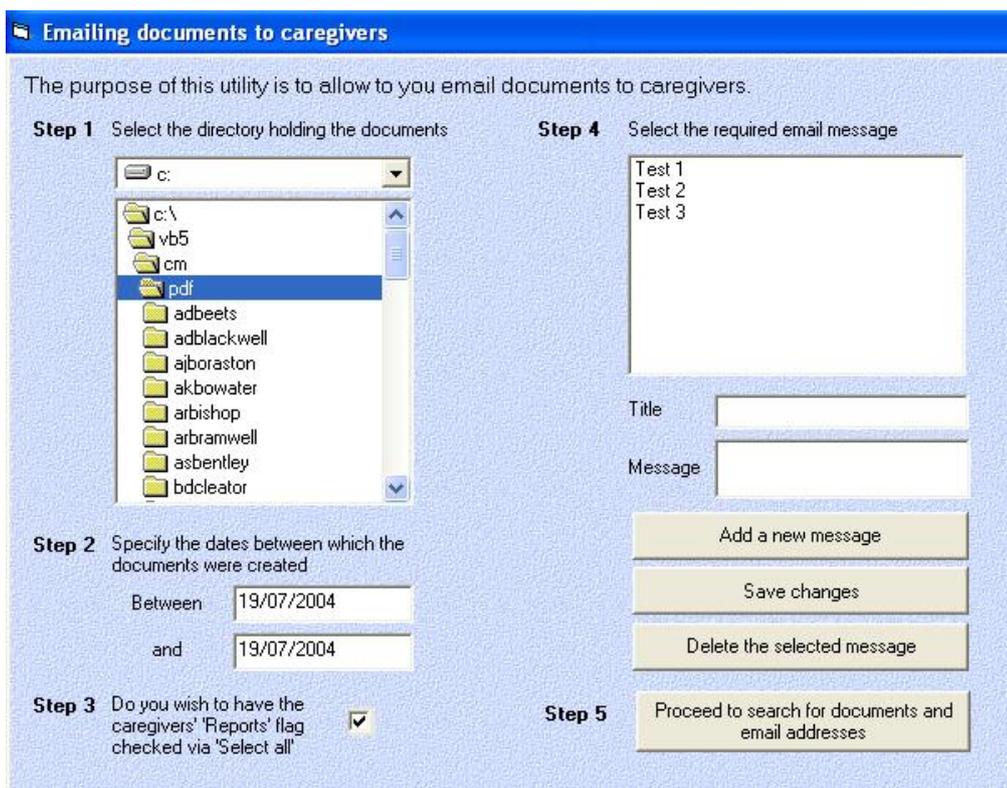
Figure 1123: The main emailing screen

When you arrive at this screen, the directory under which you chose to have the students' subdirectories will be pre-selected for you, and the first few of the subdirectories will be visible below the chosen directory.

The 'From' and 'To' dates will have also already been chosen for you.

All that remains is for you to decide whether or not you wish to send to all caregivers of each student or only to those whose 'Reports' flag is set to 'Yes'.

Finally, you must design one or more messages to form the basis of the email, to which the student's document will be attached prior to transmission.

This is done via step 4 on the right hand side of the screen. During testing, three messages have been created. You can edit an existing message by clicking on it, then changing either its title or its message, both of which are shown below the list.

The right hand side of the screen is shown below. Use the button titled 'Add a new message' to create a new message. Give it a suitable title, then click in the message area to access the word processor, where you can type in your message.
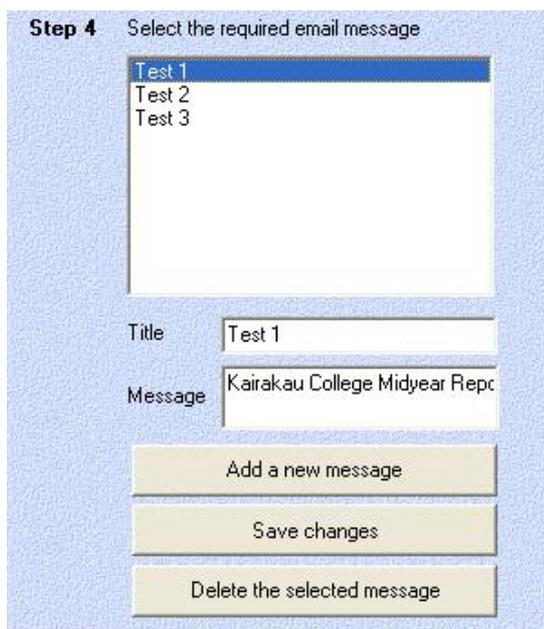
Figure 1124: Designing messages for your emails

The screen below illustrates a message which has been created during the testing process. You will notice that use has been made of the code insertion tool to refer to the student by name.
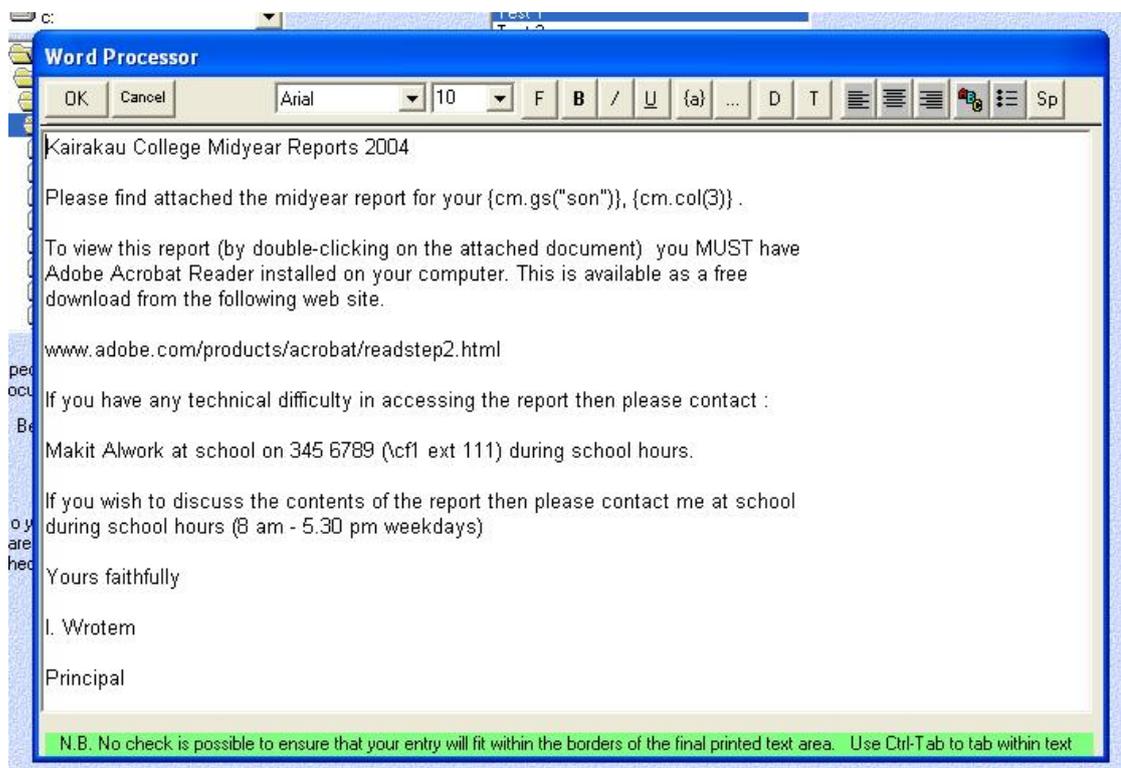
Figure 1125: An email message in the word processor

Once you have created your message(s) select the one which you wish to use and click the button in step 5 – to take you to the next screen.

Figure 1126: The identified documents

When you click the button in step 5, the program scans for subdirectories and documents, and lists them in the display, as shown above. Then it passes through the identified documents, retrieving the name of the student concerned, and the names of any caregivers, whether or not they have email addresses and whether or not their 'Report' flag is set to 'Yes'. Both of these are shown in the right hand two columns above.

You can enter or edit caregivers' email addresses via this screen, as shown below. Naturally, you can only do this if a caregiver has been identified and listed.

Figure 1127: Editing a caregivers email address

You can also toggle the 'reports' setting between 'Yes' and 'No' by double-clicking in the right hand column. Naturally, again, you can only do this if a caregiver is listed for the student.

Figure 1128: The valid selections

Finally, you can select those caregivers who do have email addresses from the list. If you click the 'Select all' button at the bottom of the list then all suitably endowed caregivers (i.e. those with addresses and – if you've chosen to restrict the sending to just those with 'Rep[orts' set to yes – those who match this setting. In the illustration above several caregivers have been automatically selected.

Click on the 'Proceed to emailing' button at the bottom of the screen and you will move to the final screen – the transmission screen, shown below.

Figure 1129: The transmission screen

In the top left hand corner of the screen you must ensure that two entries are correct. The first is your school's email address FROM which the emails are being sent. The second is the school Internet Service Provider's (ISP) address in the form smtp.aaaa.aaaa.aa, as shown above. Once these have been set they will be remembered by the program for future transmissions. The two addresses above are obviously spurious….

Once done, click on the button labelled 'Send them' and they will be sent. As they depart, they will be listed on the right hand side of the screen, as shown below.
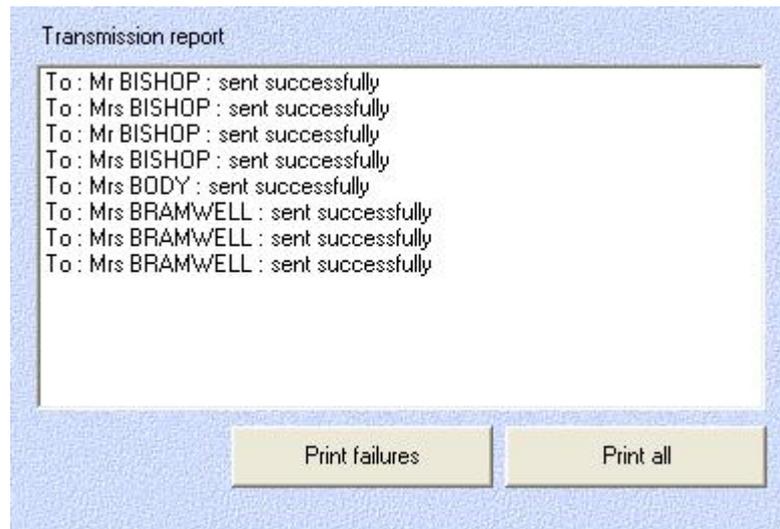
Figure 1130: The transmission report

You have two further options – to print just those which failed to transmit or all transmissions.

30 Activities

30.1 An overview of activities

ClassRoom Manager was initially designed to work solely with student specific data – their name, their date of birth, their score in maths, their reading age in Year 4 and so on. After some time we received a number of requests for a separate type of entity which we decided to call an 'activity'. In the CMAdmin section we looked in detail at the process of setting up activities, their data fields, their schedules, creating student-specific columns, making awards, connecting students to activities and, finally, the automatic generation of documents and dossiers involving activities.

As an example we created a Choir activity, along with some information relating to the choir, a schedule, some student columns (Practice day, Favourite song, Robe colour...). Some students were attached (became members of) the choir, and some were allocated awards. A document was created as was a dossier which contained that document.

These dossiers and documents are available in CMTeacher. The activities themselves are also recognised and appear on the menu list on the left hand side of the main screen.

In this chapter we shall look briefly at the document which we created, and look in detail at the activity, as many of the functions available in CMAdmin are also available here.

30.2 An activity document
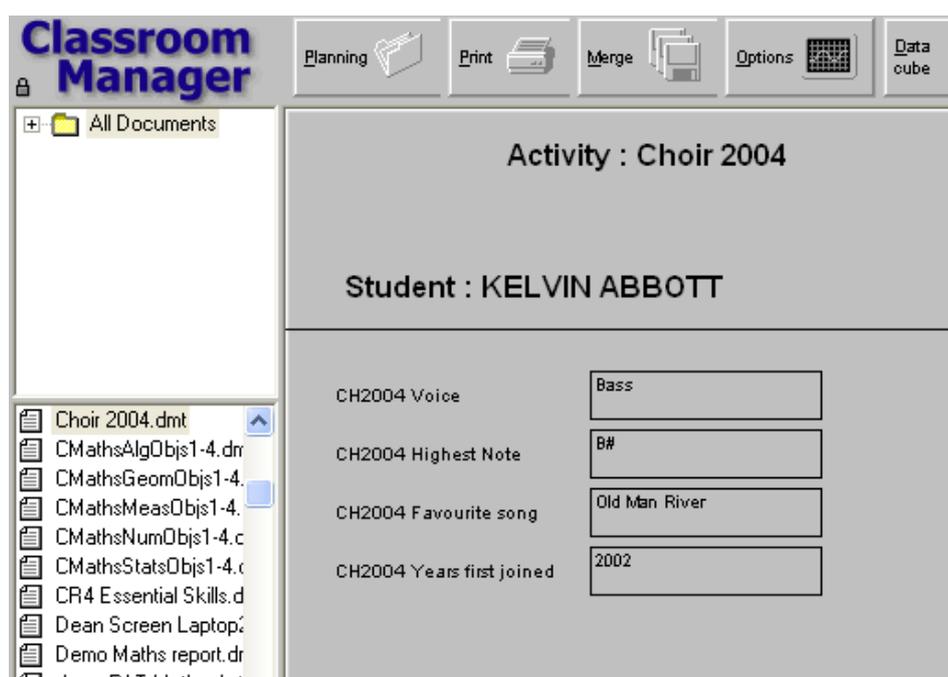
Figure 1131: The Choir 2004 document

This is the document automatically created for use with the choice. It displays the four student-specific columns allowing you to record the information requested about choir members.

It is a normal CM document and data may be entered via the document itself or through grid mode and it may be printed in the usual way.

30.3 Activities in CMTeacher

Activities appear in the left hand menu, as shown below.

Figure 1132: Activities in the menu

Selection of an activity from the menu results in the appearance of a screen such as that shown below. Down the left hand side are several buttons, similar to those in CMAdmin. Their functions are virtually identical.
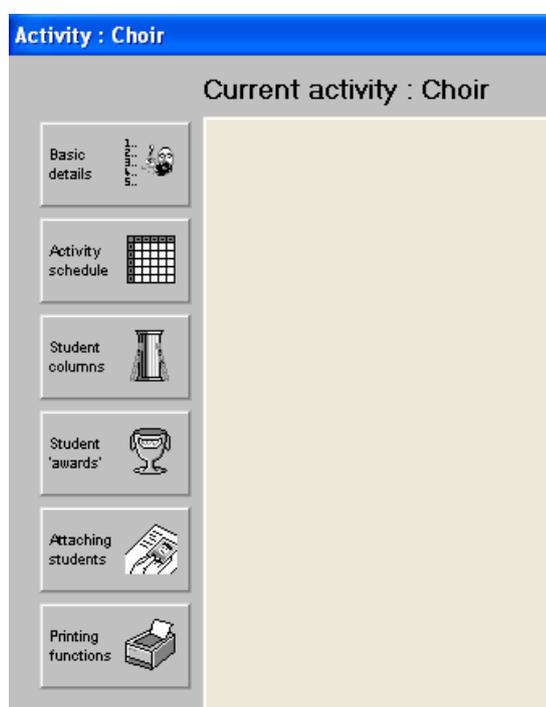
Figure 1133: The activities screen

There is no ability to create an activity in CMTeacher. This can only be done through CMAdmin.

30.3.1 Basic details

The basic details relating to the selected activity are displayed on the screen, where you may change their contents. You can also add new items to the User-defined details which were created in CMAdmin. The screen for the Basic Details of the Choir 2004 is shown below.

Figure 1134: The Basic Details screen

30.3.2 Activity Schedule

The Activity schedule for the Choir 2004 is shown below.

Figure 1135: The Activity Schedule for the chosen activity

The same processes as were available in CMAdmin are available here. You may, via the screen, adjust that grid which may be used to represent a timetable, a schedule, a results sheet – or all of these combined.

Buttons down the right hand side allow you to add, insert delete and move rows and columns and to edit the headings.

A button at the bottom of the screen allows you to copy the schedule to another activity.

At the bottom of the screen you can also enter a title for the schedule. Its default title is the imaginative 'Schedtitle'!

30.3.3 Student columns

Student columns are used, as shown in the example document earlier in this chapter, to allow you to record information relating to the activity on each student who is a member of that activity. The columns, as they were created in CMAdmin, are displayed as shown below.

Figure 1136: The student-specific columns

These columns are stored under the categories :

Activities / Music groups / 2004 / Choir

The 'Y' in the 'Rep*' column indicates that the contents of these columns are to be included in the activities summary which it is possible to include in a user-defined document under the {a} button in the word processor. By omitting the 'Y' from the first two you indicate that you do NOT wish to include each students' 'Highest note' and 'Favourite song' in their report – presumably a 'Record of Achievement' type document. (See the appendix on code insertions for further details)

30.3.4 Student awards

It is possible to create awards for activities and to allocate them to members of that activity. The illustration below shows that three awards have been created and have been variously awarded to four members of the Choir.

Figure 1137: The creation and allocation of awards

30.3.5 Attaching students

As can been seen above, a number of students have already been made members of the choir.

To add further members, click on the 'Apply a filter..' button and make your initial selection. (This uses the student filter process as described in an appendix to this document.)

You can then select students from the left hand list – the filter – to add them to the right hand list – the members of the activity. An example of this process is shown below.
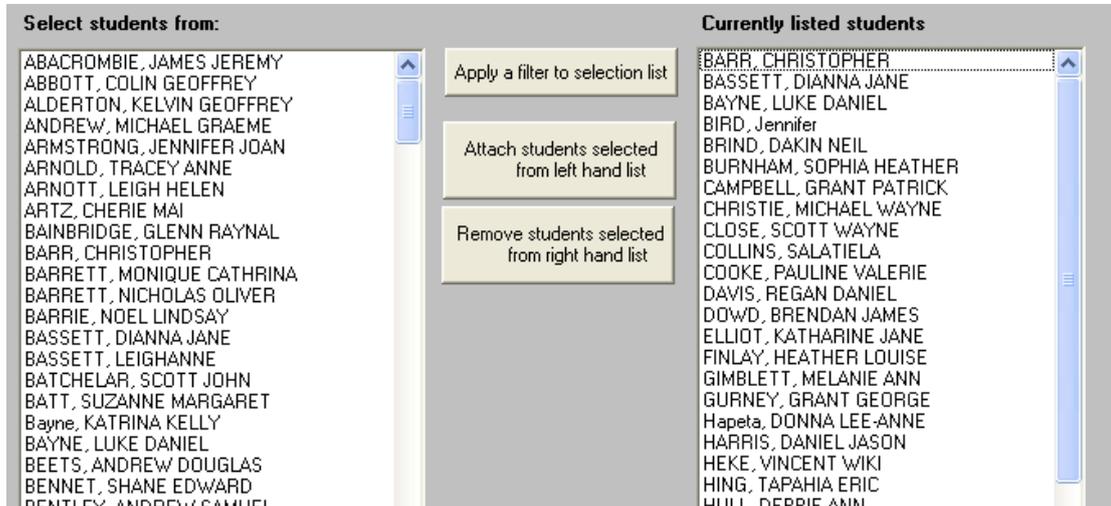
Figure 1138: Attaching students to an activity

30.3.6 Printing activity-related information
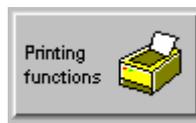
This process allows you to generate lists of information relating to the selected activity. The five possibilities are listed on the left hand side of the screen below.
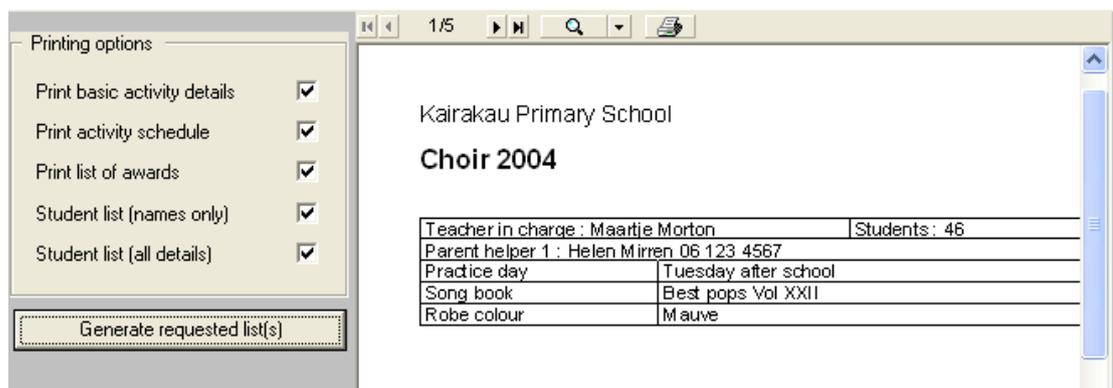
Figure 1139: Printing activity lists

Once you have made your decision, click on the 'Generate lists' button at the bottom of the screen and the lists will appear in the printer window on the right hand side of the screen. Once there you have a number of options.
You can move forward and backwards through the various pages of your lists using the four little buttons at the top of the printer.

You can enlarge or reduce the display by either clicking on the magnifying glass or, more simply, by double-clicking on the image itself. Double right-clicking reduces the image size. Once the image is enlarged you can drag it around to view different parts of a list using your mouse.

Finally you can print the pages using the Print button at the top of the screen.

31   CMPlanner

What's in this chapter?

31.1 An overview of CMPlanner

CMPlanner is a tool to enable teachers to create units or work and then to timetable and assess them. You may select aims from the NZ Curriculum Framework and then subdivide these aims using Specific Learning Outcomes (referred to as SLOs in the package). The SLOs may be selected from the PAA bank (if your school has purchased rights to these) or you may define your own learning outcomes.

You can also include notes on Activities that your students will be engaged in during learning, Assessments they will be required to complete and Resources that are required.

Once the Unit of work is defined you may then place it on your timetable so that a complete schedule of learning can be created, complete with additional notes and documentation. Multiple Units can be defined and shared among teachers to form a complete Plan.

Once a unit is defined, a Document can be generated which is compatible with the CMTeacher document reader. The document can then be used to gather and report information on student progress.

31.2 Getting started

Sign on to CMPlanner using your normal CM entry code and password. The login screen is shown below.

CMPlanner opens at the view that was open last time you used the package. It also loads the Plan and Unit that were active when you closed your previous session.

If you have no Plans available in your database, you will be shown the Create a New Plan dialogue box to enable you to make a new Plan.

Your Plan may run for several years. Each year is divided into Terms, each Term into Groups and each Group into Weeks, then Days then Periods. We will return to the various views later. To begin we need to set some of the Options that will be required.

Although default definitions are included for all of these items you may change these to suit your school. This is the recommended starting point. It may take a little time to define these items, but a good plan depends on it's foundation so it is best if these items are defined early rather than changed later.

The usual first-time screen is shown below.

Figure 1140: The main screen – General view

31.3 Setting the options

To adjust the options, click on the 'Options' button near the top right hand corner of the main screen.

The Options dialogue has five tabs - Titles, Screen Colours, Days, Rights, and Miscellaneous. These items should be defined early in the design of your Plan, especially if the timetable is going to be used to set out the order of units.

The main screen for setting the options is shown below.
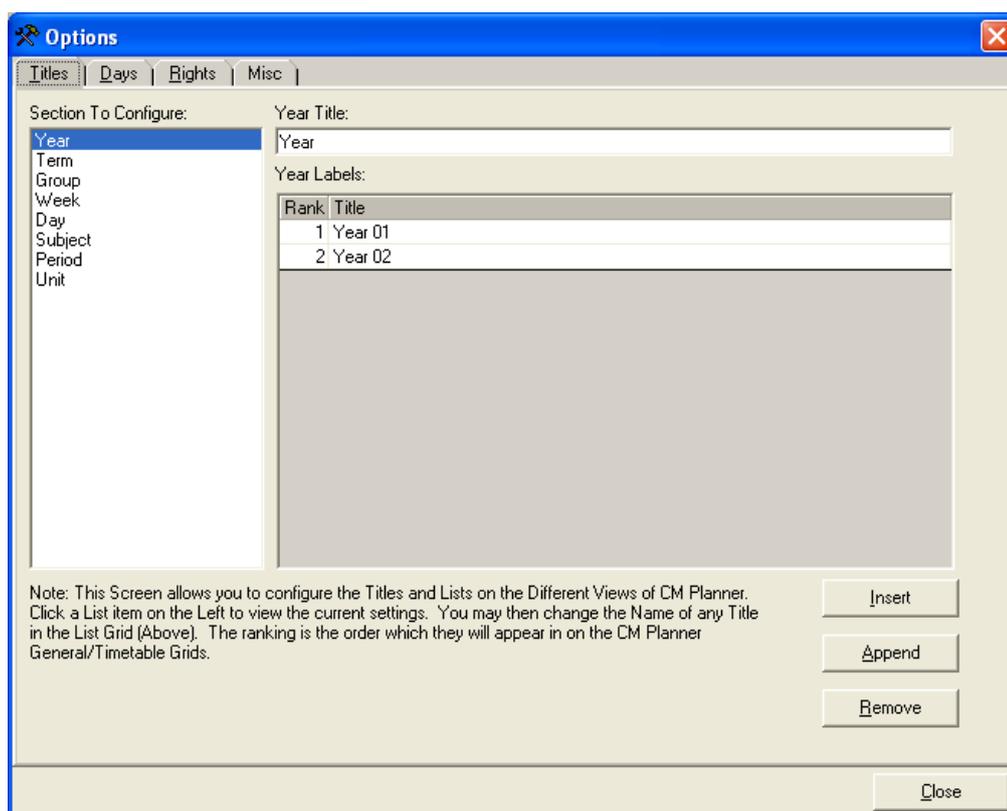
Figure 1141: The 'Options' screen

31.3.1 Titles

This section enables you to set the name that your school uses for various calendar and timetable items.

Year

You may like to rename these Year 2001, Year 2002 etc. If your plan does not require the default 3 years it may be useful to remove unwanted year titles because this will save time when the Plan is loaded. Each time the Plan is loaded all grids are filled with the titles defined in this section. The same applies to print-outs.

Term

These are fairly standard.

Group

This has been included to enable the Term to be broken into smaller chunks - say three to five weeks - as an organisational unit. Typically, this might be the length of time that a Unit will operate.

Week

These are fairly standard, but if your school uses less than the normal 10 weeks it may be a good idea to remove unwanted titles.

Day

This will be an important area for most secondary schools but could probably be left at the default settings for most primary schools.

The Default is the normal weekday names.

If you are in a secondary school and your timetable uses non-standard timing (for example, six-day timetable) you may wish to rename these to your named school days. Do this in the grid under 'Title' in the centre panel.
Next you should complete the connection between school day names and calendar day names.

If your timetable days is always on the same calendar day then just set each day to it's corresponding calendar day.

If your timetable has some other arrangement, for example 6-day timetable, then set each calendar day to 'variable'. You may have some days that are fixed (for example, Monday may always be Day 1) and some variable days. If there are any calendar days that you do not use then set these to 'not used'.
Now check the box next to each of the days that you want displayed in Detail View and print-outs. Days next to unchecked boxes will not be displayed.

Subject

This is the list of subject areas that are displayed as rows in General View and Detail View. These items are specific to the Plan, so will need to be redefined if a new plan is created.

Period

You can name the intervals of time that your school uses to divide the normal day. These intervals must be the same for all days.

Unit

These are the column headings used in Unit View. You may not add or remove any of these but they can be renamed.

31.3.2 Days

The 'Days' screen is shown below.
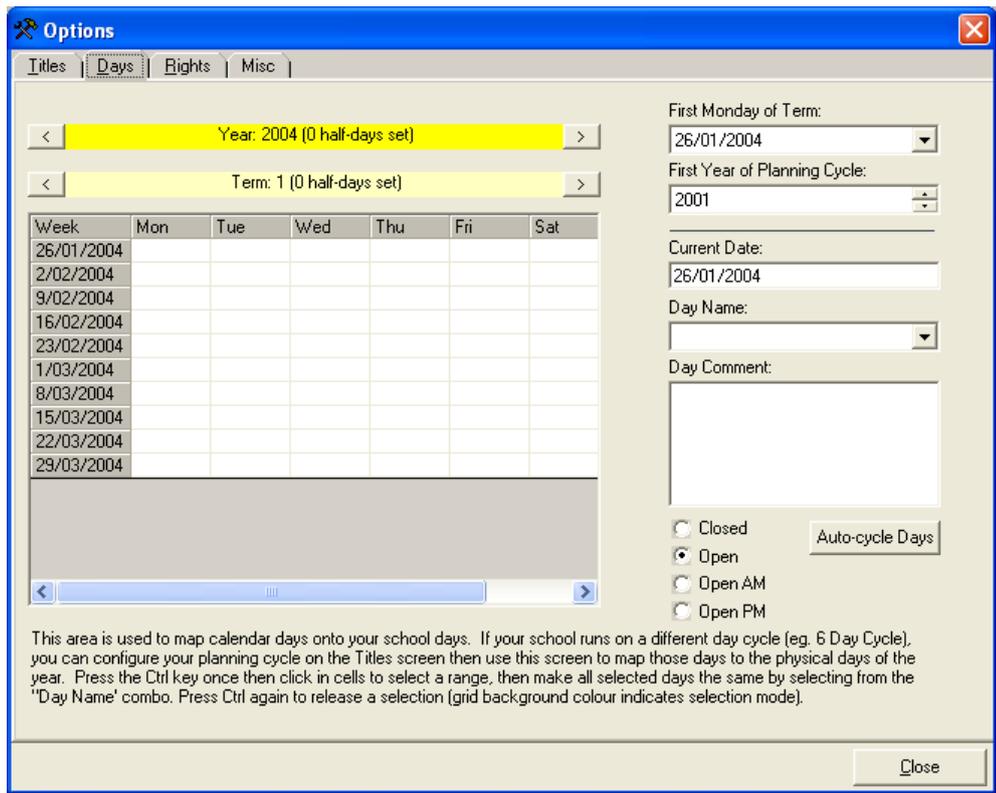
Figure 1142: Adjusting 'Days'

This section enables you to define each school day for each term. You should have defined your school days and the relationship of these to calendar days before working on the settings here.

First select the current year using the forward and reverse buttons at the ends of the Year bar.
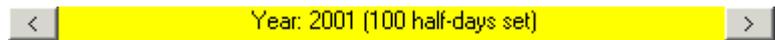
Figure 1143: The Year bar

Next select the current term in similar fashion using the Term bar.
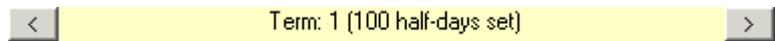
Figure 1144: The Term bar

Now use the combo drop-down at top right to select date of the first Monday of the term.

Figure 1145: The date selector

All the dates in the term calendar should now re-adjust, based on the date of the first Monday.

Now you should set the days which the school is open. The default is every day except weekends. This is indicated by a small green rectangle within the grid for each day. You can adjust these by clicking on the day to be changed then clicking the appropriate option button. The corresponding display icons are shown opposite.

Figure 1146: Open or Closed

Multiple cells can be selected at once by pressing the ctrl-key once then clicking (or click and drag across) the required cells. The Ctrl key acts as a toggle to switch selection mode on and off. When selection mode is on the background colour of the unused portion of the grid changes to the blue selection colour. If nothing happens when you press Ctrl, try clicking somewhere on the grid to give it the focus, then press Ctrl again.

If you want to select a range as well as individual cells, make sure you do the click-and-drag selection first because this resets all the other cells when it is used.

Finally, you should set the name for each day by clicking the required day and selecting it's name from the Day Name combo. Multiple cells can be selected as above and given the same day name.
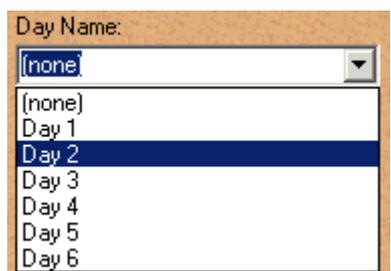
Figure 1147: The day selector

If there is a regular pattern to your days then you can speed up this process using the Auto-cycle days button. First, set the name of the first Monday of the term. Then click the Auto-cycle days button. This will use the definitions you have set under the Titles tab to calculate the position for each day. Days when the school is not open are left alone.

The Auto-cycle process starts at the currently selected cell and continues to the end of the grid, working from left-to-right then top-to-bottom. Cells to the left and above the current cell are left untouched.

31.3.3 Rights

This section enables you to select the staff who have rights to view and use your Plans. Select a staff member and check the box next to the Plans they need to use. The screen for this is shown below.
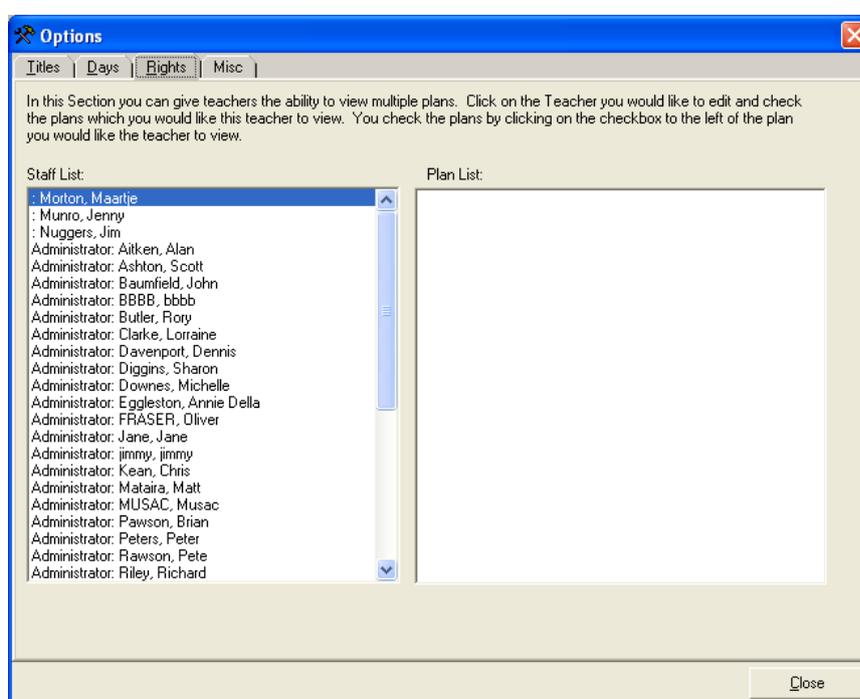
Figure 1148: CMPlanner rights

31.3.4 Miscellaneous

This section enables you to set a variety of global variables used by the package. The main screen is shown on the next page.

Import PAA

If your school has purchased the rights to the Multi Serve Planning and Assessment Assistant then this button will be enabled (the setting for this is in CMAdmin). If you click on this button the entire set of PAA learning outcomes will be loaded into your database and will become available for you to use when setting attaching learning outcomes to aims in the unit editor.

If you have already imported the PAA database then a warning will be issued. It is not a good idea to import it again, unless your version of these data items have been corrupted in some way.
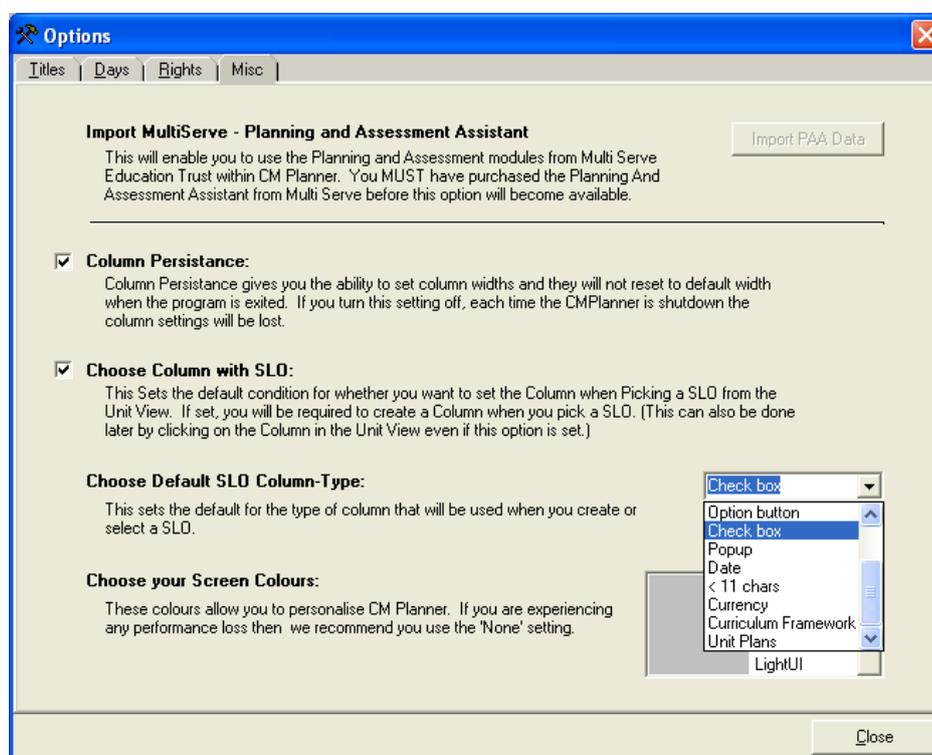
Figure 1149: Miscellaneous settings

Column Persistence

If you check this box then the program will save any changes you make to column widths on various grids. These will be re-applied next time you use the package.

Choose Column with SLO

If you check this box the package will set as default the intention to include a column number (from ClassRoom Manager) with each Aim or SLO that you install in the unit editor.

Choose Default Column-Type

This is the default column-type that will be used when an SLO is added to an Aim using the SLO-Picker.

31.4 The Plan views

This area is for setting out overviews for your complete year Plan. The screen is divided into sections.

31.4.1 The General View

Figure 1150: The General view

Subject

The list of subjects on the left of the screen are taken from the settings you made in the Options dialogue. If you want to change these click the Options button and select Subject from the text-box under Section to Configure. Change the titles or Add / Remove as you like.

Overview

You can select any box opposite a subject and make notes in that box describing your general intentions for the subject at the time of year specified in that column header.

In the Term Overview enter general details about what you intend to do in the subject during the term.

Double-click the Overview header to open to the Group level.

In the Group Overview enter general details about what you intend to do in the subject during the group of weeks (as defined in Options).

Double-click in the Overview header to open to the Week level.

Finally, you can enter details about the work you intend to cover during the specified week.

Printing

The Overview spreadsheet can be printed out by clicking the Print button (top of screen). This opens a dialogue which requires you to select whether the Full Plan, Overviews only, or Weeks only. When you select and click OK the output is sent to a print preview. You can then choose to print to the default printer or close without printing, as required.

Notes

You can choose to display only the weekly notes by removing the check from the overviews checkbox (top of screen).

You can adjust the column widths by moving your mouse pointer over a join in the column headers. When the mouse pointer changes to a resize arrow then click and drag.

31.4.2 The Detail View

This area is for organising your programme of work. You can select units and add them to your calendar. The calendar is specific to the user and the plan. That is, different users will see only their own timetable. Selecting a different plan brings up the timetable for that plan.

Figure 1151: The Detail view

There is a column on the left which shows the current week's details from the General View. You can use the resize mouse to change the area of screen allocated to this view (mouse-over the border between regions to show the resize-mouse icon).

There are two panels at the bottom of the screen. The left-hand panel shows the comment attached to the selected cell. The right-hand panel shows the description of the active unit. You can resize the area of the screen allocated to these lower panels using the resize mouse.

Timetable

The top panel shows your school timetable, as defined in the Options dialogue. You can place your units on this grid by first selecting a unit from the combo listbox at the top of the screen then double-clicking in the target cell. If you make a mistake, you can delete the placement by right-clicking on the cell and selecting the appropriate item from the popup menu, or just pressing the Delete key. A word of caution - pressing the Delete key clears the entire contents of the cell (the Unit and the Comment). To selectively clear just the Unit or the Comment or both, use the right-click method and select from the popup menu.

To copy a unit into the same cell on subsequent weeks (or school cycles), right-click the unit on the timetable grid then select Recur Unit from the menu. It will be copied into the same row position for the next days of the same name. The number of times the unit will be recurred is set in the Recur box at the top right of the screen.

Period Notes

The lower left-hand panel can be used to record any special notes that apply to the currently selected period in the timetable grid. Select the target cell and then click in the comment panel (or just begin typing). When you have finished typing, press Enter, or click elsewhere to update the contents of the target cell. If you want to begin a new line, or indent using the tab key, you need to hold down the Ctrl key at the same time.

Column Widths:

You can adjust the column widths by moving your mouse pointer over a join in the column headers. When the mouse pointer changes to a resize arrow then click and drag. You can change ALL column widths to be the same by right-clicking in the header area of the timetable grid and selecting from the popup menu.

You can also adjust row heights in the same way, but these will automatically adjust so that all rows are the same height.

Drag and Drop:

You can drag-and-drop the contents of any cell to another location using the left mouse button. Click on the target cell and hold the button down while you drag it to it's new location, then release the button. If you want a copy of the selected cell in the new location, hold the Ctrl key down as you drag. A small plus sign appears on the drag icon if a copy is being made.

31.4.3 The Unit view

This area is for recording the details of a unit of work. The upper grid contains the Aims and related Specific Learning Outcomes plus columns to enable a complete description of the unit in terms of activities the students will be doing, how the learning outcomes will be assessed and what resources will be required.

Additionally, the Aims and SLOs can be attached to particular columns from ClassRoom Manager. A document can be generated in .dmt format enabling assessment results to be entered in ClassRoom Manager and subsequent reports can be designed and printed through ClassRoom Manager.

The lower panel, Planning Notes, is a basic word processor to record specific details regarding the unit that do not fit any of the categories in the grid.
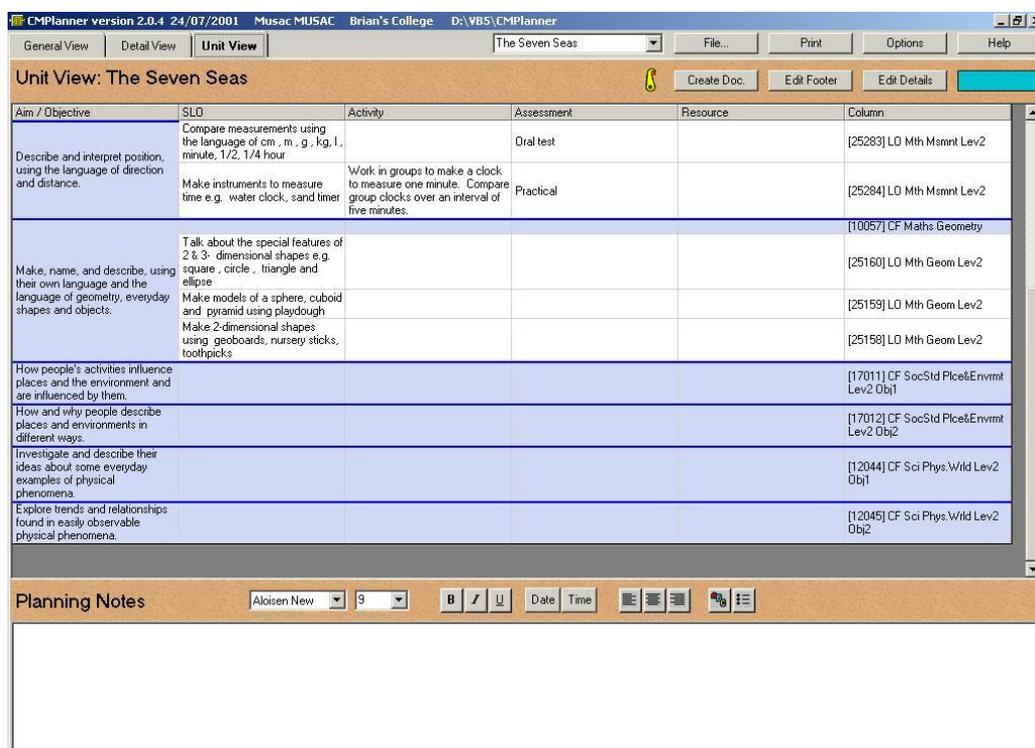
Figure 1152: The Unit view

Adding an Aim

To add a new aim, first click in one of the cells in the Aim / Objective column. Next, click the plus symbol that appears. From the popup menu select Pick Aim from Bank. The Column Picker will appear from which you can select the required column.

For more information on using this tool, see 'Selecting from the Column-Picker'.

Adding a Specific Learning Outcome (SLO)

To add an SLO to an Aim, click in the SLO column adjacent to the Aim. Next, click the plus symbol that appears. From the popup menu select either Create a new SLO, or Pick SLO from Bank.

For more information on creating a new SLO see the notes concerning this in section 12.5.

For more information on picking an SLO from a bank see the notes concerning this in section 12.5.

Activities, Assessments and Resources

These three cells are simple text. You can type details regarding the activities associated with the SLO, the way it will be assessed and list resources that will be needed. These are stored with the SLO and will appear in print-outs and generated documents.

Choosing a Column

If you did not choose to include the column when you selected your Aim or SLO then you can attach a column later by clicking in the cell under the Column heading (next to the Aim or SLO to which the column is to be attached). The Column Picker dialogue is activated.

For more information on using this tool, see 'Selecting from the Column-Picker '

Changing the Column Type

You can change the column type by clicking in the cell under the Type heading next to the Aim or SLO you want to modify. Select from the dropdown list that appears.

There are three different ways to display the numeric data type - Numeric, Option button, or Check box. These types refer to the way the data will be presented in any generated documents, but all three are stored in the same table in ClassRoom Manager.

CAUTION!

Each Aim and SLO has a data type in ClassRoom Manager. The data type tells ClassRoom Manager which table to look in when it wants a data item. So, if you change it's data type to something fundamentally different (say, from Numeric to Text) then ClassRoom Manager will now go to a different table to find data relating to this Aim or SLO. Everything will still work, but you will now be unable to see data that was previously saved against this Aim or SLO.

Since Numeric, Option button and Check box all use the Numeric type, you can change between these types without any problems.

A warning message will appear if you are about to change to a different data type that could cause data loss. (Actually, data won't be lost, but will become unavailable for display).

Notes

You can adjust the column widths by moving your mouse pointer over a join in the column headers. When the mouse pointer changes to a resize arrow then click and drag.

You can choose to show or hide columns by right-clicking in the header area and selecting the column to be shown/hidden from the popup menu.

You can move columns left or right by clicking on the header and dragging to a new position.

The Safety-Catch

This is a toggle-switch which, when set to off ( ) will disable warnings for any delete processes. This will enable you to remove a number of SLOs or Aims without annoying warning messages popping up. Be very careful if you delete with the safety off. The safety can be toggled by clicking anywhere in the heading of the Unit View.

31.4.4 User Defined Columns in Unit View

In some circumstances it is useful to attach an additional column to the grid in Unit View. This can be used to enter details about the unit or individual SLO's within the unit that do not fit into any of the supplied categories.

To attach a new column place the mouse cursor in the header row at the top of the grid and right-click the mouse.
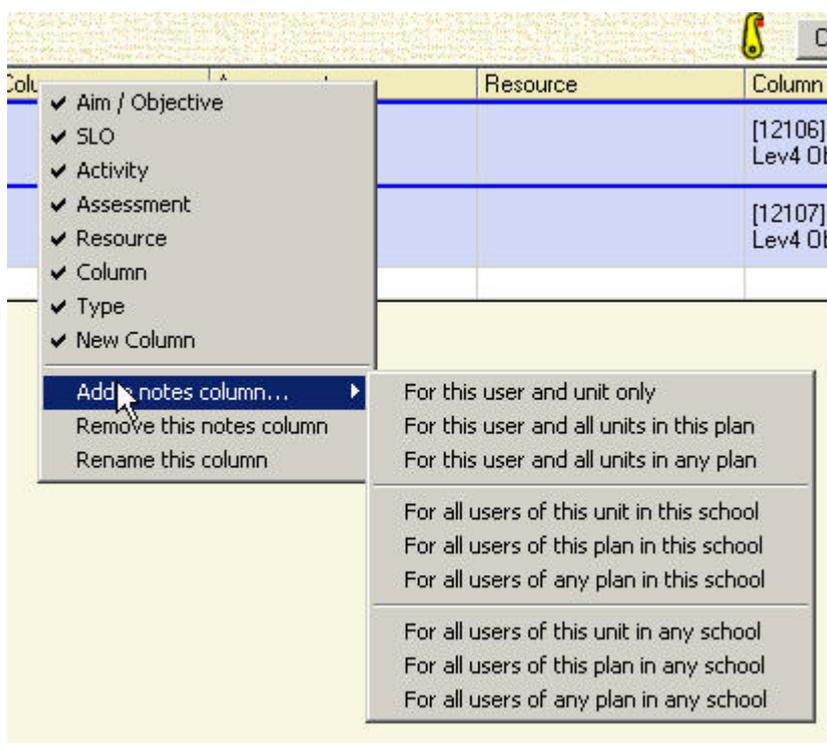
Figure 1153: Adding notes

Choose 'Add a notes column…' then select the type of column you require from the list, depending on the scope you require.

For example, if you choose the column for this user and unit only, the new column will not appear except when you are logged in and viewing this particular unit.

To rename a user column, move the mouse pointer to the column header and right-click the mouse. Select 'Rename this column' from the popup menu. Enter your new title in the input box that appears. Press enter or click OK.

Notes

The text in these columns will be included in any printouts.

The user columns can be resized or hidden in the same way as other columns in Unit View. Right-click the mouse in the header area and select the target column to toggle it on or off (columns with a tick beside them will be displayed both on screen and in printouts).

In printouts, the width of columns displayed on the page is proportional the the width displayed on screen. Widths are resized to fit onto one page-width in landscape orientation.

31.5 Creating a unit of work

To create a new unit of work click on the File… button at the top of the screen.

The File dialogue box appears, showing all your plans and enabling you to navigate folders to find your units of work.

Click on the icon beside the plan or folder where you want your unit to be stored.

Now click the Create a new Unit button at the top of the dialogue box. (or, you can right-click your mouse and choose from the popup menu).
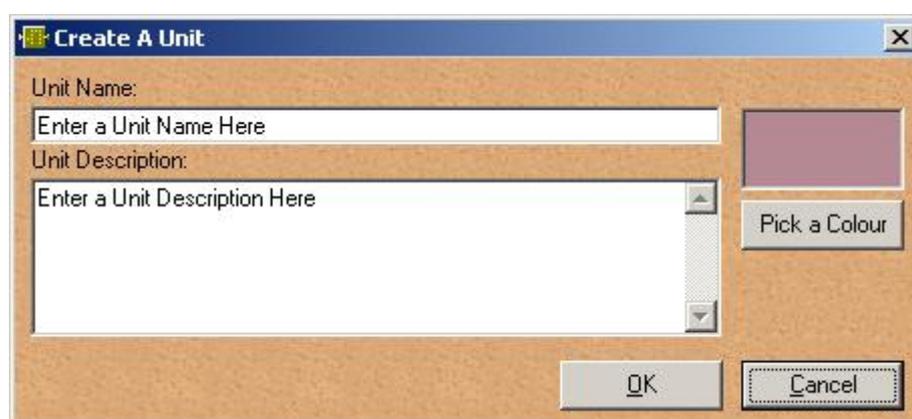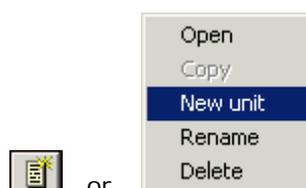
Figure 1154: Creating a unit

The Create a Unit dialogue box appears. Enter a suitable title for your unit. It is best to keep this fairly short. Next enter a longer description for the unit which helps define what it is about. You can also choose a colour to associate with the unit. This colour will be used when instances of the unit are placed on the timetable.

The details entered here can be edited later if necessary. An entry for the new unit is added to the central panel in Detail View.

Now you are ready to add the Aims and Specific Learning Outcomes to your unit of work. Double click it's new entry in the grid. This will take you to the Detail View.

31.5.1 Adding Aims to a Unit

Click in the Aim column on the grid. If you click on the column header, or the plus symbol that appears in the blank row then a menu pops up. Select 'Pick aim from bank'. This will activate the column-picker.

31.5.2 Selecting from the Column-Picker

The column picker lists columns from the ClassRoom Manager database. A tree structure is shown starting with 'ClassRoom Manager' at the top level.
By clicking on the small box beside each branch of the tree you can open or close the lower branches. If there are no lower branches then no box is shown and the item is able to be selected. Selected items are shown by yellow coloured text on a blue background.
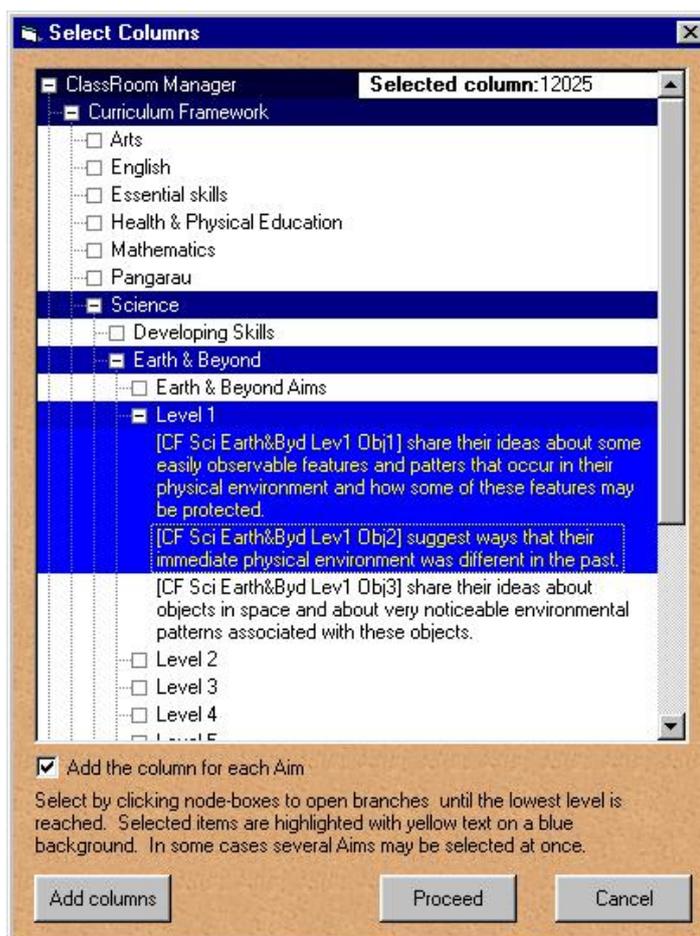
Figure 1155: The column selector

Choosing multiple aims

If you are choosing Aims for a unit, then you can select several columns at the same time. In the diagram shown, there are two aims selected. Notice the shading at each level changes as you progress down through branches of the tree. Darkest shadings are at the higher levels. The currently selected level uses the lightest shading.

Selected Column

The box at top-right shows the lowest selected column in the tree. You should ignore this if making multiple selections.

Attaching the Column Number

There is a checkbox shown beneath the tree. If this is checked then the column number is included with the aim when it is inserted into your unit. Otherwise, just the text of the aim is used and it is assumed you do not want to assess against the aim so a column is not needed.

Adding New Columns

Use the Add Columns button to add more columns to the CM database if your required column is not shown. This option will generally not be used as you should be choosing from the Curriculum Framework aims.

Finally...

Click Proceed to accept the current selection for insertion into your unit, or Cancel to abandon the selection and return to Unit View.

31.5.3 Selecting SLOs from the SLO picker

The SLO Picker enables you to select one or more Specific Learning Outcomes to attach to the current Aim. The selection is made using a tree structure. At the top level will be the PAA (bank of SLOs) and Units (which refer to your created SLOs).

The Tree Structure

By clicking on the small box beside each branch of the tree you can open or close the lower branches. If there are no lower branches then no box is shown and the item is displayed in the centre panel and is able to be selected.

Tree Shading

Notice the shading at each level changes as you progress down through branches of the tree. Darkest shadings are at the higher levels. The currently selected level uses the lightest shading.

The SLO List Panel

The list of SLOs contains four columns. The first is the SLO name, which is usually a very brief code-name giving it's curriculum area, strand and level. The column width is set to show the last part of this name, which is the level. Column widths can be resized in the normal way by clicking and dragging the resize cursor.

The second column displays a blank for unselected items, a tick for selected items and a closed circle for previously selected items (the same SLO should not be used more than once under a given Aim). Also, as you select each item, the default column-type is displayed (the setting for this can be changed using the Options dialogue under Miscellaneous).

The third column is the SLO description, and the fourth column is the column-type of selected SLOs.
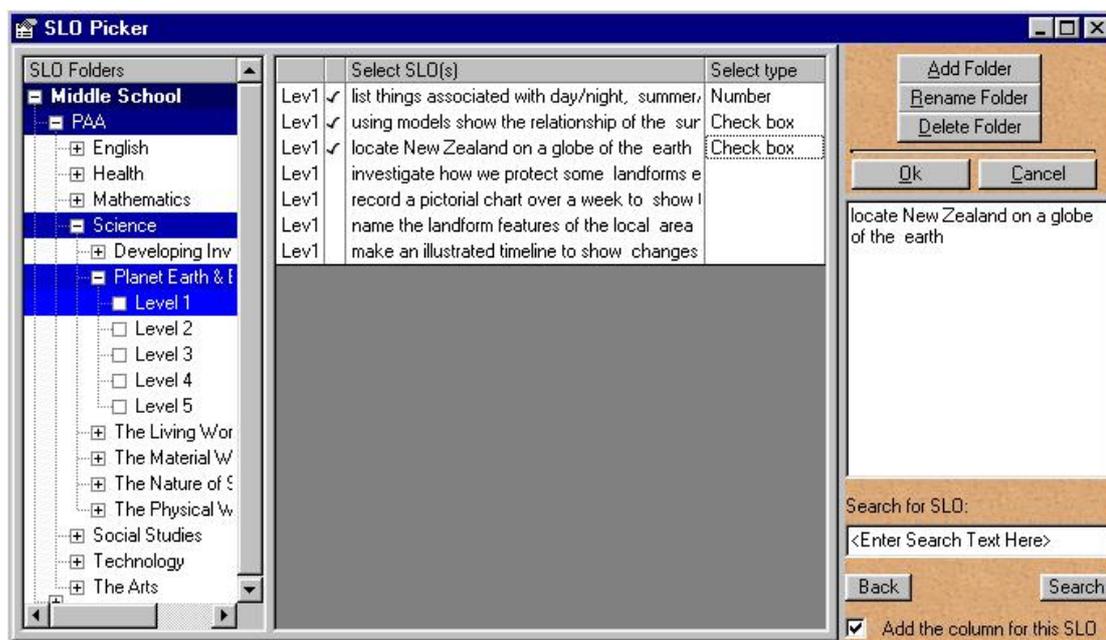
Figure 1156: The SLO selector

Selecting an SLO

You can select an item by either clicking in the blank space to the left of it's description, or by clicking in the blank space to the right of it's description and selecting a column type from the popup that appears.

The full text of the SLO description is shown in the panel on the right. To see the complete text for an SLO just click on it's truncated text in the centre panel.

Searching for an SLO

To find all the SLOs that contain a particular word or phrase, type the search text in the Search for SLO text box, then click Search. All items containing the search text are displayed. You can use wildcard characters *,? and # to select items fitting a particular pattern. * stands for any number of characters, ? represents just one character and # represents one digit. For example, if you want to find all SLOs that contain a two digit number followed by a space then a character then type ## ? in the search text box. Items containing things like ...$10 and..., ...25 ml... etc would be found.

To return to normal tree selection mode click the Back button.

Attaching the Column Number

There is a checkbox shown beneath the search text box. If this is checked then the column number is included with the SLO when it is inserted into your unit. Otherwise, just the text of

the SLO is used and it is assumed you do not want to assess against the SLO so a column is not needed.

31.5.4 Creating a new Specific Learning Outcome

Selecting an SLO

You can select an item by either clicking in the blank space to the left of it's description, or by clicking in the blank space to the right of it's description and selecting a column type from the popup that appears.

The full text of the SLO description is shown in the panel on the right. To see the complete text for an SLO just click on it's truncated text in the centre panel.
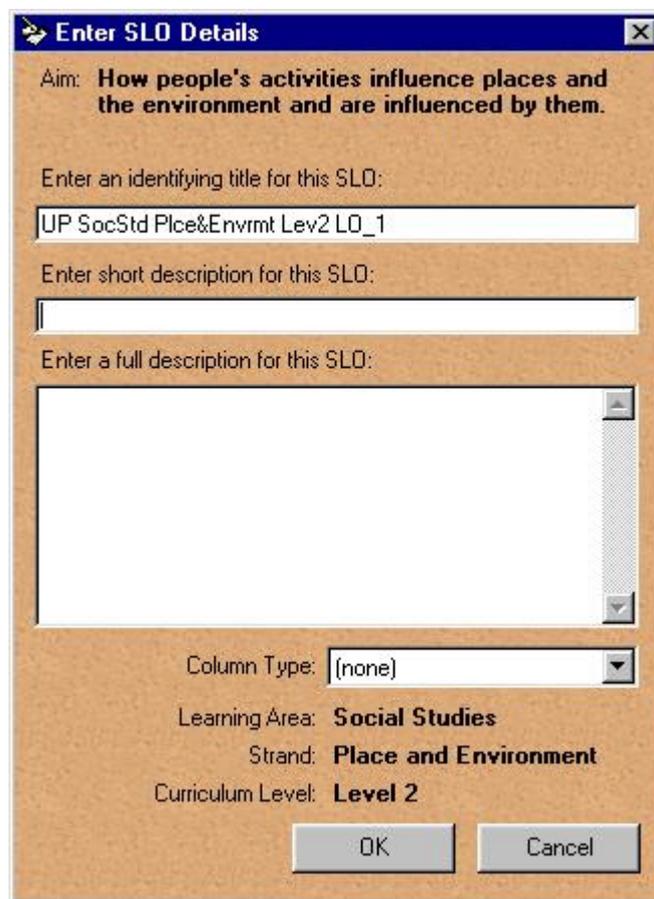
Figure 1157: SLO details

Searching for an SLO

To find all the SLOs that contain a particular word or phrase, type the search text in the Search for SLO text box, then click Search. All items containing the search text are displayed. You can use wildcard characters *,? and # to select items fitting a particular pattern. * stands for any number of characters, ? represents just one character and # represents one digit. For example, if you want to find all SLOs that contain a two digit number followed by a space then a character

then type ## ? in the search text box. Items containing things like …$10 and…, …25 ml… etc would be found.

To return to normal tree selection mode click the Back button.

Attaching the Column Number

There is a checkbox shown beneath the search text box. If this is checked then the column number is included with the SLO when it is inserted into your unit. Otherwise, just the text of the SLO is used and it is assumed you do not want to assess against the SLO so a column is not needed.

The Short Description

There is a limit of 80 characters for the length of this item of text, but the less you use the better. This description is used to name data entry boxes when the document is generated for ClassRoom Manager.

The Long Description

There is no limit to the length of the text in this item. The long description is used in the generated document, print-outs of the Unit and is displayed in the SLO column in Unit View.

The Column Type

You should choose from the dropdown list. If a type other than (none) is selected then a column will be created and added to ClassRoom Manager.

Number, Option button and Check box all equate to numeric type as far as ClassRoom manager is concerned. However, the selected type also refers to the required display format when the document is generated. Choose the type that will suit best when you are entering assessment data for the SLO in ClassRoom Manager using the document you generate in CMPlanner.

31.6 Looking after your files

There are three areas which concern files.

31.6.1 File Maintenance

This concerns the list of Plans, Folders and Units that are used to conveniently store and retrieve your work. The file maintenance dialogue enables you to create new Plans and new Units as well as providing folders for you to store your work. A plan could end up containing many Units of work. You may wish to categorise the Units, which can be done by placing them in folders.
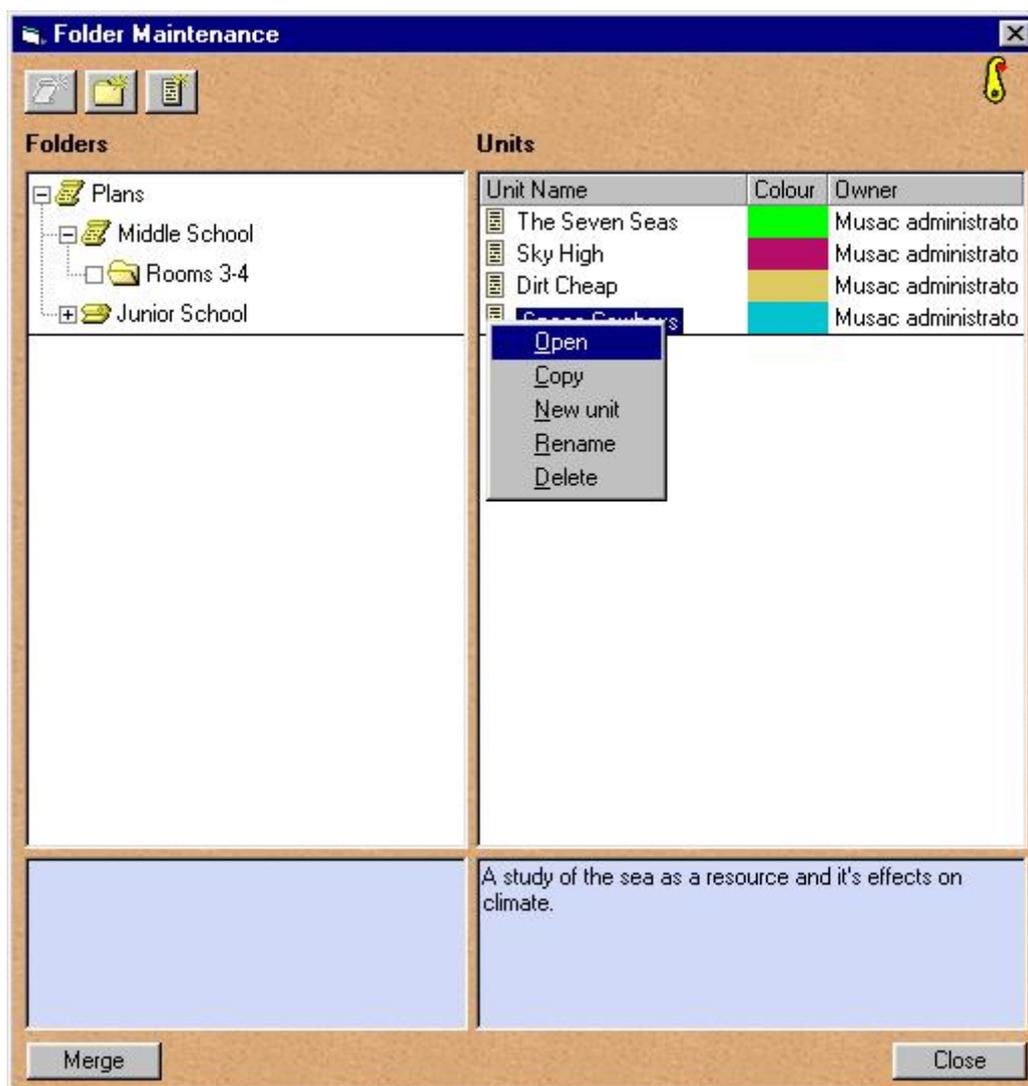
Figure 1158: Folder Maintenance

Creating a New Plan

Click on the Plans icon at the top of the left-hand panel. The New Folder and New Unit buttons will be disabled, and the New Plan button will be enabled. Click this button, or right-click and choose New Plan from the popup menu.

The Create a Plan dialogue will appear. Enter a Plan name (shorter is better) and a brief description if required. Click OK to add the new Plan to your list of Plans.

Loading a Plan or Unit

Double-click the icon next to the Plan or Unit name, or right-click and select Open from the popup menu. If a Unit is selected that is not in the active Plan then the required Plan will be loaded (you will see a progress-bar if a new Plan is being loaded).

Creating a New Folder

Click the icon next to the Plan or folder where you wish to add the folder. The folder is just a convenient way of dividing your Units into related areas.

Click the New Folder button (top) or right-click and select New Folder from the popup menu. A folder will be added to the Plan, or a subfolder added to the existing folder. The folder name defaults to New Folder. Click on the name to edit and give it your preferred title.

Creating a New Unit

Click on the Plan or Folder where you want to put the new unit. Click anywhere in the right-hand panel, then click the New Unit button, or right-click and select New Unit from the popup menu.

The Create a New Unit dialogue will be displayed. Enter a short title for the Unit and add a brief description of the ideas to be covered. Choose a colour to be associated with the Unit. Colour coding may help you to see the 'big picture' when you are placing your units on the calendar.

Editing the Name, Description, Colour

To change the name of a Plan, Folder or Unit just click on it's name. An edit box will appear with the current name highlighted. Just type in the new name and press Enter (or click somewhere else).

To change the description for a Unit, click on the icon beside it then click in the right-hand panel at the bottom of the dialogue box. Make your changes then click somewhere else to accept the changes.

To change the colour of your Unit double-click on the colour panel beside it's name in the list. Choose a colour from the dialogue box that appears.

Drag and Drop

You can move Folders and Units from place to place by clicking and dragging with your mouse. If a Folder is moved, all it's contents and subfolders will be moved as well.

The drag icon changes as you are dragging, indicating if it is OK to drop the object at the current mouse position. Plans can't be shifted at all. Folders must remain in the Folders panel. Units must be dragged into the Folders panel.

Due to some problems implementing this feature, the mouse needs to be moved a fraction after releasing the button before the drop action takes place.

Important!

Moving a Unit to a different Plan (or causing this to happen by moving the Folder that contains it to a different Plan) will cause changes to your Calendar (in Detail View). This occurs because the Calendar is specific to the Plan. If the Unit is removed from the Plan, then the Calendar

must be updated. The Units being moved may be programmed at the same time in the Calendar for the Plan they move into. This will cause a conflict as two Units compete for the same space in the grid. Only one Unit and Comment will be displayed in any given Calendar cell.

Deleting Plans, Folders, Units

Occasionally old, redundant work may need to be removed. Right-click and choose Delete from the popup for deletions. Be very careful!!!

Copying a Unit

To create a copy of a Unit in another Plan or Folder just left-click on the icon beside the Unit name and hold the Ctrl key down while dragging the Unit to it's new location. When you release the mouse button the Unit will be copied into the highlighted Plan or Folder.

You can also right-click the Unit then select Copy from the popup menu. Then right-click the folder you want the Unit copied into and select paste from the popup menu. A warning will be given, because hours of work is about to be erased, and you may change you mind. Be careful!

Note that the safety-catch works here too. Click on the form near the picture of the safety catch to turn it off or on. If the safety-catch is off, no warning will be given

Merging

This facility enables new plans or units that have been developed at home, or using another CMPlanner database, to be merged with the current database. Clicking the Merge… button invokes the Merge dialogue box.

Notes:

The file maintenance dialogue uses a tree structure similar to Windows Explorer. Initially the tree only opens out to the level showing the list of Plans. As you work you will open and close folders. When you click Close, the dialogue is hidden from view so the next time you use it, it will be just as you left it. However if you click the terminate button then the dialogue is unloaded. The next time you use it, it will open only to the list of Plans again.

If your changes affect the active Plan then the Plan will be reloaded as you exit this dialogue box.

31.6.2 Merging Data

This dialogue box enables you to bring Plans and Units etc. that have been developed at another computer (at home or in another school) into the current CMPlanner database.

All CMPlanner merge files are named cmplan.zip. Use the drive and directory boxes to navigate to your cmplan.zip source file.

31.6.3 Exporting the Current Plans

If you wish to create a merge file that can be taken to another computer, then just put a blank, formatted floppy disk in drive A: and select the root directory of that drive. An arrow will point to the target directory for the merge.
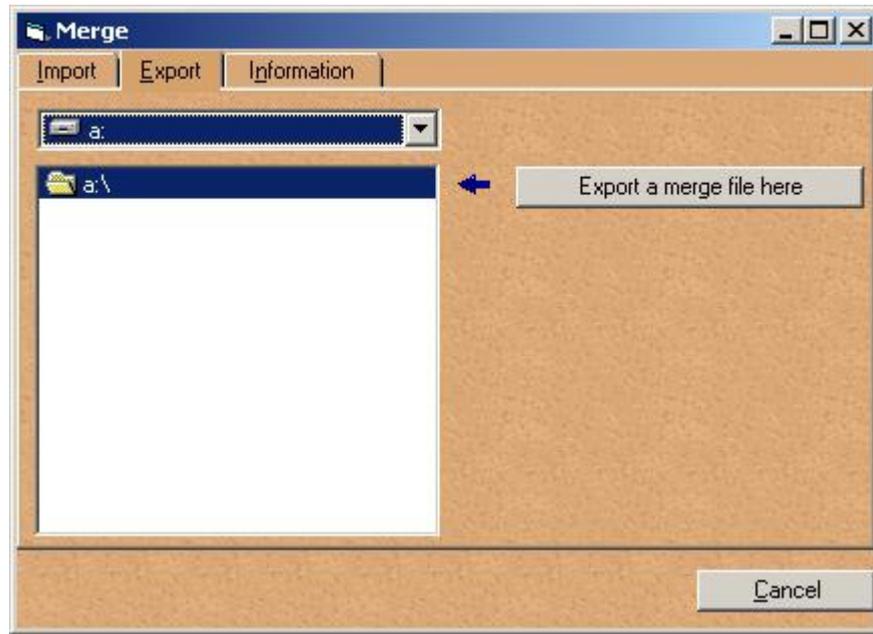
Figure 1159: Merging - Export

Clicking the button will cause the current database to be compressed and saved to the target directory.

31.6.4 Importing Plans

If you have used another computer to create an export file on a memory stick, you can then use that as a source file to import Plans into the current CMPlan database.

First, navigate to the directory holding the source file. It must be named cmplan.zip and it will contain a file name 'Merge Copy of cmplan.mdb'.
Once you have identified such a file, the command button will be enabled and a blue arrow will point toward the textbox containing the filename.
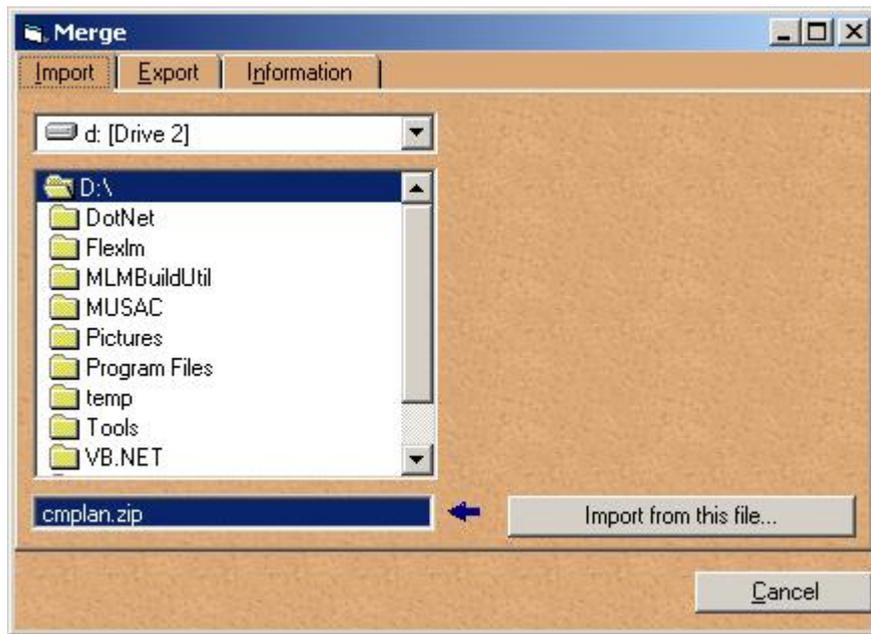
Figure 1160: Merging - Import

Click the command button to move to the next step.
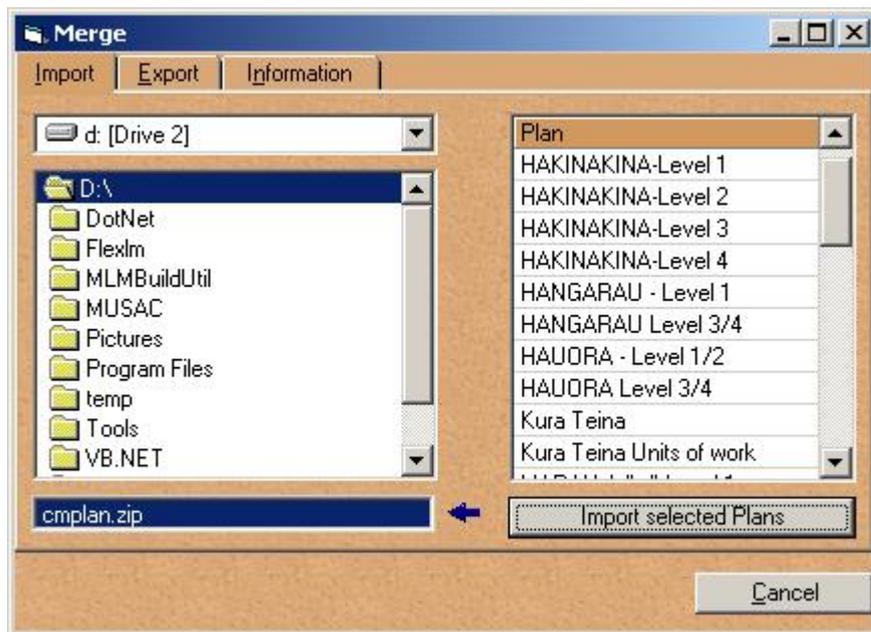
Figure 1161: Merging –Import II

Select the Plan to be imported, or use click-and-drag or Ctrl-click to select several Plans. Then click the command button to merge these Plans into the current database.

A progress bar indicates the degree of completion of the import process. The cancel button changes to Close when the process is complete.

Closing the Merge dialogue will cause the File dialogue to update itself with the imported Plans. If some Plans do not display in the file dialogue, you probably do not have permission to view those Plans (see below).

Some points to note:

Merging is a very complex process. Each Plan, Unit, Aim and SLO from the source file has to be checked to see if it already exists in the current database. If it does not exist, then it is created, but must be created with it's own ID codes relevant to the current database. Any references to CM columns must also have new versions created together with category headings and popup items as required. The process may take a minute or so to complete.

To enable all Plans to be viewed you may need to use the Options dialogue to check which of the introduced Plans may be viewed by you. If you cannot see all the expected Plans, you may need to get a user with administrator status to login and give you permission to view these plans.

The Information tab simply holds a brief explanation of the merge process.

31.6.5 Database structure tests

Each time CMPlanner starts up it runs a variety of tests on tables in the cmplan.mdb database. Some tables may be modified by adding new fields to accommodate improvements to the functionality of the software. New tables may be added or tables may be removed. Some tables will have their data checked to ensure it complies with the latest formats and linking.

You will notice the structure testing dialogue box appear and disappear as the program starts.

In all cases, the tests need only be done once. Once a table has been checked and updated subsequent activations of CMPlanner don't need to re-check the data. CMPlanner keeps a record of the tests it has done in a table named StrucTests. If your data becomes corrupted, it may be helpful to force CMPlanner to re-activate some, or all of the tests. There are three ways this can be achieved. They are listed below:

1. Enter CMPlanner as a stand-alone program (by running CMPlanner.exe). As you are logging in you will notice a small green light beside the OK button. Press Ctrl-T. The light should turn red. When you click OK, the Database Structure Test dialogue should appear and remain waiting for you to decide what to do next.
2. The Database Structure Test dialogue can also be activated once CMPlanner is running. To do this click on the Detail View tab then double-click on the text 'Calendar Date' in the heading area (this is a sort of secret entry point into the structure test dialogue).
3. Use Microsoft Access to open the file cmplan.mdb then delete all entries in the StrucTest table. This will force CMPlanner to re-write the entries as it starts up and therefore perform all the tests. This occurs automatically each time you install a new download (a flag entry in the StrucTests table in CMPlanBase.mdb is used to achieve this).
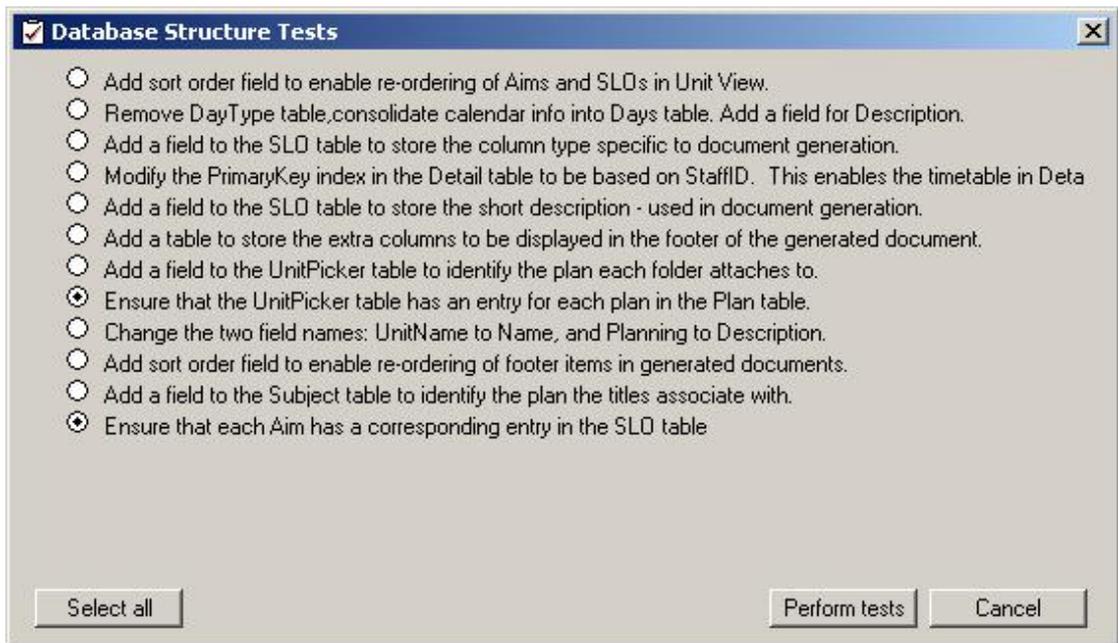
Figure 1162: Structure tests

To activate a particular test click the option button beside it, then click Perform Tests. A series of LEDs (lights) show progress through, and results of, the tests. Grey indicates that the test was not performed. Red indicates the test is in progress and green indicates the test has been completed successfully.
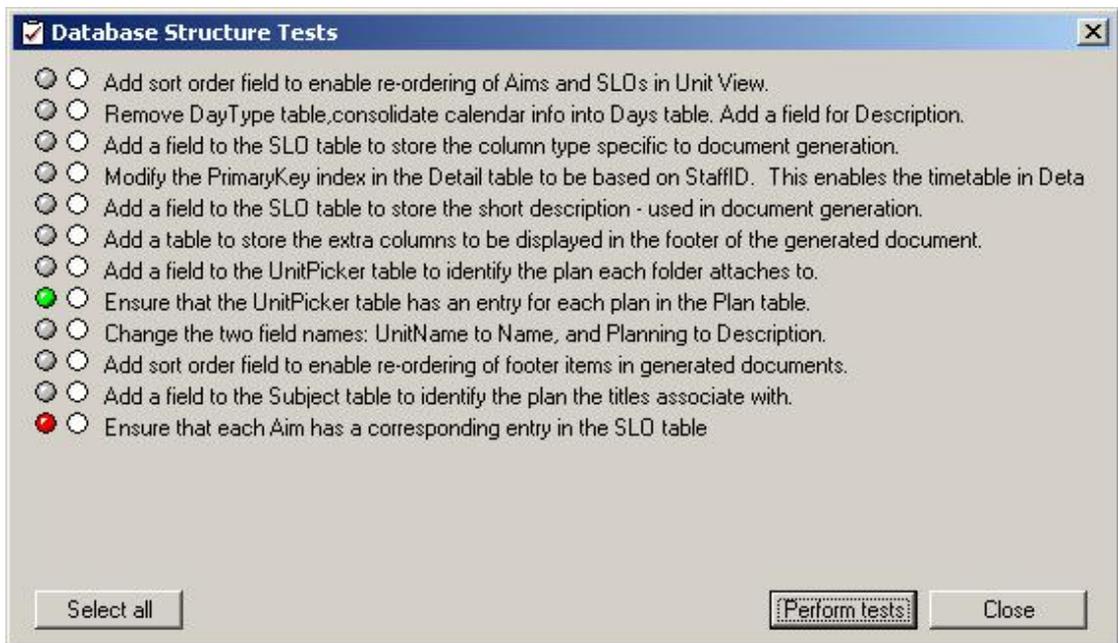
Figure 1163: Completed structure tests

The option buttons are reset to blank indicating that the status for the structure tests on the next activation of CMPlanner is 'off'.

31.7 Creating a document

This is one of the key functions of CMPlanner. The document generator takes your Unit plan and creates a document that can be viewed in ClassRoom Manager. You can use the document to enter details of student progress in the Unit. There are two steps to the document generation process.

31.7.1 Creating a footer

When you generate a document, all the Aims and SLOs that you have included in your Unit will be placed in the document, together with any columns that you have attached.

The footer enables you to include a comment and attach extra columns such as report comments. These will be included at the end of all generated documents (although they are specific to the current unit). You can add or remove columns at any time. There is a limit of twelve comments.
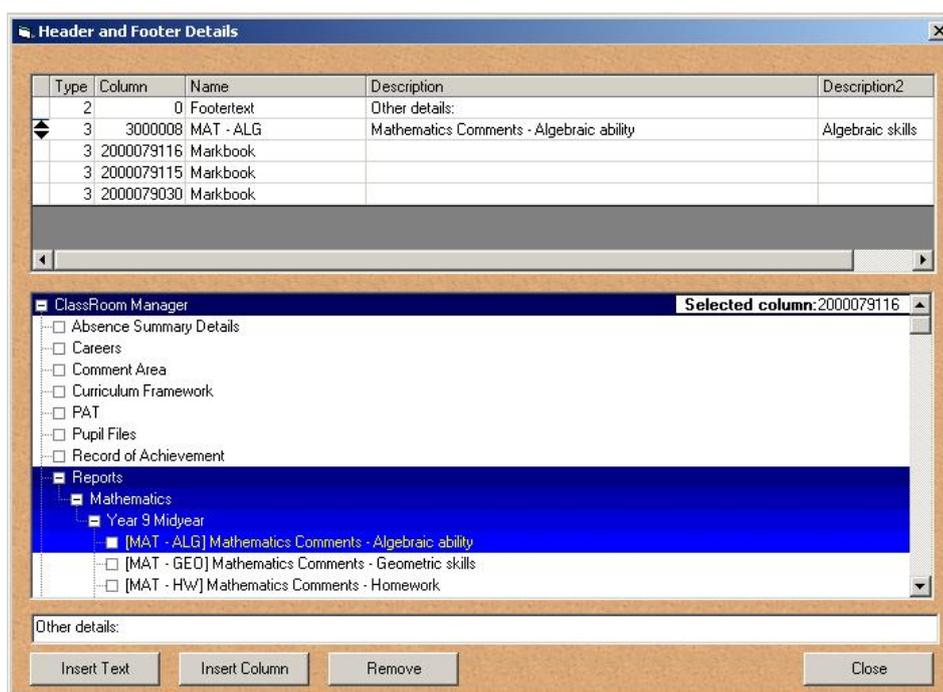
Figure 1164: Header and Footer details

The dialogue is divided into three main areas.

The Footer List

The grid at the top is for display purposes only. It shows the following information:
- Type - this will be either 2 (text) or 3 (column).
- Column - the selected column number.
- Name - the identifying codename of the column.
- Description - the long description of the column, or the footer text.
- Description 2 - the brief description of the column.

The Column Picker

A tree-view of the ClassRoom Manager columns enables selection of one or more columns to be attached to the footer. Once the columns have been identified, click the Append Column button to add them to the Footer List grid.

To remove unwanted entries, click on the entry to be removed then click the Remove button.

To change the order of items in the list click on the up-down icons that appear in column 1 of the selected item. When the document is generated items are placed on the document in two columns working from left to right then top to bottom.

The Footer Text

The document footer can have a title. Enter the text that you want displayed into the text box at the bottom of the dialogue box. Then click the 'Append Text' button to add the item to the Footer List. You can only have one item of footer text (that is; there is only room for one title in the document footer).

The document generator

This dialogue enables you to decide which dossiers you want the new document to go into and to complete the document generation process.
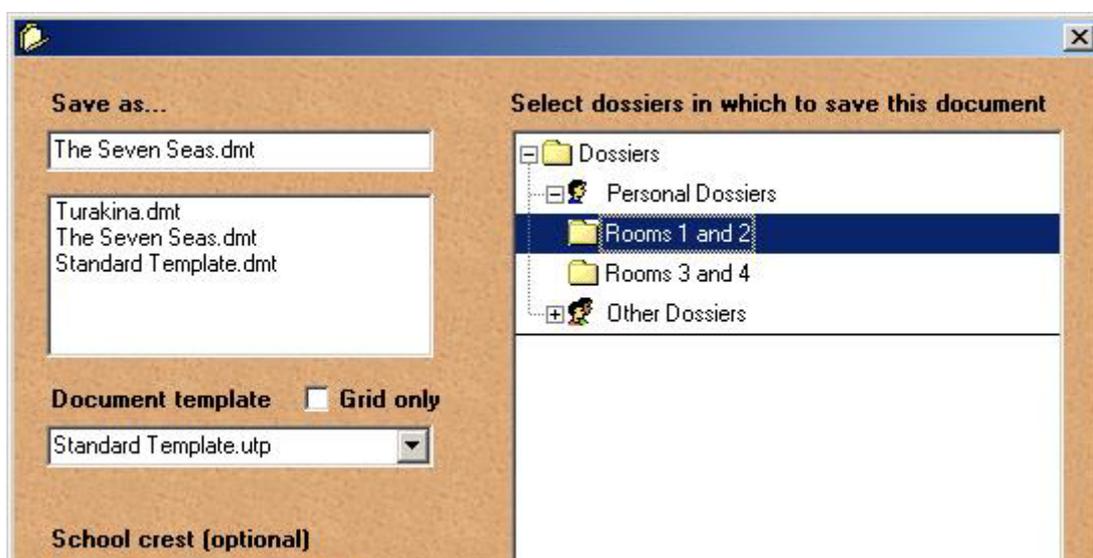
Figure 1165: The document generator

The main steps in this process are:

31.7.2 Setting the Document Name

In the text box at top left, enter the name you would like the document saved as. The default is the unit name. If you are happy with the default, then you don't have to make any changes here.

A list of all available documents will appear in the box immediately beneath the filename. You can select one of these by clicking it with the mouse. The selected filename will replace the default filename.

31.7.3 Choosing a Document Crest

The document header includes a picture object which you can replace with your school crest. If you want to change the displayed picture then click on the picture. A list of available bitmap picture files will appear. Select the required filename using a mouse click. If your school crest is not in the list of files you will need to obtain one. It must be a *bitmap (.bmp)* file type. You can create one using a scanner and suitable image processing software.

31.7.4 Choosing a Dossier

The panel on the right is a tree structure of available dossiers. At the top should be a list of your personal dossiers. Other peoples' dossiers are listed beneath. Click on the open \ close boxes to move down through the tree.

You must have *at least one* dossier selected before the Proceed button will be enabled. You can select as many dossiers as you like. The new document and any columns it contains will be made available in all selected dossiers.

31.7.5 Choosing a Document Template

The document template holds the format used to create the final document using your Unit definition. There are four parts to this template. The Header, aim, SLO and footer. The template is really just another document, created in CMTeacher and can be edited. However, the process is quite complicated and will be the topic of another help screen (one day). For the moment it will be best to use the (default) Standard Template.

You can always edit the final document in CMTeacher to customise it to your needs.

31.7.6 Grid Only Documents

If you want the generated document to be for Grid-Only viewing, then check the Grid Only box.

31.7.7 Short Description

Each Aim and SLO has both a long and a short description. In the generated document, the long description is applied across the full width of the page. The short description is put into the data-box or check-box panel. Usually the short description is either not very short (so it gets truncated), or repeats the long description. So the default is to *not show* the short description. However if you want the short description displayed then check this box.

32 CMAdmin Appendix 1- The National and Standard Columns

32.1 The National Columns

MUSAC has prepared several thousand pre-designed columns ready for your use with ClassRoom Manager. By bringing these in to your database, they become available for use in documents. Select those which meet your needs. Do not choose column groups unnecessarily as they all serve to increase the size of the database. All told, there are several thousand columns available for your use, grouped together under up to five categories. For a further explanation of categories and the grouping of columns, read the chapter on Column Maintenance.

Many of these columns have been incorporated into default documents which you have elect to have installed along with the columns. You may then, if you so wish, modify these documents for your own school's needs.

Many of the columns relate to standard tests, e.g. PAT, ESA, 6 year net, ESOL, STAR etc. Where relevant, the entry of a raw score will automatically cause subsequent entries to be determined and displayed. For example, the 'Date sat' field, if associated with a test, will be filled in automatically. In the case of PAT tests (the use of conversion processes for which were approved by Mr Cedric Croft of NZCER) the entry of a raw score results in the determination of the level score and the class and age percentiles and stanines. In the case of STAR and ESOL tests, once all of the component results have been entered, the total is automatically calculated. In the case of Star tests the resulting stanine is determined and stored. In the case of ESOL tests, the total is compared with a score of 112. If that benchmark is reached then the student is deemed to have completed the ESOL program and the date of completion is automatically recorded.

In the case of Curriculum Framework columns, Full column sets are provided for all subjects at all levels, including sets of objectives in Te Reo. You can, via configuration, set up to six the progress stages which you school wishes to use. These are initially set to three steps: Begun, Achieved, and Mastered. During data entry, a small popup window enables you to simply click on the relevant stage and the date at which this has been reached is automatically recorded. You can either click on the relevant entry or simply type the letter corresponding to the progress stage. This makes it possible to determine individual and group progress between any two dates.
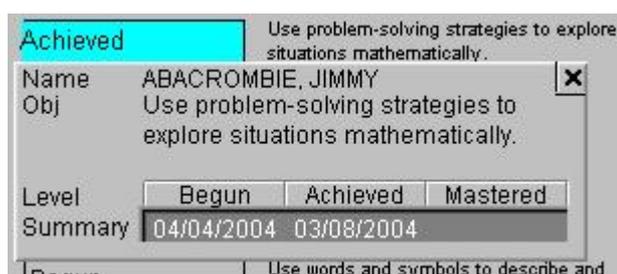
Figure 1166: Curriculum framework data entry

Along with the Curriculum Framework objective columns there are also a series of 'Best fit' columns.

There are also asTTle columns, used to store the imported results of your asTTle tests, and also a range of Numeracy and Literacy columns.

Samples of some of these documents are shown at the end of this chapter.

Illustrations have been taken from the 'Install National columns from MUSAC' screen for primary, intermediate and secondary school types.

32.1.1 Primary School Columns
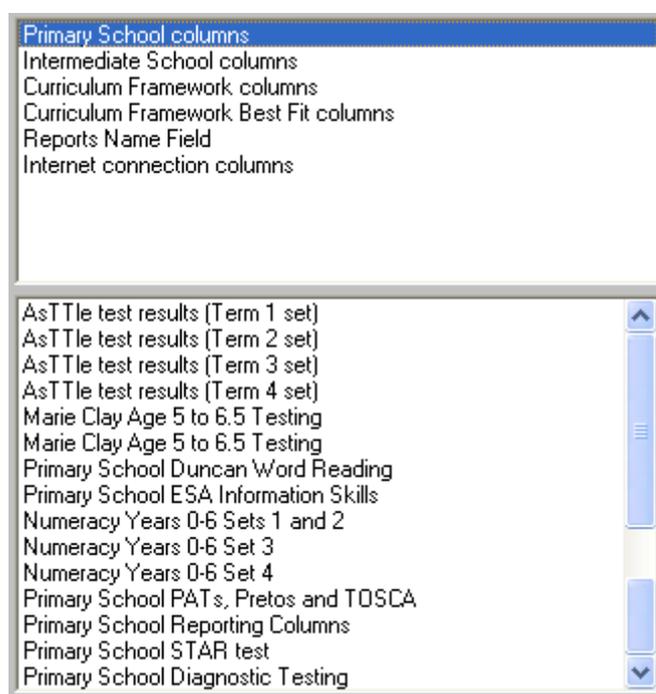
Figure 1167: Primary school columns

These are provided under several headings.

PATs, PRETOS

These are the traditional standard primary school tests. Entry of a raw score of any of these will automatically cause the related columns (level score, class and age percentiles and stanines, reading ages etc) to be completed for you.

The standard columns include those provided to record the difference between subsequent years for class and age percentiles and stanines. These too are automatically calculated and stored for you ready for analysis and/or reporting.

In most cases, pre-designed documents are supplied and can optionally be imported as the columns are installed. For our What-if feature, see PAT Stanine What-If?

There are three columns set up (a value, a level and a comment under each of the area/strand/year/term categories.

Essential Learning Areas
Language
        Oral
            2004
                Term 1 Value
                Term 1 Comment
                Term 1 Level
                and the same for each of terms 2, 3 and 4
      and the same for each year
        and the same for Written and Visual
      and the same for the other learning areas:
Mathematics
Science
Technology
Social Studies
Health and Physical Well-being
Arts

Essential Skills
The columns for the essential skills are classified in a similar manner to those for the essential learning Areas.

      Communications Skills
      Number Skills
      Information Skills
      Problem-Solving Skills
      Self-Management and Competitive Skills
      Social and Co-operative Skills
      Physical Skills
      Work and Study Skills

Under each of these categories there are values, comments and levels for each term in each year.

Values **-** Provision has been made for comments relating to values under each term of each year.
Other Comments **-** Similarly, provision has been made for comments by the Principal, by parents and by the student for each term of each year.

Primary STAR tests
A full range of the columns necessary for managing STAR testing is provided.

Primary School Testing

A large group of columns is provided relating to other standard primary school tests. These include

6 year Diagnostic Tests
School Entry Assessment
Year Four Check
Basic Facts
Reading
Spelling
Record of Oral Language
ESOL tests (available at all levels)

- Marie Clay tests
  - STAR tests
  - Numeracy and Litaracy
  - Burt, Peters, Schonnell
  - PRETOS
- TOSCA
  - Junior Oral Screening Test

32.1.2 AsTTle columns

A complete range of asTTle columns is available. For more information concerning these see asTTle data.
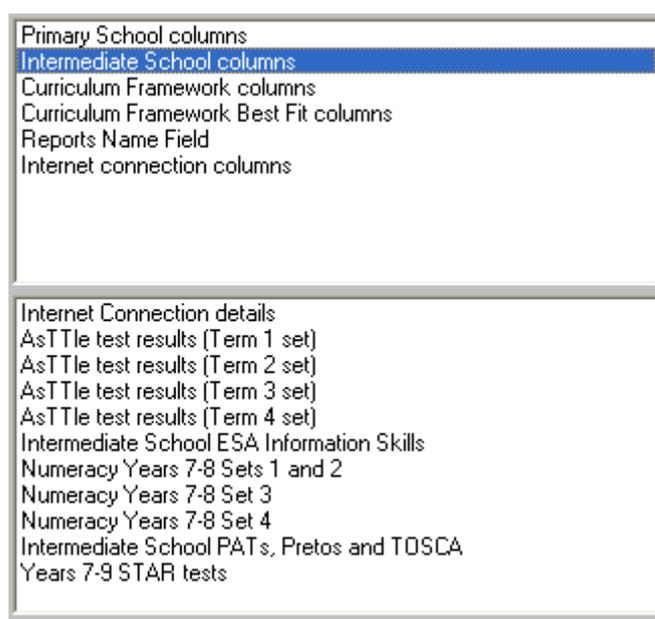
Figure 1168: Intermediate school columns

32.1.3 Intermediate School PATs, Pretos and TOSCA

We have separated these out so that Intermediate schools may load just those columns relating to years 6, 7 and 8. We've included Year 6 as many intermediates like to have on record their student results for Year 6.

32.1.4 Curriculum Framework Columns

Each of the Learning Areas is there, with the strands, the levels and all of the objectives, ready for recording progress and reporting and analysing.

Each of the Curriculum Framework objectives in two versions: the full version (as provided in M.O.E. documentation) and a shortened version. The latter has a maximum of eighty characters and has been reworded to simplify the lengthy official ones into text more suitable for appearing on reports.

At the time of writing we have produced reworded shortened versions for all objectives up to Level 4 in each of the Learning Areas.
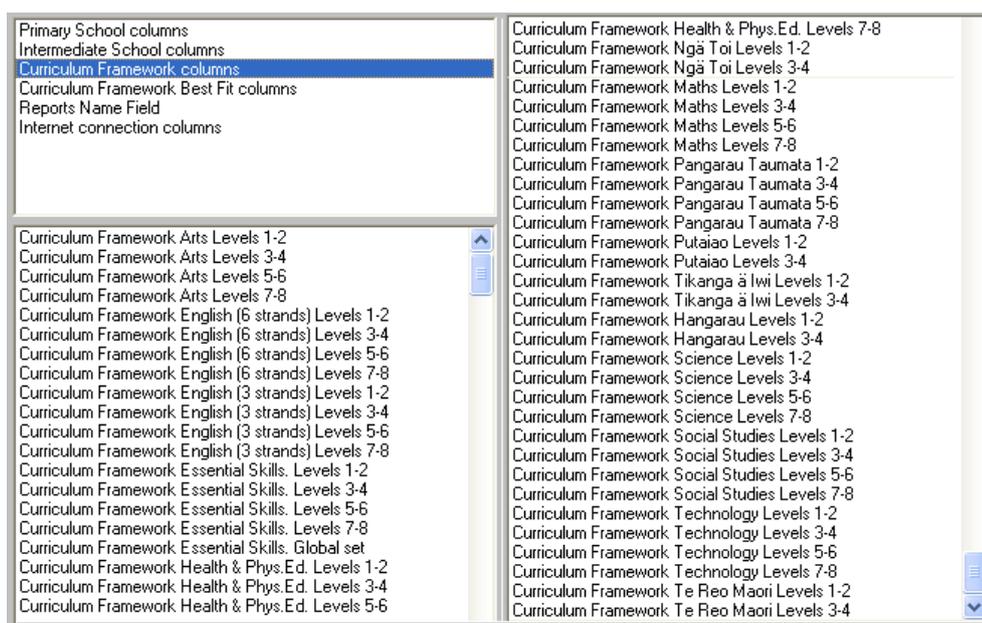
Figure 1169: Curriculum Framework columns

But wait! We listed English (3 strands) and English (6 strands)? Officially, English has three strands:
- Listening and Speaking
- Reading and Writing
- Viewing and Presenting.

Many schools prefer to split these into the obvious six strands, so we have provided both configurations.

Along with the objectives the package also comes with pre-designed data entry forms for each level of each learning Area. You are free to use these documents as they stand or to modify them for your own needs, or to ignore them altogether.

32.1.5 Curriculum Framework Best Fits
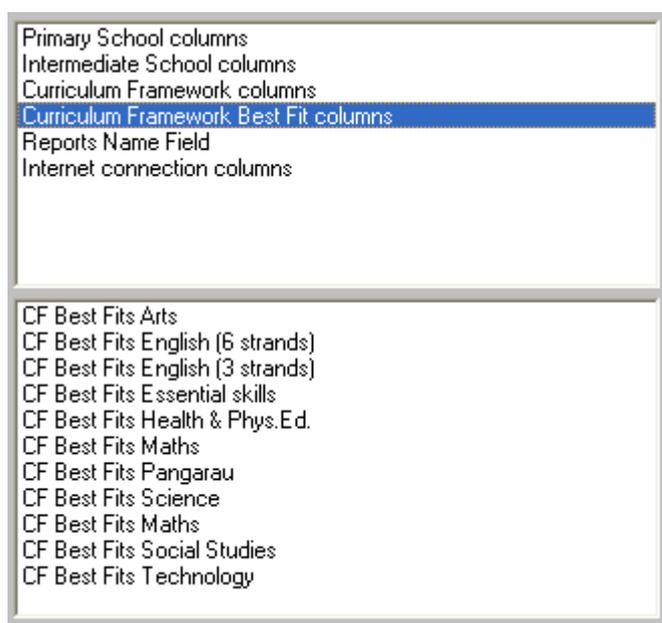
Figure 1170: Curriculum Framework Best Fit columns

Many schools, rather than assess meticulously individual objectives, prefer to record simply a number which indicates the sort of 'average level' at which a particular student is working at one or more times of the year.

Suitable columns are pre-configured to allow you to do this. Each strand of each Learning Area has columns configured for each year from year 0 through to Year 8. In fact, we've provided two sets of measurements for each strand, so that you can record these measurements twice each year. Should you require more frequent Best Fit measurements then it is an easy task to prepare further sets of columns for yourself.

32.1.6 PAT Stanine What-If?

You can now test a student's assessment score against the previous or next year, to see how they would perform in the band above or below the reference year. To use this feature, import the Stanine What-If columns from CMAdmin > Install supplied components > Install Musac Standard columns
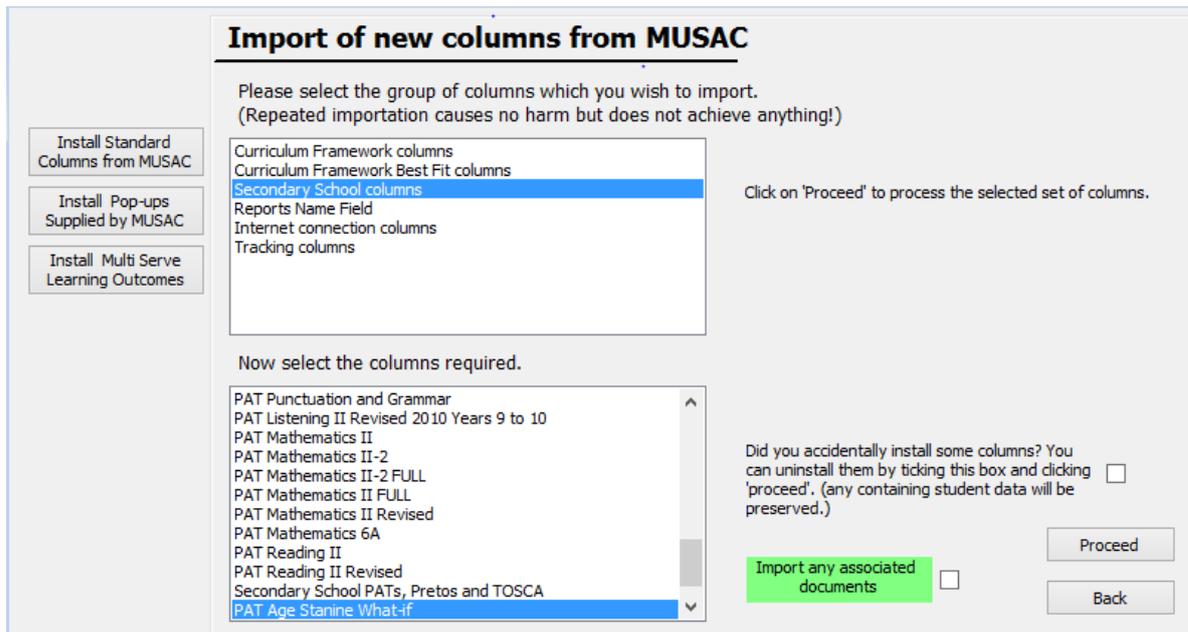
Figure 1171: Importing PAT Stanine What-if columns

Select Primary, Intermediate or Secondary columns as appropriate, and click 'Proceed'.

In ClassRoom Manager, locate the document to which you want to add a stanine what-if column in the sidebar, right click it and select edit. In the document designer, add the stanine what-if column from the data assistant and save your document.
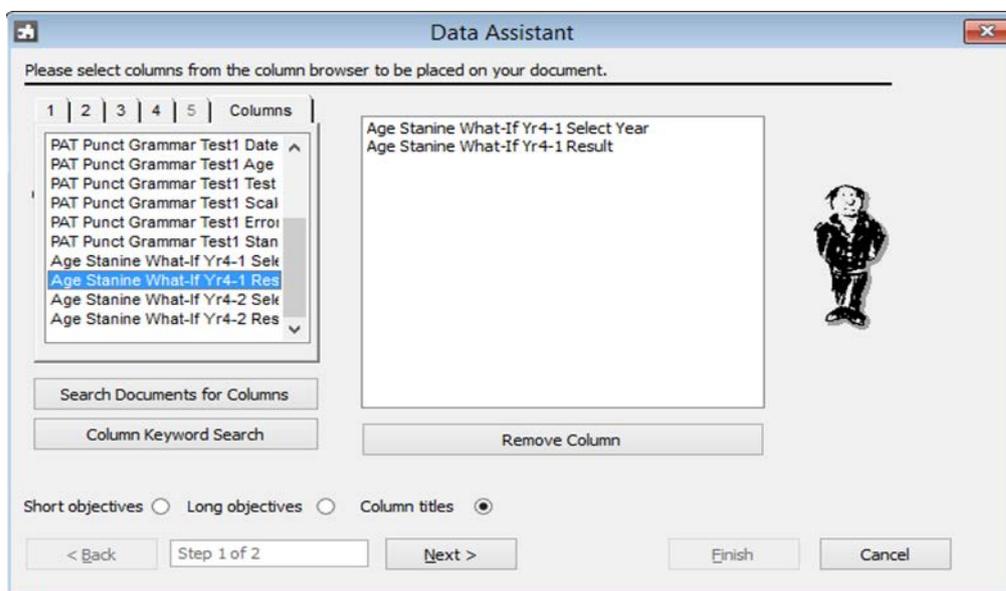
Figure 1172: Adding Stanine What-if Column to a document

You can now access this feature from your document.

PAT Punct Grammar Test3 Stanine Yr6-1	Age Stanine What-If Yr6-1 Select Year	Age Stanine What-If Yr6-1 Result
1	Last Year	1
3	Next Year	2
2		
6	Last Year	7
9		

When using the what-if feature, ensure you have first filled in the test correctly and have a normal stanine displayed, and that the requested what-if falls within the allowed year levels for the test you are using. Also, the what if can only be used on tests that fall within the last calendar year.

32.1.7 Secondary School Columns
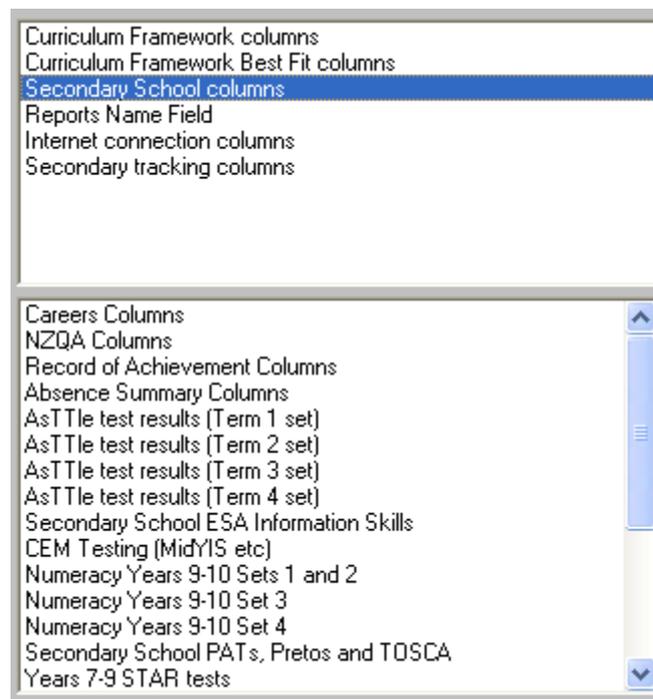
Figure 1173: Secondary school columns

These currently appear under two sets of headings.

PAT's, Pretos and TOSCA.

These columns hold the relevant scores (raw scores, level scores etc) for each of the years from Year 4 through until each test's natural maximum year. This allows secondary schools to record details relating to their students from year 8 forward.

Record of Achievement Columns

We have set up a standard set of columns which could be used for the long term recording of information relating to student achievement and leaver documentation. These include:

Attendance
>   Date from
>   Date To

Year Specific Details
>   Class
>   Room
>   Half days present
>   Half days absent
>   Teacher
>   Comment

Comment Areas
>   A large number of these include:
>   Academic awards
>   Other distinctions
>   Cultural activities
>   Personal Qualities
>   Work habits
>   …. and several more

Subject History
>   Each Year
>>   Each option line

It is under this last category combination that students' options are recorded, as described elsewhere in this user guide.

Reports Name Field

Two schools have indicated that they use neither the students' First Names nor their Preferred Names in generating reports, but, instead, use an alternative name. In case this applies to you, we have provided a separate 'Report Name' column for your optional use.

Schools may ALWAYS add their own columns to meet their own needs. Columns structures designed in one school may be made available for use in others.

Where data is recorded in standard columns, it is possible to pass student information from one school to another.

32.1.8 Internet Connection Columns

These are the columns which hold the fields associated with internet connections: the student's email address, their logon and their pin number (password)

Further columns are constantly being added to the database as they become available or are requested by schools. If you wish to have new standard columns made available then please contact MUSAC or our agents.

32.2 Sample Standard Documents

32.2.1 Document 1: A PAT data-entry document

Figure 1174: PAT data entry

Of course schools also use larger 'Cumulative record' documents to summarise the wide variety of test results. For further examples of reports see the appendix to the ClassRoom Manager Teacher section.

32.2.2 Document 2: A Curriculum Framework data entry document (part of)

Figure 1175: Curriculum Framework data entry

32.2.3 Document 3: A STAR test data entry document (part of)

.

Figure 1176: STAR test data entry document

32.2.4 Document 4: ESOL monitoring document

Kairakau School ESOL Programme

Student : Jasmine Ca███████████   Year : 12   Form : 12PS   House : T

Date entered programme `07/05/2003`   **Date reached ESOL standard** ` `

Term	Date sat	Listening	Reading	Speaking	Writing	
Max		27	36	33	36	135
Term 1	01/06/2003	11	14	13	18	56
Term 2	07/09/2003	13	15	16	21	65
Term 3	05/02/2004	15	18	15	23	71
Term 4						

33 CMAdmin Appendix 2 - The Student Filter

33.1 Using the student filter

Frequently throughout ClassRoom Manager and Student Manager you need to reduce the number of students displayed from the whole school to just (for example)

- a single year level
- a single class
- a single ethnic group
- those with a certain range of marks in a certain column
- or any combination of possibilities.

This is done using the student filter which appears, when called, as a series of tabs offering various possibilities and a 'Proceed' button.

> **Please note:** the filter logic is OR within each list or section and AND between sections. Thus we could set a filter to find those students who are in (Year 3 OR year 4 OR year 5) AND (Rm2 OR room 3) AND who are (Maori OR Polynesian OR Asian) AND (whose score in Maths PAT year 3 Class Percentile is > 50)

Let's now look at each of the tabs of the student filter to examine the possibilities which they offer.

33.1.1 Tab 1 Years, Horizontal classes and Vertical classes

This tab will be automatically renamed to include the titles which you have given these groupings e.g. 'Years Forms Groups' or 'Years Classes Rooms'
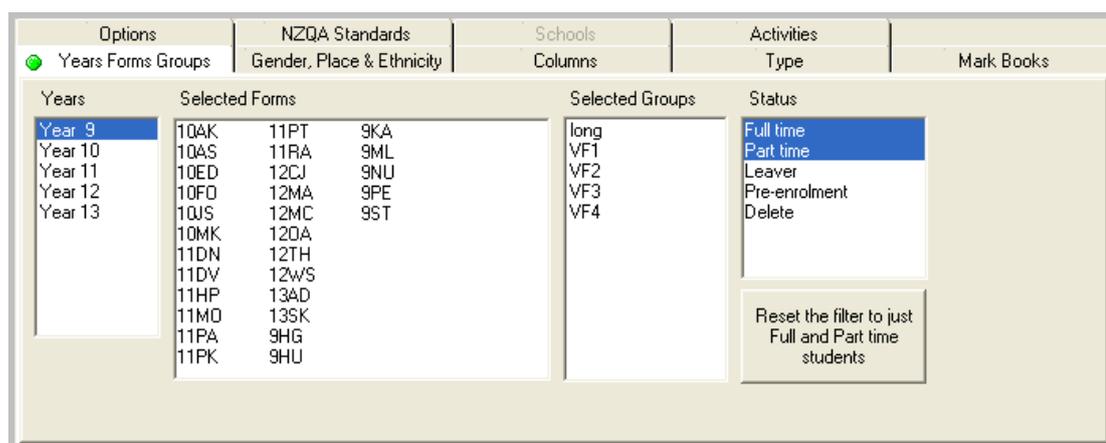
Figure 1177: Tab 1 — Years and class groupings

As the most frequent filters used are those to select an individual year or class group, the student's status is also included on this tab and is always set, by default, to include full-time or part-time students.

The three lists show students' years, horizontal classes and vertical classes respectively. You can multi-select without holding down the Ctrl key.

There is also a button on this screen to clear the present filter (on all tabs) and reset to just full- and part-time students.

33.1.2 Tab 2 – Gender, Place and Ethnicity

On this tab, shown below, you can select the student's gender, their place in the family, and their ethnicity using either the 'MOE five' or the full range of MOE ethnicities.
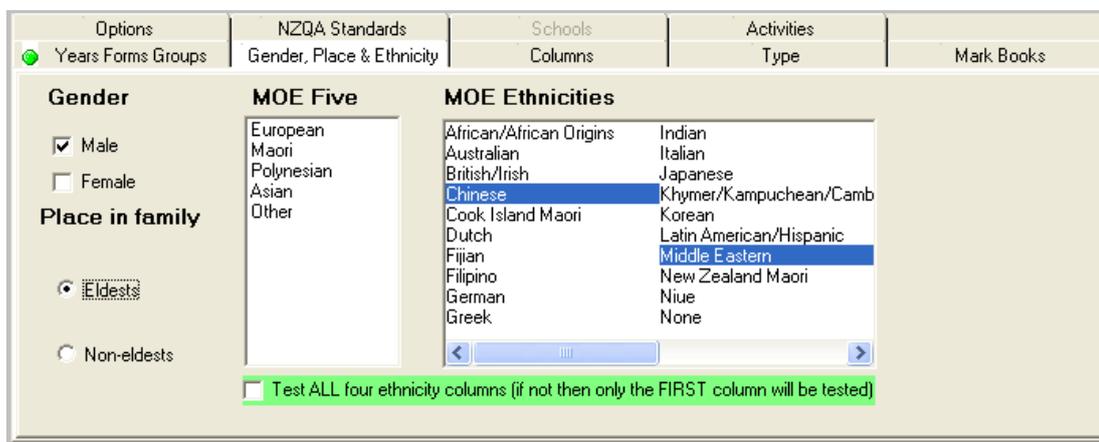
Figure 1178: Tab 2 – Gender, Place and Ethnicity

Several years ago the Ministry of Education required that students ethnicities be returned as one of the five possibilities shown in the 'MOE five' list. Since then they have expanded their definitions to those on the right hand side of the tab, but school frequently prefer to use the 'MOE five' when doing a high level analysis. For more detailed ethnic analysis you could use the right hand possibilities.

The 'Place in family' choice is restricted to just 'Eldests' and 'Non-eldests' if you are using ClassRoom Manager. If you are using Student Manager then this choice is expanded, as shown below.

Figure 1179: Student Manager 'Place in family' options

33.1.3 Tab 3 – Columns

The third tab, shown below, allows you to specify a wide range of possibilities concerning the data stored in columns.

You may set up several possibilities and, in this instance, you are able to determine the logic between entries for yourself, using the AND / OR choice on the right hand end of the screen.

In the example below the filter is being set to 'Class Stanine Maths Yr 9' > 50.

This is done by using the column picker on the left to identify the column the contents of which you wish to test, then selecting a condition from the pulldown (shown above) and finally entering the expression to be tested in the right hand column.
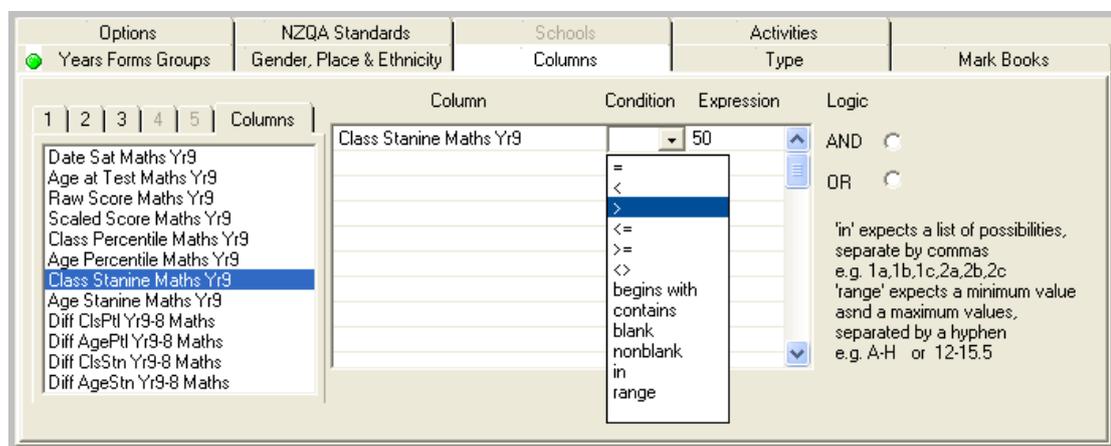
Figure 1180: Tab 3 – Columns

Note the text on the right of the screen. If you select the condition 'in' then the 'Expression' field can contain a list of comma-separated possibilities e.g. 1a, 1b, 2a, 2b, 2c. If you select the condition 'Range' then the "expression' field expects two values separated by a hyphen e.g. A-H or 12-15.5. Note that BOTH ends of the ranges are INCLUDED when a student's result is checked to see if it falls within the range.

33.1.4 Tab 4 - Type

The Ministry of Education provide a list of types and each student must belong to one of these categories. In the example below the filter is being set to select those students who are either 'Regular students' or 'External students.
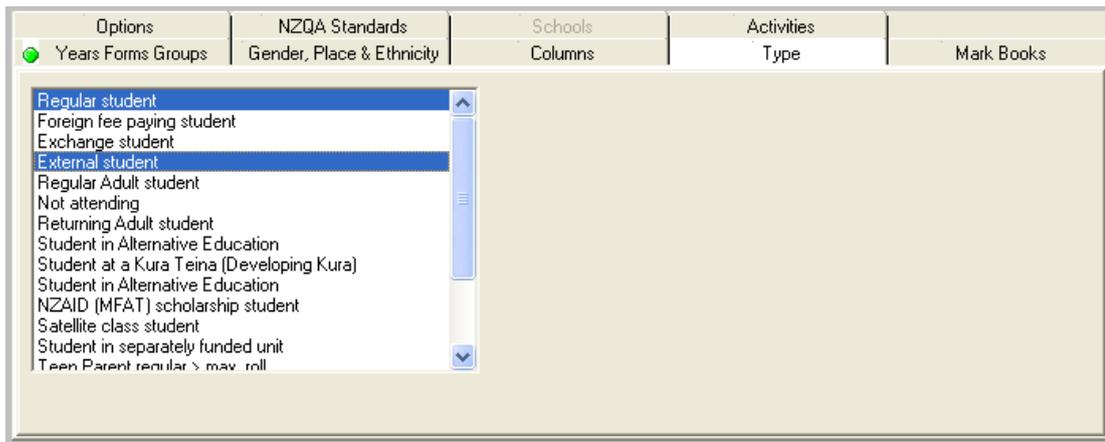
Figure 1181: Tab 4 — Type

33.1.5 Tab 5 — Options

You can filter for students who are members of one or more option classes using the tab shown below.
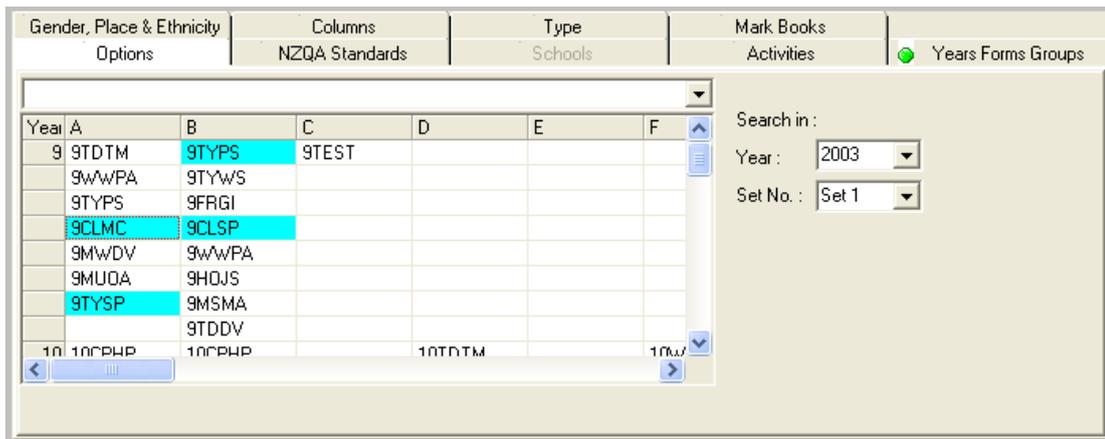
Figure 1182: Tab 5 — Options

You can select both the year and the option column set on the right hand side of the screen then multi-select the various options within that set. You cannot select from more than one set in a particular filter.

33.1.6 Tab 6 — NZQA standards

This tab allows you to select just those students taking a particular standard or standards, as shown below where the filter has been set to select those who have 'Achieved' standard number 90147 (version 1 Language E).
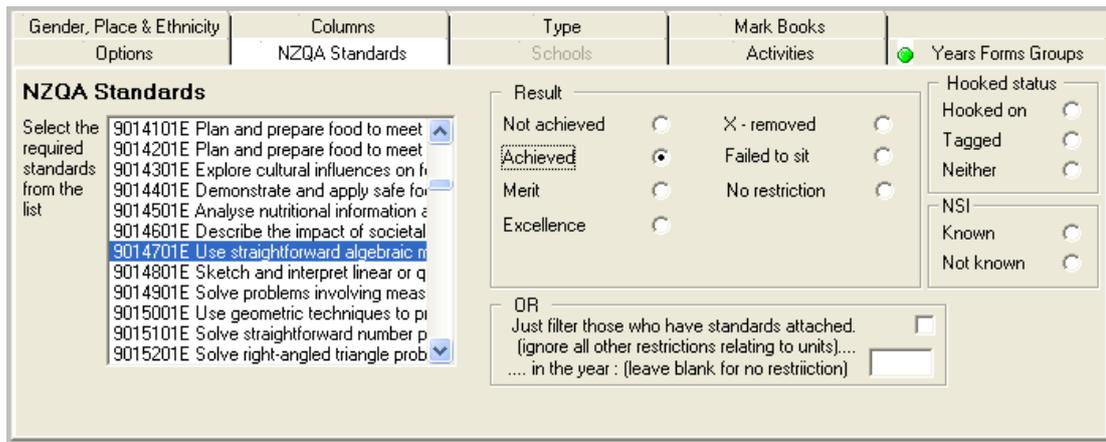
Figure 1183: Tab 6 – NZQA standards

Alternatively, you may simply click in the check box in the 'OR' frame to select just those students taking standards. If you wish to specify a particular year then type that year into the extra entry box devoted to that purpose.

33.1.7 Tab 7 – Activities

This tab allows you to select those students attached to particular activities, selecting from the list of current activities as displayed in the illustration below.

In the example the students who are in the choir are being sought.
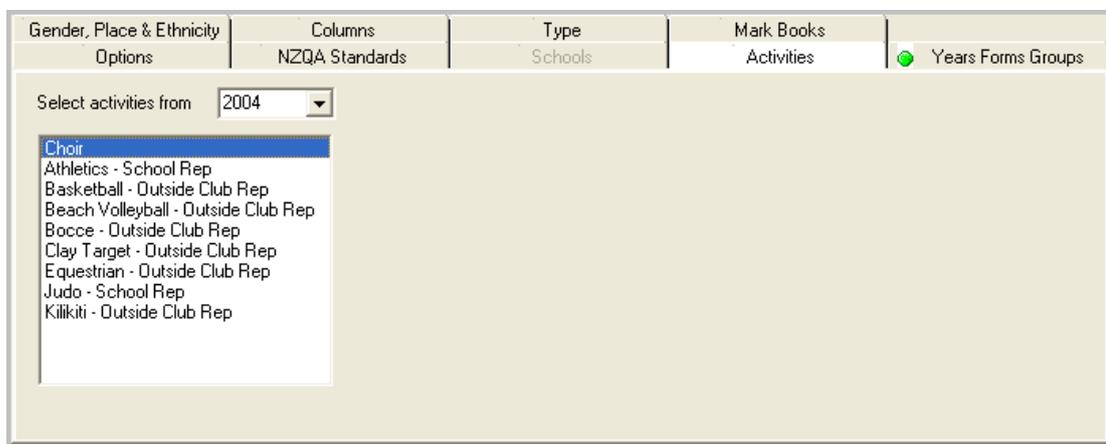
Figure 1184: Tab 7 – Activities

33.1.8 Tab 8 – Markbooks

This tab enables you to find those students who are members of a current markbook or markbooks. Multi-select the require books from the list shown.

Please note: The year 9 markbooks appear AFTER the year 13 markbooks, due to the strictly alphabetic nature of the sorting within the list.

In the example below the students who are in the '9CL 2004' markbooks are being sought.

Figure 1185: Tab 8 – Markbooks

There is one further tab, disabled in the illustrations above. This is the 'Schools' tab which becomes enabled if your installation of ClassRoom Manager or Student Manager is in the multi-school mode. This enables you to filter just those students who are for one or more of the schools represented in your installation.

Finally, in one or two places within the package (notably in grid mode in CMTeacher) you can repeatedly use the filter to refine your selection by optionally applying the filter to the 'currently selected' group of students. The alternative is, depending on where you are in the package, to apply the filter to either the entire school or to those in your dossier's filter.

# 34	CMAdmin Appendix 3 - The Word Processor Insertion Tool

34.1 Using The {A} Tool In The Word Processor

One of the buttons at the top of the word processor is titled {a}.

Figure 1186: The code-insertion button

This tool is used to insert a code into the word processor text. When the text is printed for a particular student the code is recognised, extracted, evaluated and the resulting information is used to replace the code in the final text.

The simplest example is the use of Ctrl-N to insert the code for the student's preferred name. The code for this is 'cm.col(3)' which is translated by the software to mean 'the contents of this student's third column'. Column 3 is the student's preferred name so, when printed, that is what will replace the code.

This insertion tool offers a very wide range of possible codes across thirteen different tabs. (Not all are available unless you have Student Manager as some, e.g. Pastoral, refer exclusively to data stored via Student Manager.

When you come to a position in the text where you wish to insert a code click on the {a} button and the code insertion tool will appear, as shown below.

34.1.1 Columns
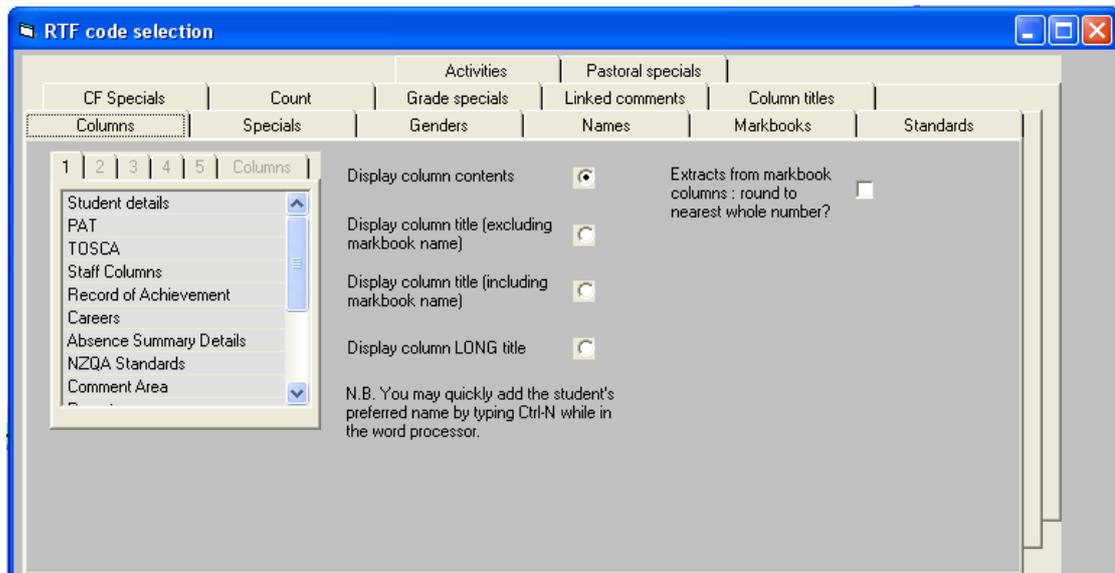
Figure 1187: Selection of data from columns

The simplest use of this tab is to insert the data held in a column for the current student. To do this simply select the column from the column picker on the left of the screen.

Alternatively, if you wish to insert the column title (including or excluding the name of a markbook from which you might be selecting a column), or the column long title, then you should first select which of these you wish from the options in the centre of the screen BEFORE selecting the column concerned.

To select a column from a markbook, first select 'Electronic Markbooks' from the column picker. This will display the current markbooks. Select one of these and its named columns will be displayed. Select one of these and (slightly complex) code will be embedded in your text. A composite screen capture of these steps is shown in the illustration below.

Figure 1188: Selection of a markbook column

If you wish to select from a markbook from other than the current year then select 'Display all markbooks' from the top of the centre column above.

Alternatively you might wish to display data from a column in an as yet unnamed markbook. This is done when you are designing a generic report for an unspecified subject. The subject is not selected until you come to view or print the report. In this case you would select 'Generic Markbook' which appears after the last markbook name in the second column. After this you can select from the various possibilities shown on the right in the illustration below.
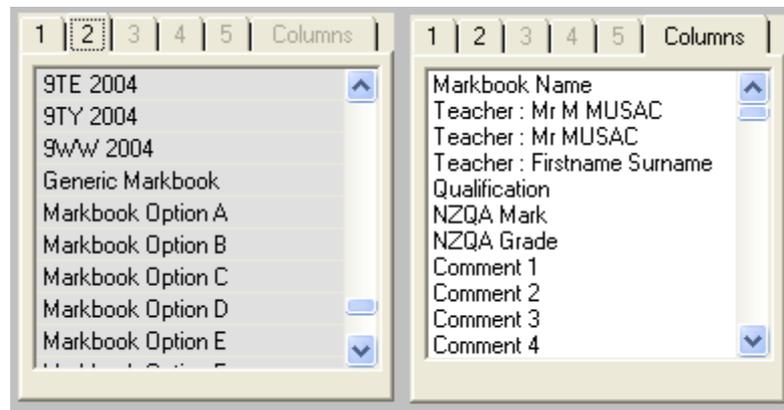
Figure 1189: Selection of a generic or option-specific markbook column

There is a third possibility to do with markbooks. You can design a report for the 'subject in the D option line' whatever that might be for a particular student. To do this select from the 'Option specific' possibilities at the bottom of the left hand column in the illustration above. Then you may select from the same range of possibilities shown in the second part of the display. This includes the markbook name (i.e. the 'Report name' as specified in the markbook definition), the teacher's name (in a variety of formats), a report comment, or a column.

34.1.2 Specials
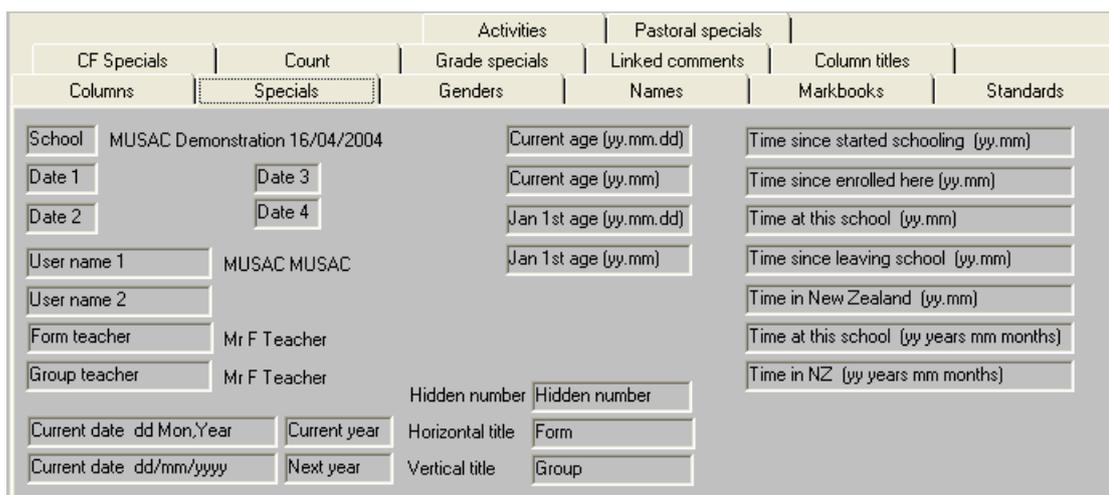
Figure 1190: Specials

Specials are displayed on the tab above. They include some information derived from data held in columns (e.g. the 'Time at this school' is derived from the current date and the student's 'Date first started here') and other information (e.g. Date 1, Date 2) which are specified in the configuration area of the package.

34.1.3 Genders

We last met genders when dealing with report comments. These are replaced by the gender-specific equivalent depending on whether the student concerned is male or female.

If you are a single sex school then, of course, you will not have to use these codes. If you wish to insert the code for 'her' then use the code for the male equivalent. 'her' is strange as it has two male equivalents. Consider 'It is his ball so I gave it to him' and 'It is her ball so I gave it to her'.
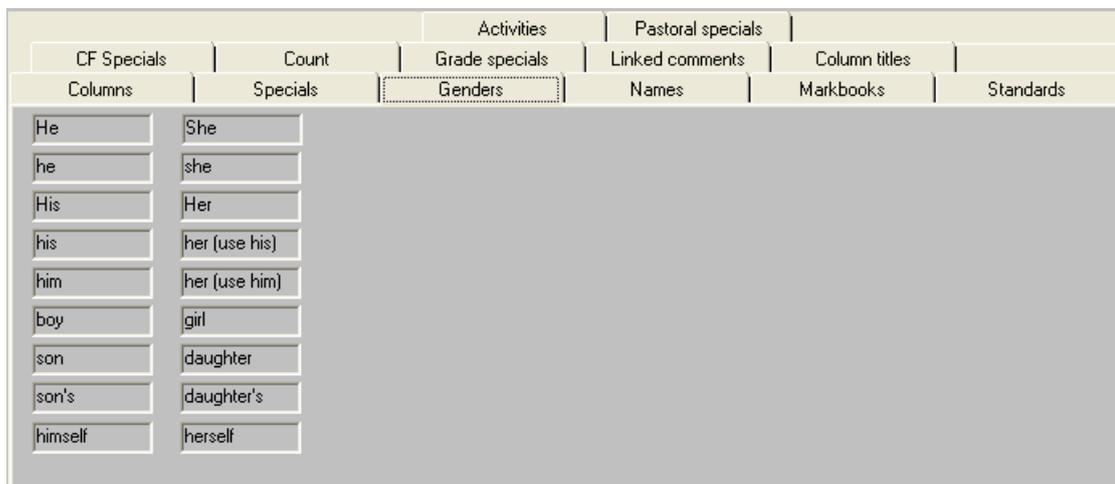
Figure 1191: Gender insertions

34.1.4 Names

This allows you to insert one of the four possibilities shown below.
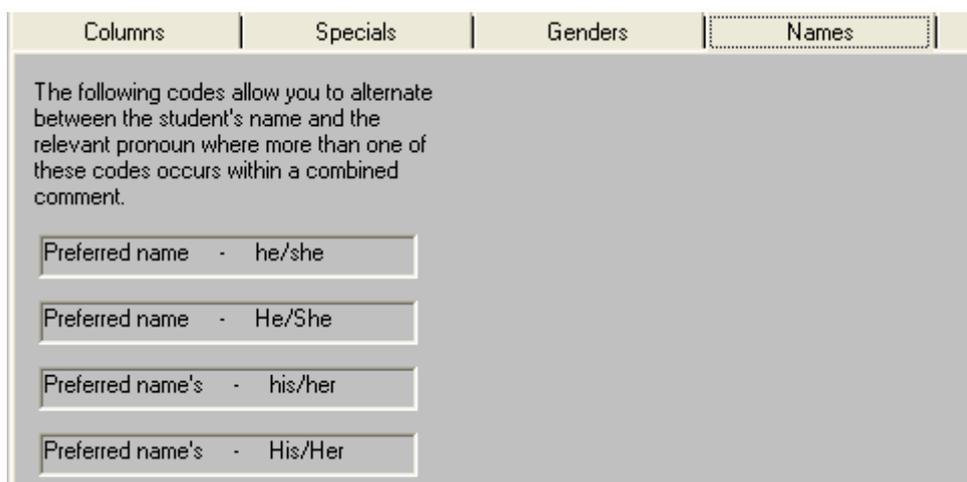
Figure 1192: Name insertions

The fast way to insert the first of these has been mentioned earlier. You do not have to click on the {a} button and select this tab. Just press Ctrl-N while in the word processor itself.

Please note: In a combined comment where the preferred name is repeated in several comments it will automatically be replaced by the relevant pronoun (he or she) on every second occurrence.

34.1.5 Markbook specials

These allow you to automatically insert one of the possibilities down the left hand side of the screen shown below for the markbook selected from the right hand side.
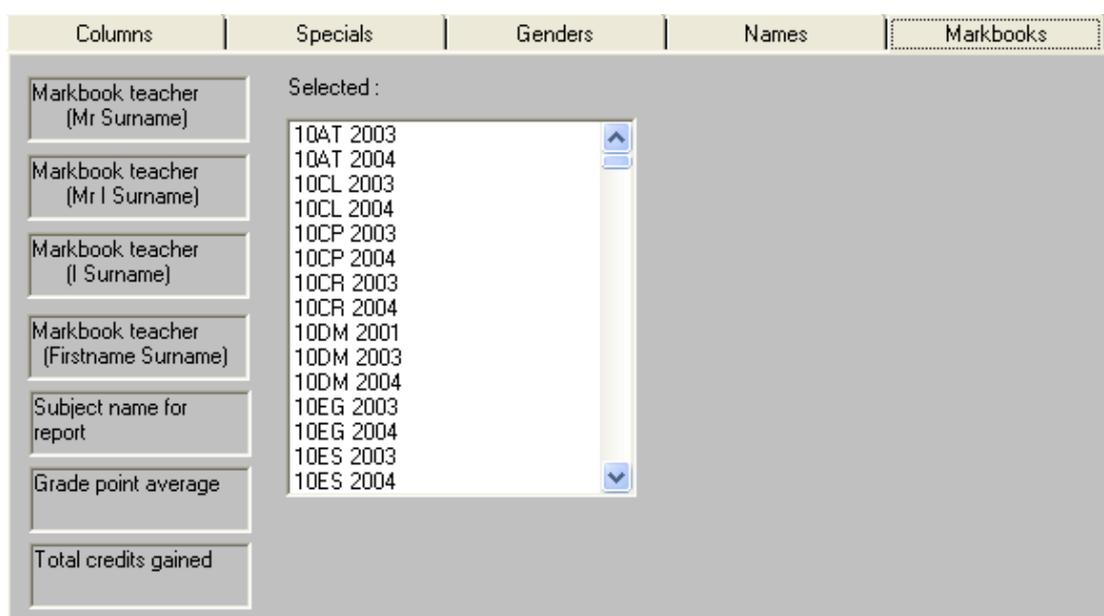
Figure 1193: Markbook insertions

We have already discussed a more general approach to this in the 'Column insertion' process earlier in the appendix. This routine, however, does offer the two extra possibilities ('Grade point average' and 'Total credits gained') at the bottom of the list of possibilities.

34.1.6 Standards

These apply to unit standards and achievement standards taken by the student and the tab has two sub tabs.

The first, shown below, allows you to insert a number relating to the label which you click. This could be, for example, the total number of Level 3 units attempted, or the total credits gained at level 2, or the number of Level 1 Literacy credits gained.

Figure 1194: Number from standards

The second 'Standards' tab is now obsolete as far as its original intention was concerned. This was in earlier days when unit standards were subdivided in elements and these into performance criteria.

The possibilities do still have a place however if you wish to insert the code, short title, long title etc of a particular standard.

Figure 1195: Standard codes

34.1.7 Curriculum Framework specials

These are not student specific. They allow you to count the number of students who have reached one of the levels of attainment which you have configured for your school for the curriculum framework objectives.
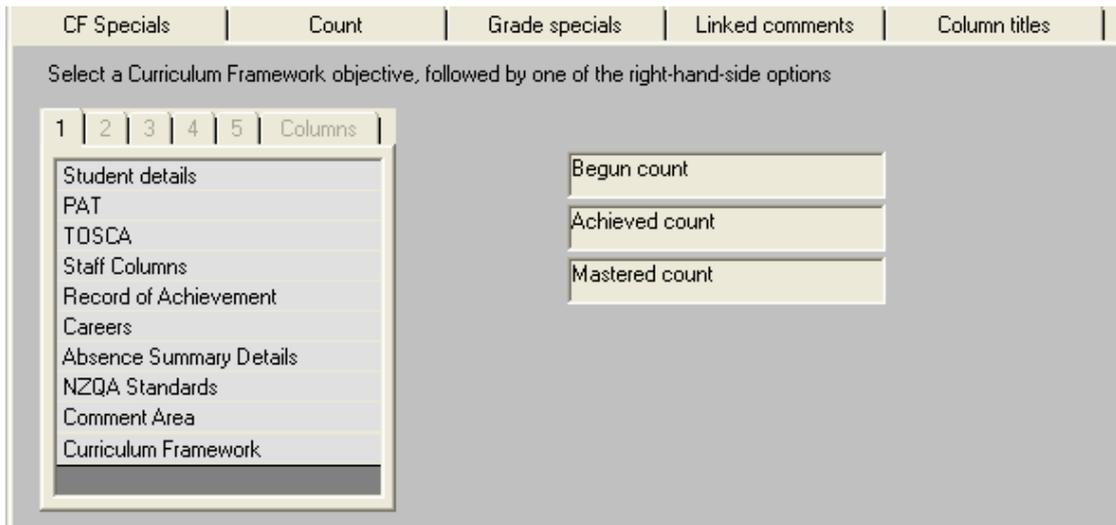
Figure 1196: Curriculum Framework specials

Select the objective (under 'Curriculum Framework' in the column picker, followed by one of the possibilities on the right hand side of the screen above.

34.1.8 Count specials

This area allows you to count the number of students who satisfy a particular criteria and to have the resulting number reported in your document.
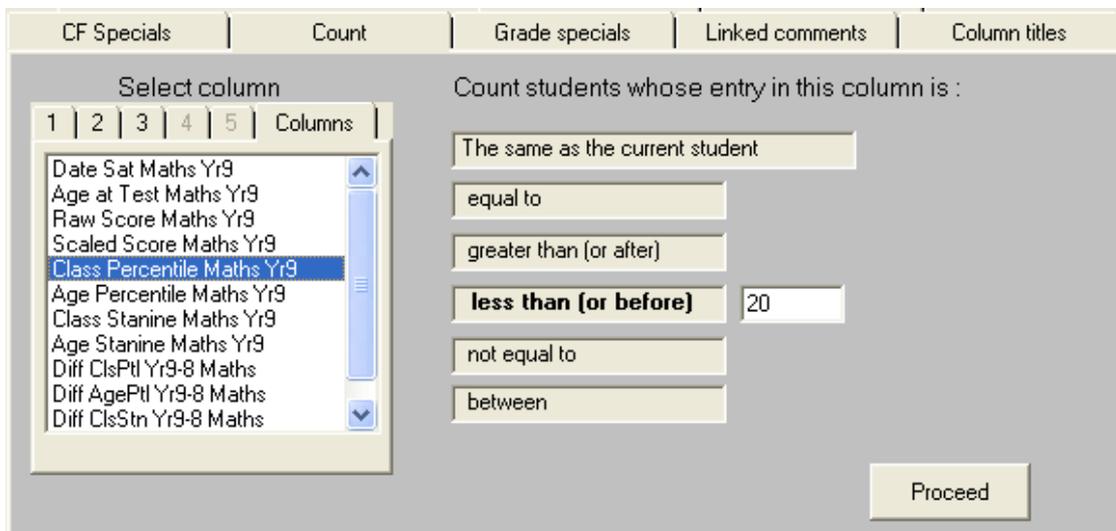
Figure 1197: Grade specials

In the example above, the document will report the number of students who have scored less than 20 in their PAT Maths Yr 9 Class Percentile.

34.1.9 Grade specials

This area is very similar to the previous one. First select the column in which you are interested, followed by the entry to be counted (which may be a range – see the note on the screen below), and finally click on the operation you wish to have performed:

- Count the number of students with the specified entry or in the specified range
- Calculate the percentage of students with results which meet the same criteria.
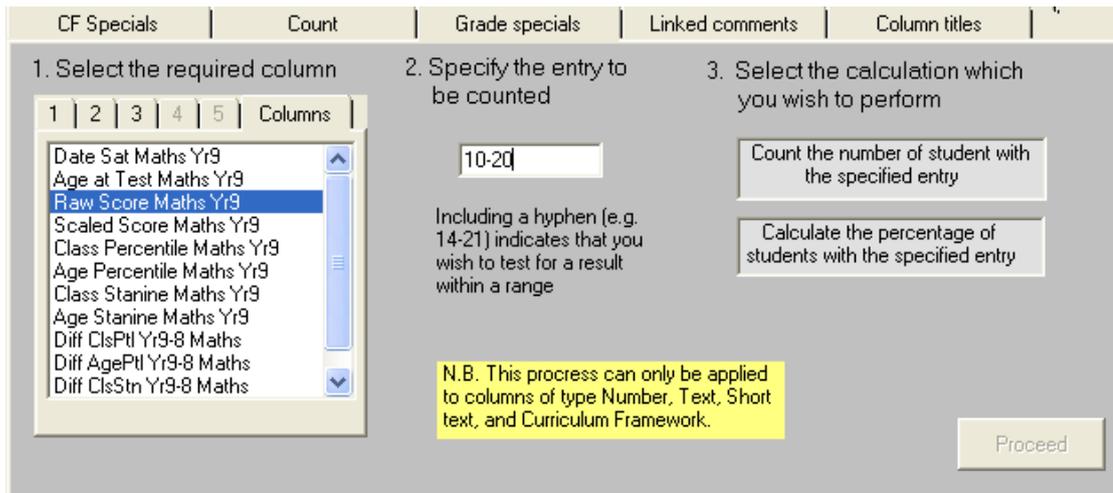
Figure 1198: Grade specials

34.1.10   Linked comments

This area allows you to insert a comment into the text where that comment depends on the result which the student has in a particular column.

You must set up the possibilities in the screen below by first selecting the column then specifying the range of possible entries in that column along with the text which you wish to appear in the document if the student has the matching result.
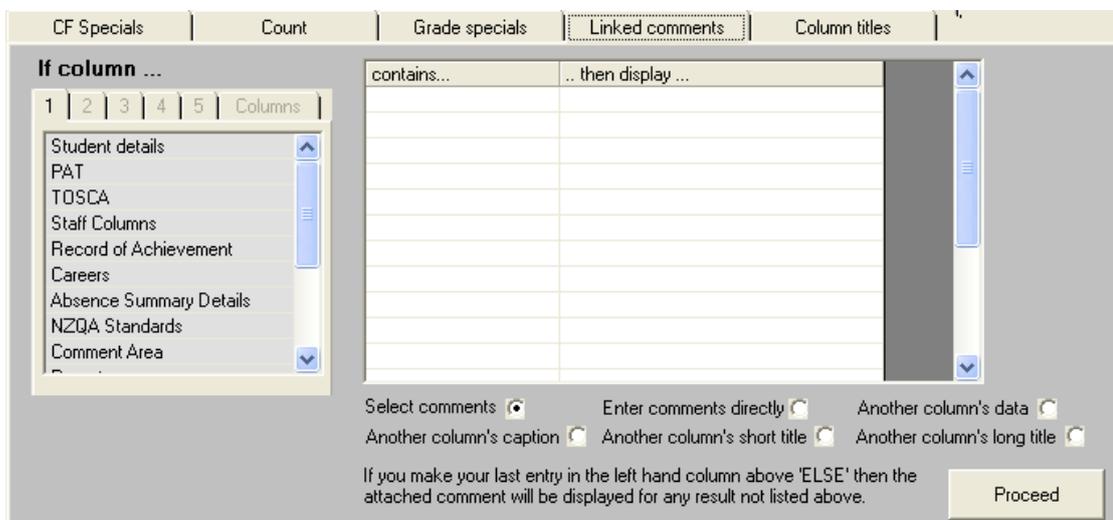
Figure 1199: Linked comments

34.1.11   Column titles

This area simply inserts into the document the basic title or the long title of the selected column. Surely it would be much easier to simply type the required text into the word processor, but clearly at some time in the past someone requested this facility and we thought that it was such a good idea (at the time) that we included it.
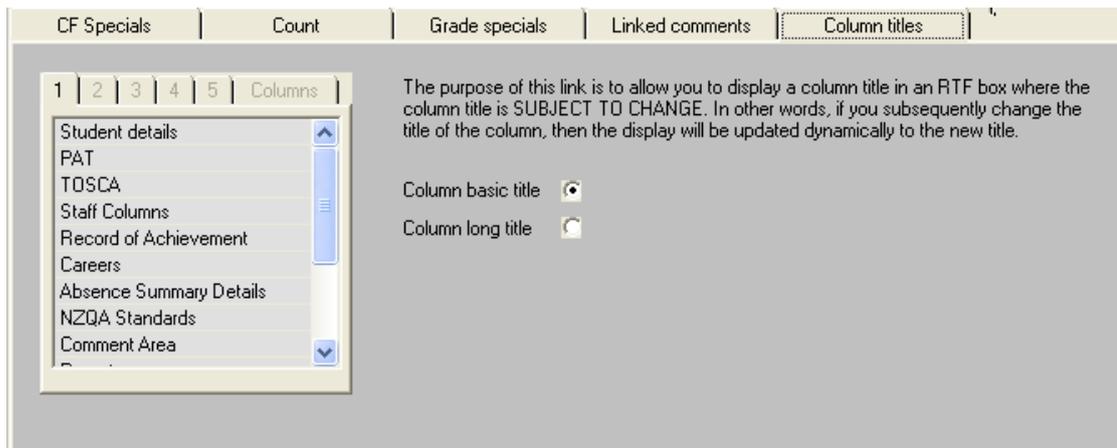
Figure 1200: Column titles

34.1.12   Activities

The section allows you to return a reasonably complex text extract related to the current students activities.

Select the year and the category required then tick on the option which you require.
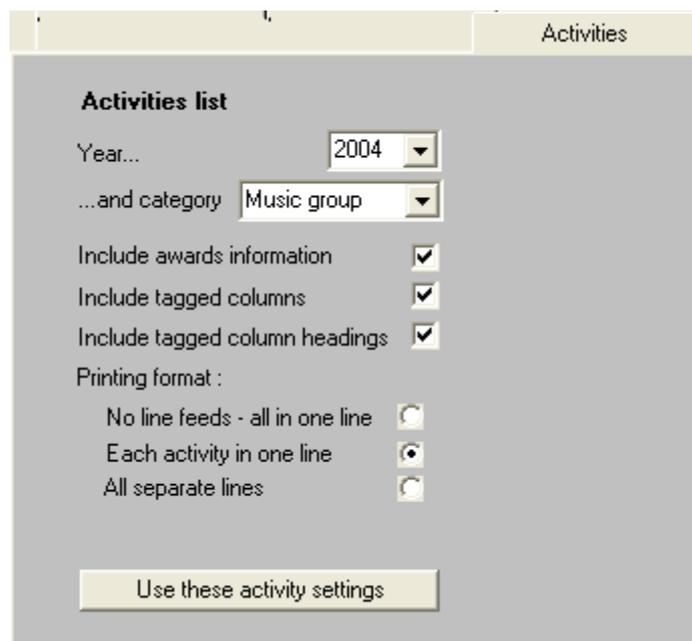
Figure 1201: Activities

This will generate a summary related to the student the format of which will depend on the setting you select from the three possibilities displayed above:

- No line feeds – all in one line
- Each separate activity on one line
- All activities and their component details (e.g. awards) on separate lines.
- This is intended to form part of e.g. a student's leaver documentation.

34.1.13 Pastoral

The final tab (for users of Student Manager only) allows you to design a document relating to a particular pastoral transaction. These are used in the 'Pastoral' area of Student Manager for designing a letter home relating to a particular offence – e.g. the 'Smoker's letter'.

Figure 1202: Pastoral insertions

A pastoral letter can be printed from within the pastoral section of Student Manager and the letter will relate to the transaction currently being viewed there.

35 CMAdmin Appendix 4 - The Column Selector

35.1 Using The MUSAC Column Selector

The MUSAC column selector pops up whenever you are required to select a column. This can be when you are:

- designing a document
- designing a graph
- applying a filter to a column
- selecting an insertion code in the word processor
- applying a formula to a column
- … and other possibilities

The column selector can appear slightly differently in different circumstances. Its height depends on its location (as has been set for that location within the software).

It may or may not offer special features (detailed below) such as electronic markbook columns, generic option columns and the like.

The selector appears as shown below with a series of five tabs across the top. You need only use these tabs when RETURNING to a previous selection, as will be explained shortly.
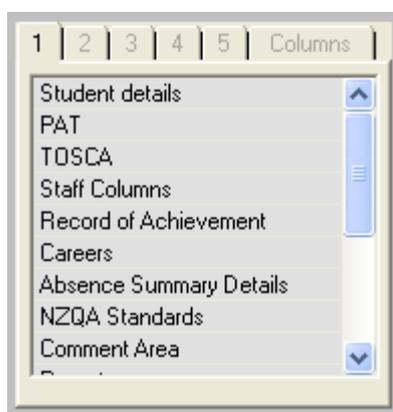
Figure 1203: Selection of the first category

This illustration shows the column selector with those entries which your package has in the first column category displayed. When you click on one of these (e.g. 'PAT') the display will change to the relevant second category entries, as shown below.
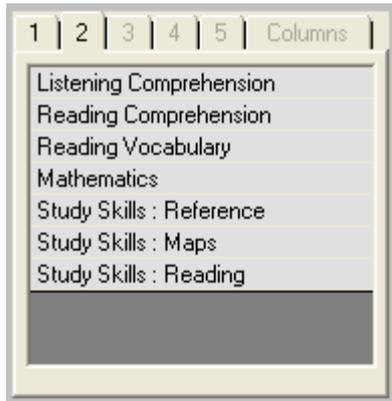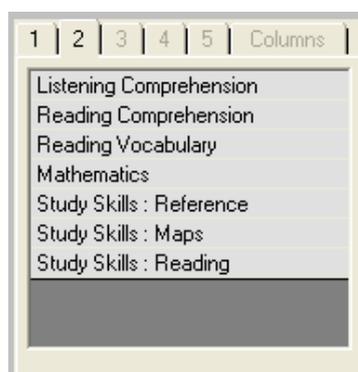
Figure 1204: Selection of the second category

These are the PAT tests for which you have installed columns. Selecting 'Mathematics', the year categories are displayed, as shown below. If there are no subsequent categories to display then the display will list the columns available.
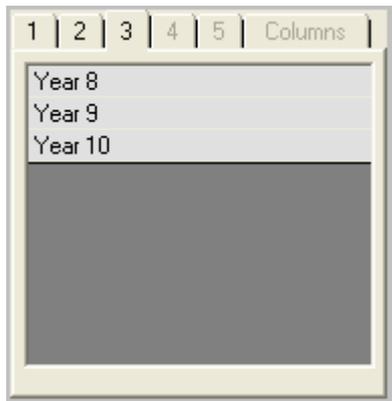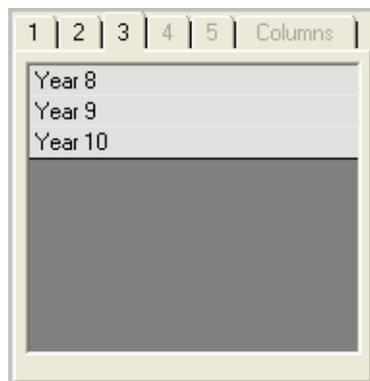

Figure 1205: Selection of the third category

On selecting 'year 9' the program found that there were no Category 4 entries, so it displayed the columns installed under Year 9. The 'Columns' tab at the top of the selector indicates that you have reached columns and, by clicking on a particular column it is selected and this information is returned to the part of the program which requested your selection.
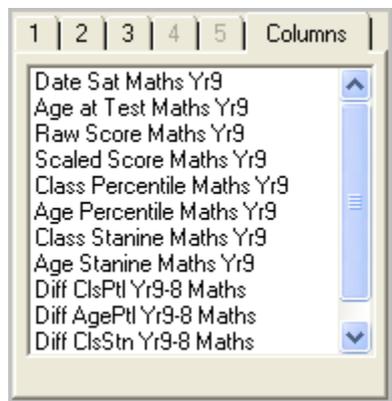
Figure 1206: Selection of column(s)

In some areas you will be required to multi-select columns. You do this by clicking on the various columns which you require.

Remember that, if you wish to return to a previously displayed category then you do this by clicking on the relevant tab at the top of the selector.

One area of use of the column selector which differs from the others is in the selection of a column or other data relating to a markbook. Markbook columns are not normal CM columns but, using the selector, they may be treated as if they were.

To select a markbook column, return to the category 1 display and move to the last entry on that display. This is 'Electronic Markbooks', as shown below.

Figure 1207: Selection of Electronic Markbooks

Click on 'Electronic Markbooks' and the list of available markbooks will be displayed, as shown below.
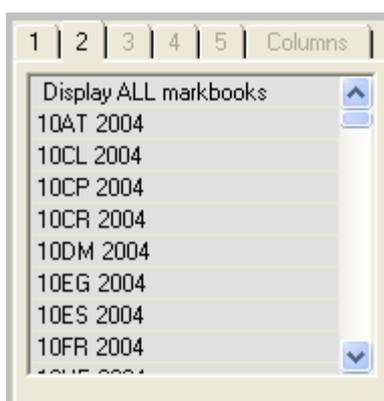
Figure 1208: Selecting a particular markbook

If you wish to select from a markbook in other than the current year then click on the very first option and all markbooks from all years will be displayed. Select the markbook from which you wish to select a column (I've selected '11MAT 2004') and its columns will be displayed, as shown below.

Any global columns with headings will be displayed. At the bottom of the display it is possible to select Teacher column 101 through to Teacher column 200. Since these columns may or may

not be defined for a particular teacher all are displayed, on the understanding that you will select a column (or columns) which have been brought into use for a particular teacher – by the naming of the column(s).
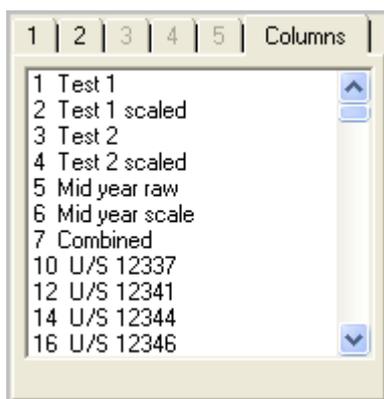

Figure 1209: Selection of markbook column(s)

You may wish to select a column from a 'Generic Markbook'. This is done when you are designing a document (see CMTeacher section for full details) which is to be a report document for an as yet unspecified subject. When you elect to view the document you will be asked, at that point, to nominate the markbook from which data is to be extracted. Alternatively, you may wish to place on a report data extracted from whichever markbook a particular student has in his or her e.g. A option. To do this you would select Markbook Option A from the display below.

'Generic markbook' and 'Option specific markbooks' are found at the bottom of the list of available markbooks, as shown below.

Figure 1210: Selection of Generic or option related markbooks

Once you have selected either the 'Generic markbook' or an option specific markbook then the possible data extractions from that are shown, in an extended format (a composite screen capture for this user guide) as shown below.
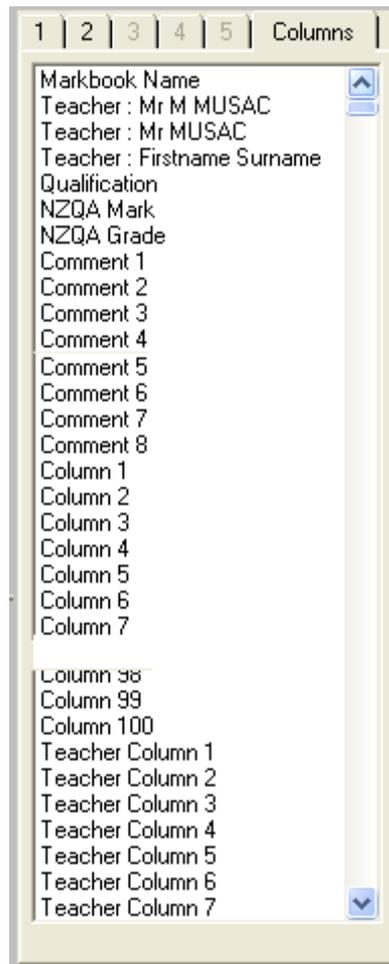
Figure 1211: Selection of generic or option related markbook column(s)

At the top of the list is the markbook's name, along with three formats of the teacher's name and a few 'other details' stored in markbooks. These are followed by the eight columns and these are followed in turn by first the one hundred 'Global' columns (i.e. those which apply to all teachers in the markbook) then the 100 teacher-specific columns.

36   CMAdmin Appendix 5 - The Password Utility

36.1 Using the Password Utility

The MUSAC generalised backup utility can be accessed from the sign-on splash screen provided that you have the necessary right to access this utility. If you do so, then, after you have entered your entry code and your password a small button will appear to the right of the entry code area. The entry code and password of the demonstration user have been erased from the illustration as shown below.
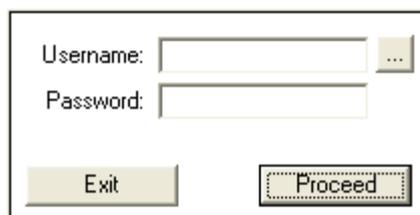
Figure 1212: Accessing the password utility

Click on the small button and you will be asked to enter the special access password for this utility. This password is not published in this user guide and may be obtained, given suitable proof of identity, from the MUSAC Help Desk on 06 350 9255.

The password request screen is shown below.
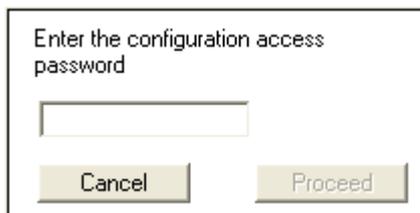
Figure 1213: The request for the special password

Enter the special password and a further small button will appear, as shown below.
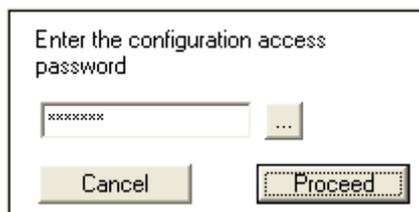
Figure 1214: A further button to change the special password

Clicking this further button takes you to a screen where you can enter your own password to provide access to this utility. Please ensure that this password is recorded somewhere safe and secure (and memorable) as the special entry password will no longer work once you have made the change.

Figure 1215: Changing the special password

Once you proceed to the main utility screen, shown below, you will have a number of functions available and decision to make.
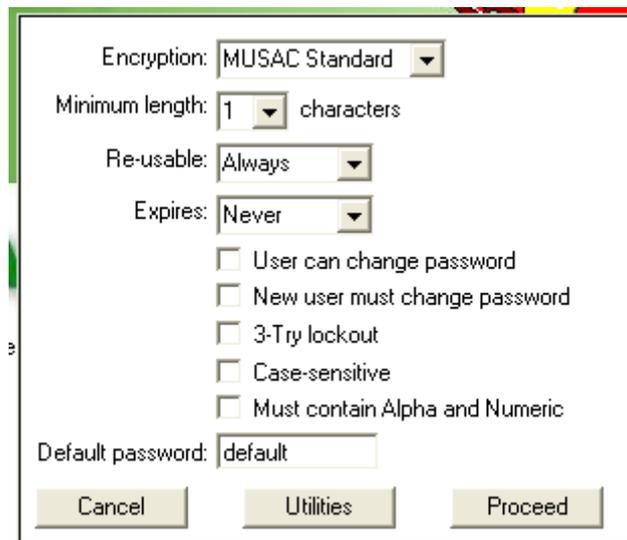
Figure 1216: The main utility screen

Firstly, encryption. MUSAC has its own rather sophisticated password encryption routine. However, the Ministry of Education have indicated that they prefer an even more complex process known as 'Blowfish encryption' (128-bit encryption). You have the choice of the two, via the first pulldown, as shown below.
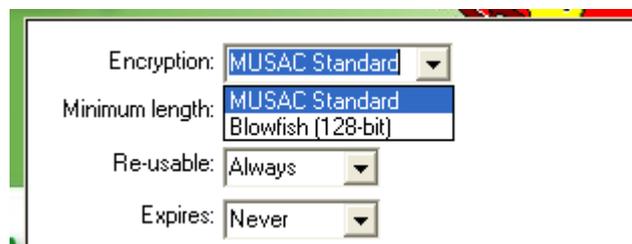
Figure 1217: The Encryption possibilities

The second decision concerns the minimum length of your passwords. This is specified via another small pulldown as is the third entry – Reusable. You can specify the number of changes of password which must occur before a previously used password may be reused.

The 'Reusable' possibilities are shown below.

Figure 1218: The reusability possibilities

The final pulldown allows you to specify the number of days for which a password will remain active before requiring re-specification. These are shown below.
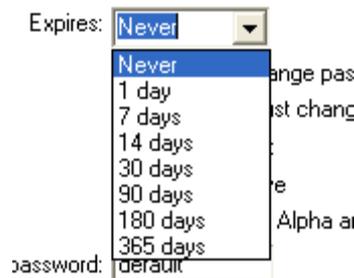
Figure 1219: The expiry time possibilities

There are several further options:
- User can change password - each person will have the right to change their own password
- New user must change password - each new user MUST change their initial password before they can proceed.
- 3-try lockout - after three attempts a user is blocked out from further attempts.
- Case-sensitive – if it is case sensitive then the program will distinguish between upper and lower case and passwords would have to match case exactly.
- Must contain alpha and numeric - if set then any password MUST contain both alphabetic and numeric characters.

The button ate centre bottom of the screen, marked 'utilities' leads you to a list of all of your staff members and various details relating to their access. You can alter their passwords for them on this screen, and change their right to eternal life. (This actually refers to the lifetime of their password!) This screen is shown (in stretch format) below.

Figure 1220: Viewing all users' details

Should you forget your password, you can ring MUSAC for a special '1-day' – 'Super-user' password which will be provided to you once your right to use such a password has been established.

37   CMAdmin Appendix 6 - The MUSAC Backup Utility

37.1 Using The MUSAC Backup Utility

The MUSAC generalised backup utility can be accessed from within both ClassRoom Manager and Student Manager and externally as a stand-alone program.

Its name is MUSACBackup.exe and it resides in the \cm directory. If you add it to your desktop as a shortcut then it might well appear as shown below.

Access it either from within one of the two packages listed above or from the desktop shortcut and you will arrive at the main screen, shown below.

There are four buttons down the left hand side and we shall start with the last of these – the 'Utilities' button.
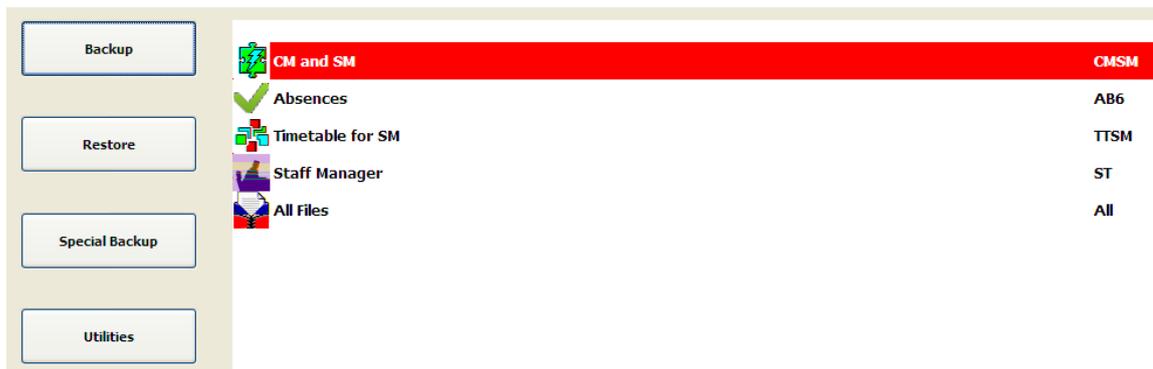
Figure 1221: The backup utility main screen

37.1.1 Utilities

Click on the 'Utilities' button and you will arrive at the following screen:
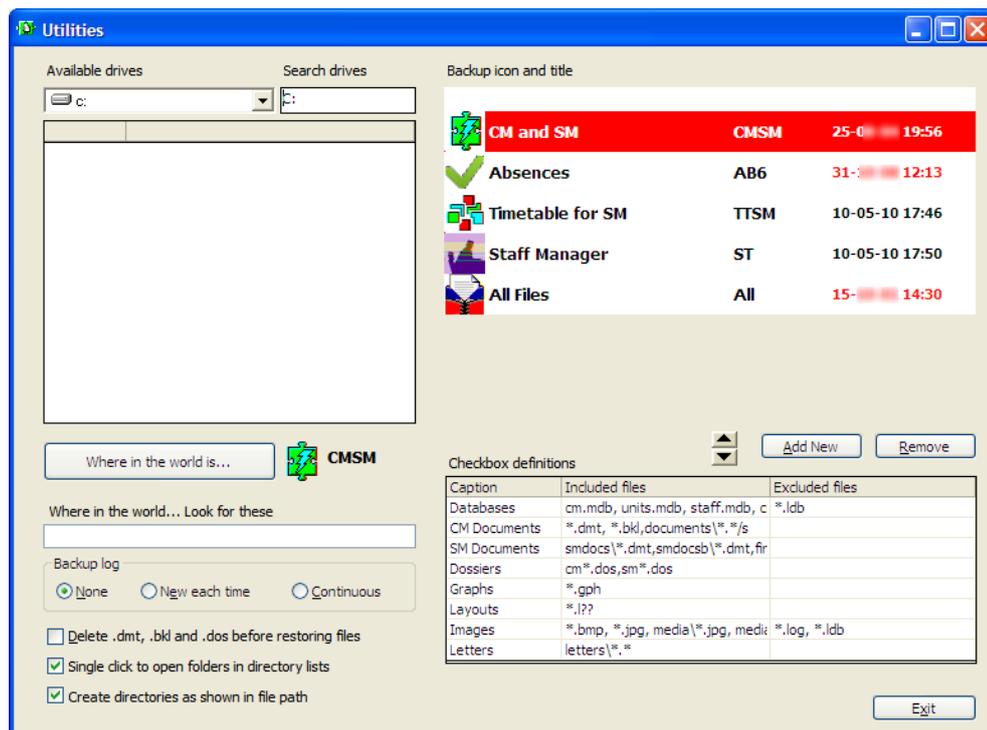
Figure 1222: The Utilities screen

The purpose of Utilities is to allow you to:
- Find out where a program resides
- Specify the files to be included or excluded from the backup process
- Set backup parameters

Firstly, we'll look at the program finding capacity. On the right are the packages which can be backed up by this utility. If you select one then its main program file will be listed at the bottom right of the screen. In the example below I am looking for cm.exe (which is CMTeacher)

The next step is to specify the drive where you wish to search, after which you can click on the 'Where in the world is …' button, shown below.

Figure 1223: The search button

The small clock will appear as the search is conducted. The results of the search are listed in the list box on the left of the screen. As shown below, two copies of cm.exe were found on the C: drive tested.

Path\File	Modified
c:\CM\cm.exe	05/04/ 11:07
c:\vb5\cm\cm.exe	13/11/ 13:07

Figure 1224: The search results

The next feature of this screen is the ability to specify which files will be included in and excluded from the backup process. The following five illustrations below display the file specifications for five of the packages listed.

Caption	Included files	Excluded files
Databases	cm.mdb, units.mdb, staff.mdb, cmplan.mdb,	*.ldb
CM Documents	*.dmt, *.bkl,documents*.*/s	
SM Documents	smdocs*.dmt,smdocsb*.dmt,financial docu	
Dossiers	cm*.dos,sm*.dos	
Graphs	*.gph	
Layouts	*.l??	
Images	*.bmp, *.jpg, media*.jpg, media*.bmp, me	*.log, *.ldb
Letters	letters*.*	

Figure 1225: File specifications

Using the buttons on the left you can add your own backup specifications.

On the left you can set some parameters which control what happens during the backup and restore processes.

37.1.2 Backup

Before clicking on either the 'Backup' or 'Restore' button select the program with which you are concerned from the list on the right of the screen.

The backup screen is split horizontally into two halves. The top half of the screen displays the files relating to the selected program in its main directory and the bottom half displays the same for the backup. If there are NO files in the backup half of the screen no backup has yet been made.

On the left of each half you can specify the drive and directory which apply to the package and its backup, and a button at the bottom of each area allows you to set these as the defaults, so that you do not have to make the selections each time you make a backup.

On the top right you can include or exclude particular file types from the backup. Initially all files (from the specification described earlier in this chapter) are selected and, in the centre part of the screen, the individual files meeting the specified criteria are ticked (in the left hand column of the display grid).

To make the backup click on the 'Backup' button on the right of the screen and the backup will proceed, as shown below.
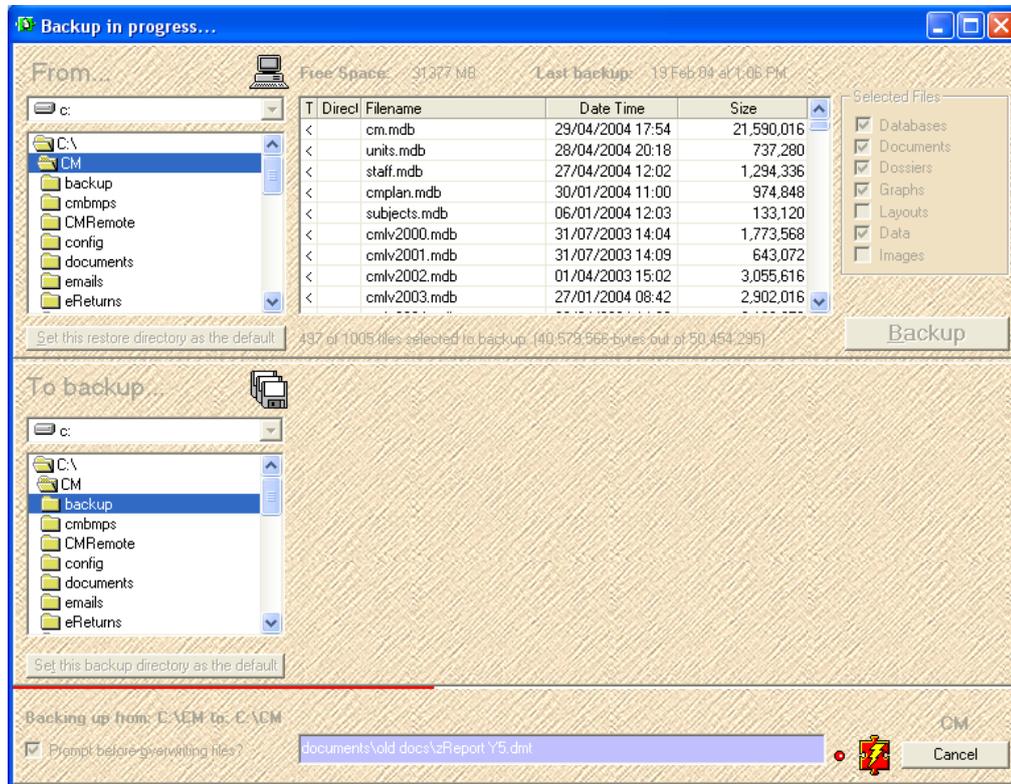
Figure 1226: Progress during a backup

In the example the backup is being made to the subdirectory `\cm\backup`. This is, of course, a particularly useless place to have a backup, unless you are sure that your computer will never be subject to theft or fire and its hard drive will never suffer damage; and that the computer itself will last forever.

Backups MUST be made frequently and regularly and held in a secure place away from the school.

When a backup IS made to a more sensible site then it IS first made to the backup directory and then copied from there to the requested backup drive.

> **Please note:** Backups CAN be made will other users are currently using the package and have the database file(s) open. The program checks to see if a database is open and, if so, then a copy of the file is made and this is included in the backup rather than the original file.

37.1.3 Restore

To restore from a backup, first select the package concerned on the front menu, then click the 'Restore' button to arrive at the following screen, which illustrates a restoration of ClassRoom Manager.

Again, the screen is subdivided into two halves horizontally. This time the top half displays the contents of the backup and the bottom half displays the contents of the directory into which the backup will be restored.

As with the backup process, you can, at the top right hand side of the screen, specify the file types which you wish to be restored and, by clicking in the left hand column of the centre display grid, you can select individual files to be restored. In the example below I have selected just cm.mdb to be restored.

To begin the restoration process, click on the 'Restore' button in the bottom right hand corner of the top half. A message will be displayed (of which an example is shown below) advising you of what you have elected to do.
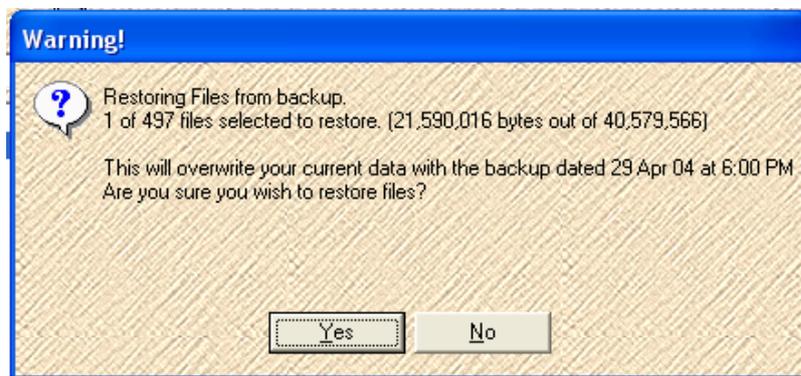
Figure 1227: Ready to begin the restoration process

If you proceed then the first file will be extracted s shown below.
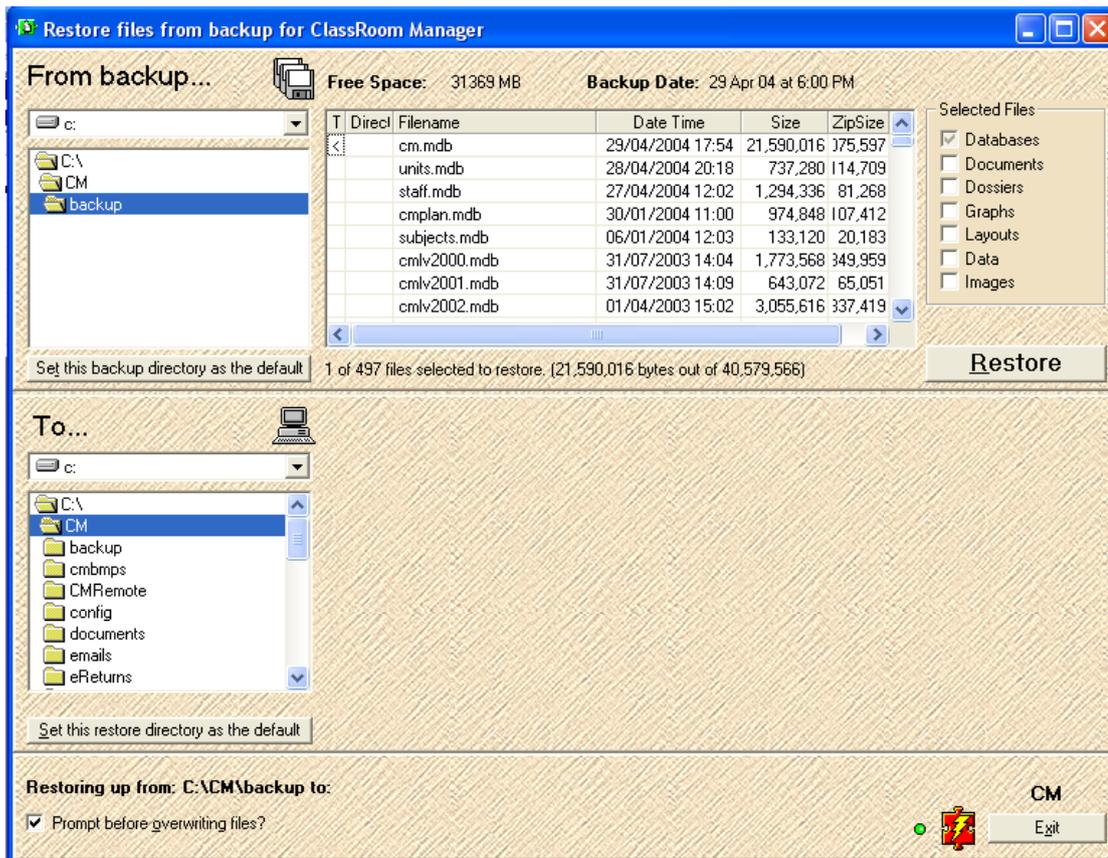
Figure 1228: During the restoration process

If a previous copy of a restored file is found in the destination directory a message will be displayed asking whether or not you wish to proceed by overwriting the original. An example of this message is shown below.
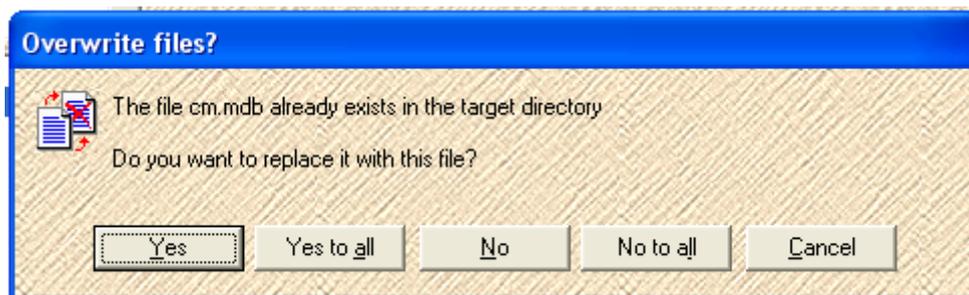
Figure 1229: Overwrite the existing file?

The usual practice is to click the second button to avoid having this message appear for each file extracted from the backup.

Please note: When a backup is made it is created as a series of floppy disk sized files – each approximately 1.4 megabytes in size. Many schools do make their backups on to floppy disks.

A word or two of warning about tape backups. Many schools have an automatic system where their entire file server (or just selected files) are automatically backed up at regular intervals to

a tape backup machine. This is great and excellent but please ensure that you have someone in your school who

- Knows the password to the backup restoration process
- Knows how to perform the process
- Knows how to extract a single file from the general backup

Backups are entirely useless unless they can be used in an emergency.

38   CMTeacher Appendix 1 – Using the Student Filter

Frequently througho0ut ClassRoom Manager and Student Manager you need to reduce the number of students displayed from the whole school to just (for example)

- a single year level
- a single class
- a single ethnic group
- those with a certain range of marks in a certain column
- or any combination of possibilities.

This is done using the student filter which appears, when called, as a series of tabs offering various possibilities and a 'Proceed' button.

Note that filter logic is OR within each list or section and AND between sections. Thus we could set a filter to find those students who are in (Year 3 OR year 4 OR year 5) AND (Rm2 OR room 3) AND who are (Maori OR Polynesian OR Asian) AND (whose score in Maths PAT year 3 Class Percentile is > 50)

Let's now look at each of the tabs of the student filter to examine the possibilities which they offer.

38.1.1 Tab 1 Years, Horizontal classes and Vertical classes

This tab will be automatically renamed to include the titles which you have given these groupings e.g. 'Years Forms Groups' or 'Years Classes Rooms'
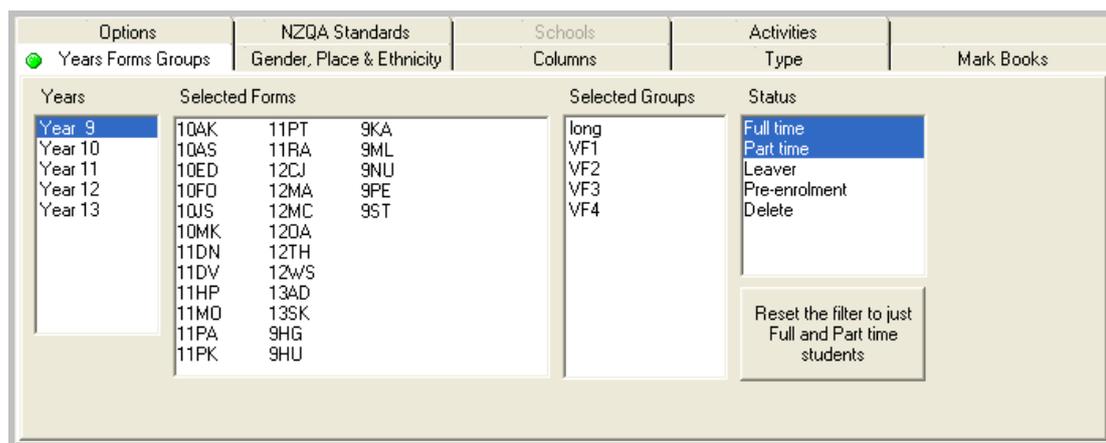
Figure 1230: Tab 1 – Years and class groupings

As the most frequent filters used are those to select an individual year or class group, the student's status is also included on this tab and is always set, by default, to include full-time or part-time students.

The three lists show students' years, horizontal classes and vertical classes respectively. You can multi-select without holding down the Ctrl key.

There is also a button on this screen to clear the present filter (on all tabs) and reset to just full- and part-time students.

38.1.2 Tab 2 – Gender, Place and Ethnicity

On this tab, shown below, you can select the student's gender, their place in the family, and their ethnicity using either the 'MOE five' or the full range of MOE ethnicities.
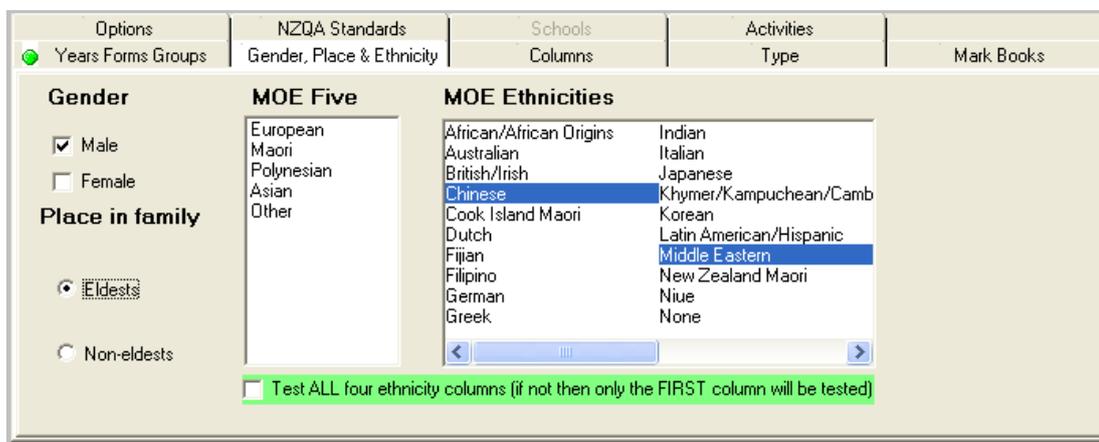
Figure 1231: Tab 2 – Gender, Place and Ethnicity

Several years ago the Ministry of Education required that students ethnicities be returned as one of the five possibilities shown in the 'MOE five' list. Since then they have expanded their definitions to those on the right hand side of the tab, but school frequently prefer to use the 'MOE five' when doing a high level analysis. For more detailed ethnic analysis you could use the right hand possibilities.

The 'Place in family' choice is restricted to just 'Eldests' and 'Non-eldests' if you are using ClassRoom Manager. If you are using Student Manager then this choice is expanded, as shown below.

Figure 1232: Student Manager 'Place in family' options

Student Manager offers a wider range of possibilities than ClassRoom Manager in this area.

38.1.3 Tab 3 – Columns

The third tab, shown below, allows you to specify a wide range of possibilities concerning the data stored in columns.

You may set up several possibilities and, in this instance, you are able to determine the logic between entries for yourself, using the AND / OR choice on the right hand end of the screen.

In the example below the filter is being set to 'Class Stanine Maths Yr 9' > 50.
This is done by using the column picker on the left to identify the column the contents of which you wish to test, then selecting a condition from the drop-down (shown above) and finally entering the expression to be tested in the right hand column.
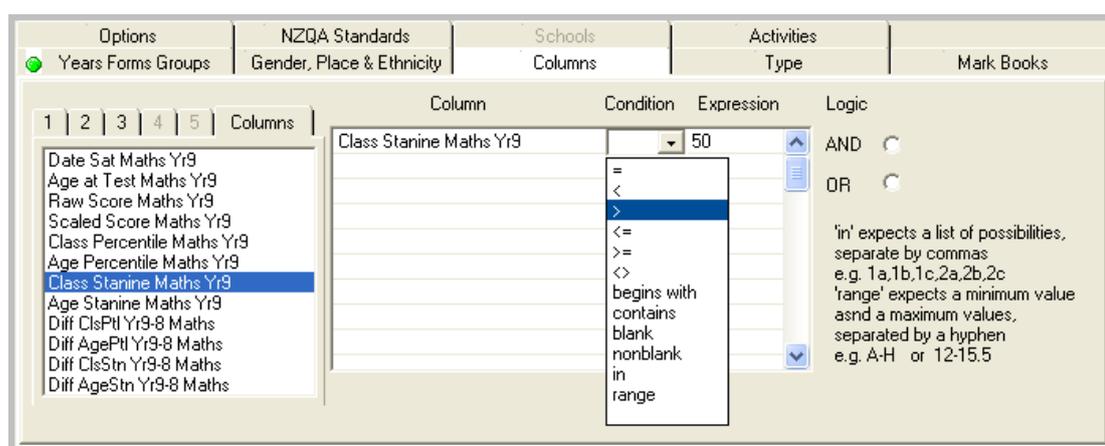
Figure 1233: Tab 3 – Columns

Note the text on the right hand side of the screen. If you select the condition 'in' then the 'Expression' field can contain a list of comma-separated possibilities e.g. 1a, 1b, 2a, 2b, 2c. If you select the condition 'Range' then the "expression' field expects two values separated by a hyphen e.g. A-H or 12-15.5. Note that BOTH ends of the ranges are INCLUDED when a student's result is checked to see if it falls within the range.

If you elect to filter on a DATE column, then the options available in the 'Condition' column include 'This week' and 'Next week'. This enables you to find, for example, all of the students who have a birthday next week.

38.1.4 Tab 4 - Type

The Ministry of Education provide a list of types and each student must belong to one of these categories. In the example below the filter is being set to select those students who are either 'Regular students' or 'External students.
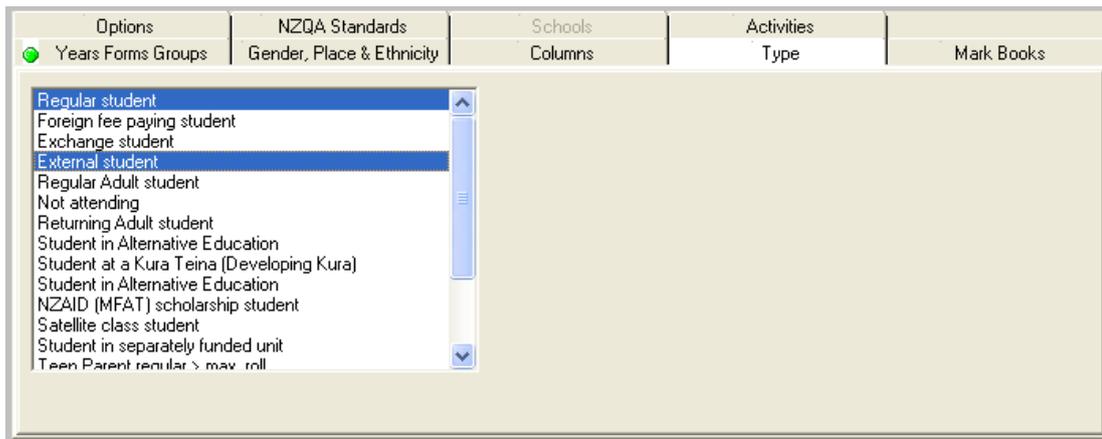
Figure 1234: Tab 4 – Type

38.1.5 Tab 5 – Options

You can filter for students who are members of one or more option classes using the tab shown below.
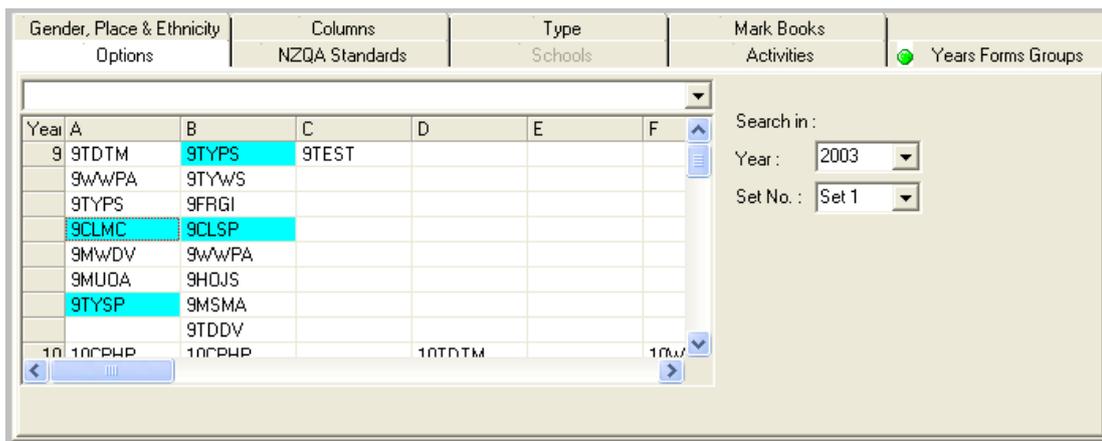
Figure 1235: Tab 5 – Options

You can select both the year and the option column set on the right hand side of the screen then multi-select the various options within that set. You cannot select from more than one set in a particular filter.

38.1.6 Tab 6 – NZQA standards

This tab allows you to select just those students taking a particular standard or standards, as shown below where the filter has been set to select those who have 'Achieved' standard number 90147 (version 1 Language E).
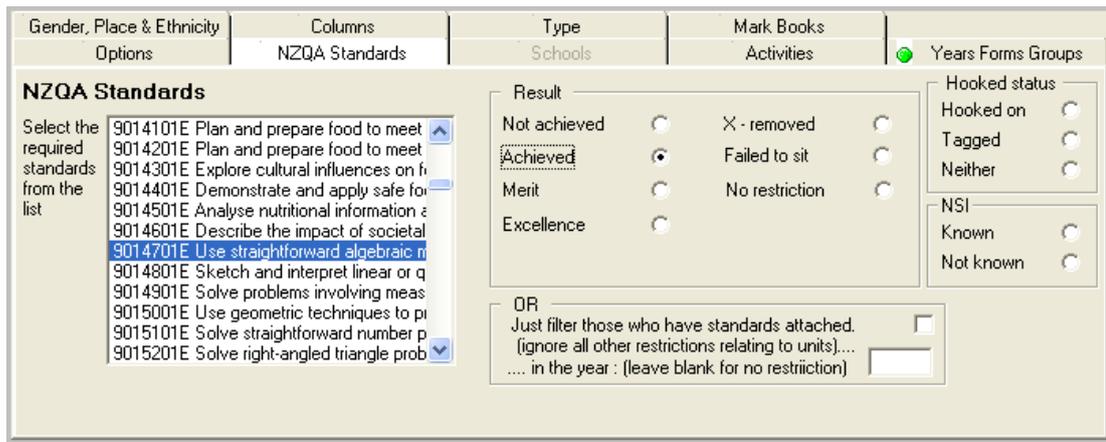
Figure 1236: Tab 6 – NZQA standards

Alternatively, you may simply click in the check box in the 'OR' frame to select just those students taking standards. If you wish to specify a particular year then type that year into the extra entry box devoted to that purpose.

38.1.7 Tab 7 – Activities

This tab allows you to select those students attached to particular activities, selecting from the list of current activities as displayed in the illustration below.

In the example the students who are in the choir are being sought.
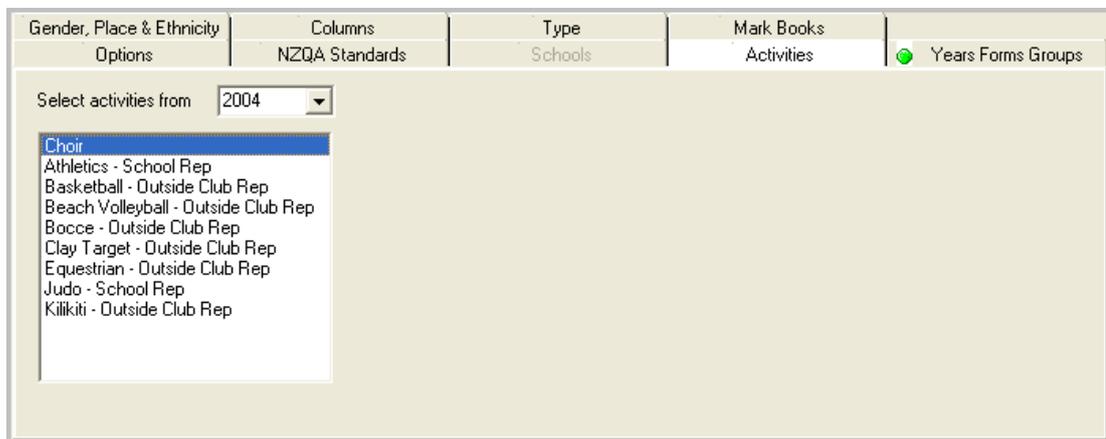
Figure 1237: Tab 7 – Activities

38.1.8 Tab 8 – Markbooks

This tab enables you to find those students who are members of a current markbook or markbooks. Multi-select the require books from the list shown.

Please note: The year 9 markbooks appear AFTER the year 13 markbooks, due to the strictly alphabetic nature of the sorting within the list.

In the example below the students who are in the '9CL 2004' markbooks are being sought.

Figure 1238: Tab 8 — Markbooks

There is one further tab, disabled in the illustrations above. This is the 'Schools' tab which becomes enabled if your installation of ClassRoom Manager or Student Manager is in the multi-school mode. This enables you to filter just those students who are for one or more of the schools represented in your installation.

Finally, in one or two places within the package (notably in grid mode in CMTeacher) you can repeatedly use the filter to refine your selection by optionally applying the filter to the 'currently selected' group of students. The alternative is, depending on where you are in the package, to apply the filter to either the entire school or to those in your dossier's filter.

39 CMTeacher Appendix 2 - The Word Processor insertion tool {a}

One of the buttons at the top of the word processor is titled {a}.

Figure 1239: The code-insertion button

This tool is used to insert a code into the word processor text. When the text is printed for a particular student the code is recognised, extracted, evaluated and the resulting information is used to replace the code in the final text.

The simplest example is the use of Ctrl-N to insert the code for the student's preferred name. The code for this is 'cm.col(3)' which is translated by the software to mean 'the contents of this student's third column'. Column 3 is the student's preferred name so, when printed, that is what will replace the code.

This insertion tool offers a very wide range of possible codes across thirteen different tabs. (Not all are available unless you have Student Manager as some, e.g. Pastoral, refer exclusively to data stored via Student Manager.)
When you come to a position in the text where you wish to insert a code click on the {a} button and the code insertion tool will appear, as shown below.

39.1 Columns
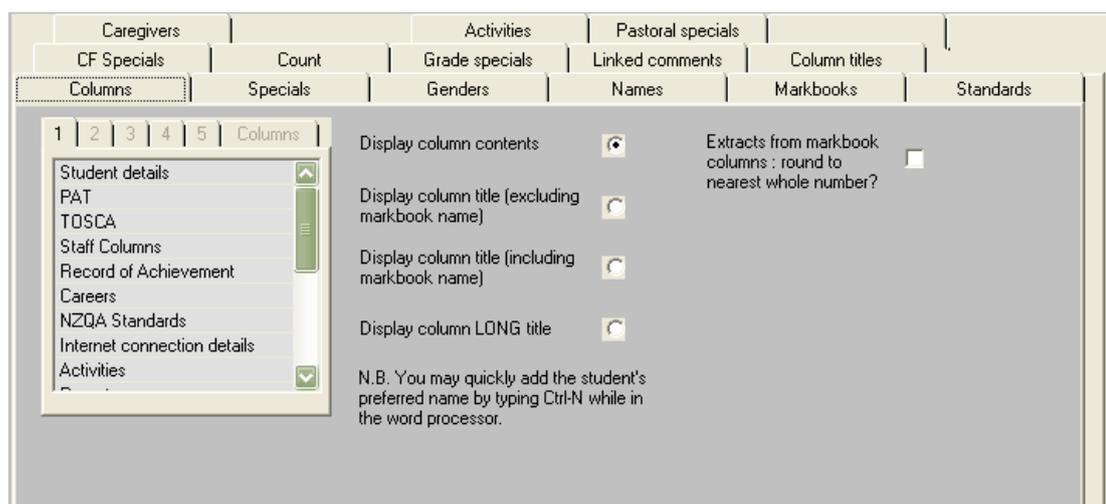
Figure 1240: Selection of data from columns

The simplest use of this tab is to insert the data held in a column for the current student. To do this, select the column from the column picker on the left of the screen.

Alternatively, if you wish to insert the column title (including or excluding the name of a markbook from which you might be selecting a column), or the column long title, then you should first select which of these you wish from the options in the centre of the screen BEFORE selecting the column concerned.

To select a column from a markbook, first select 'Electronic Markbooks' from the column picker. This will display the current markbooks. Select one of these and its named columns will be displayed. Select one of these and (slightly complex) code will be embedded in your text. A composite screen capture of these steps is shown in the illustration below.

Figure 1241: Selection of a markbook column

If you wish to select from a markbook from other than the current year then select 'Display all markbooks' from the top of the centre column above.

Alternatively you might wish to display data from a column in an as yet unnamed markbook. This is done when you are designing a generic report for an unspecified subject. The subject is not selected until you come to view or print the report. In this case you would select 'Generic Markbook' which appears after the last markbook name in the second column. After this you can select from the various possibilities shown in the right hand side of the illustration below.
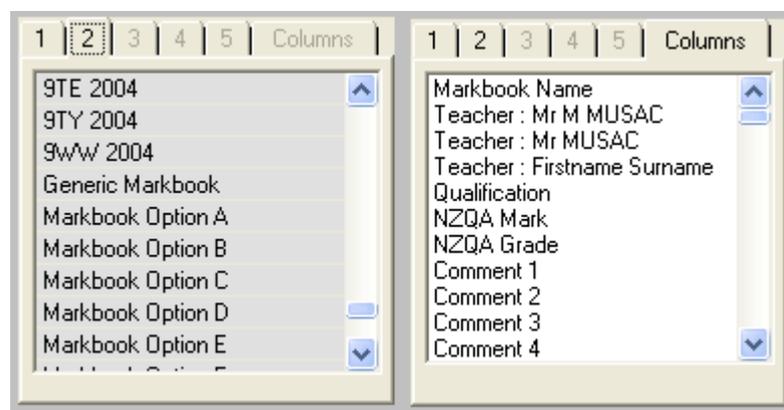
Figure 1242: Selection of a generic or option-specific markbook column

There is a third possibility to do with markbooks. You can design a report for the 'subject in the D option line' whatever that might be for a particular student. To do this select from the 'Option

specific' possibilities at the bottom of the left hand column in the illustration above. Then you may select from the same range of possibilities shown in the second part of the display. This includes the markbook name (i.e. the 'Report name' as specified in the markbook definition), the teacher's name (in a variety of formats), a report comment, or a column.

39.2 Specials
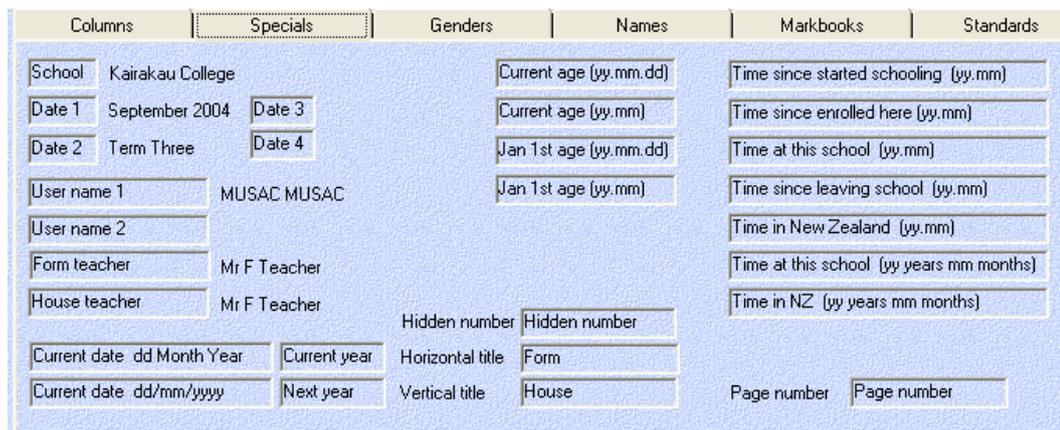
Figure 1243: Specials

Specials are displayed on the tab above. They include some information derived from data held in columns (e.g. the 'Time at this school' is derived from the current date and the student's 'Date first started here') and other information (e.g. Date 1, Date 2) which are specified in the configuration area of the package. 'Page number' inserts the page number of a multi-page document.

39.3 Genders

We last met genders when dealing with report comments. These are replaced by the gender-specific equivalent depending on whether the student concerned is male or female.

If you are a single sex school then, of course, you will not have to use these codes. If you wish to insert the code for 'her' then use the code for the male equivalent. 'her' is strange as it has two male equivalents. Consider 'It is his ball so I gave it to him' and 'It is her ball so I gave it to her'.
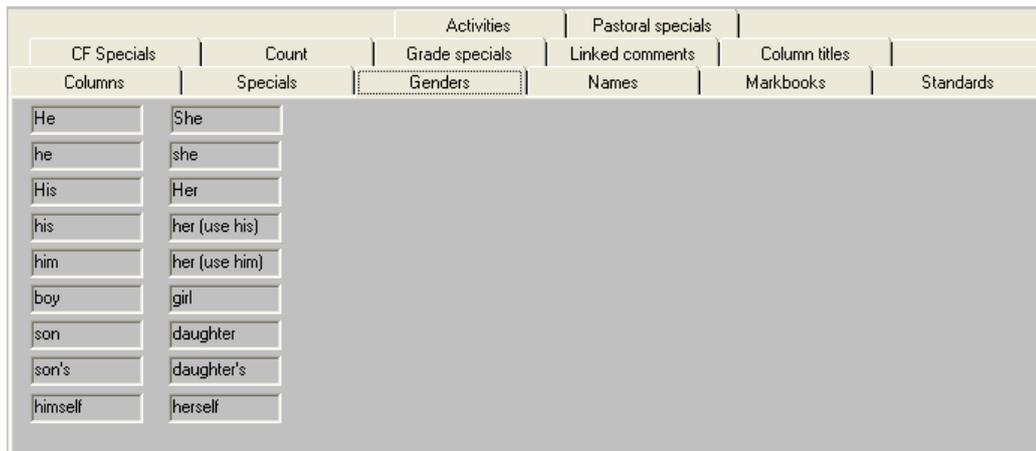
Figure 1244: Gender insertions

39.4 Names

This allows you to insert one of the four possibilities shown below.
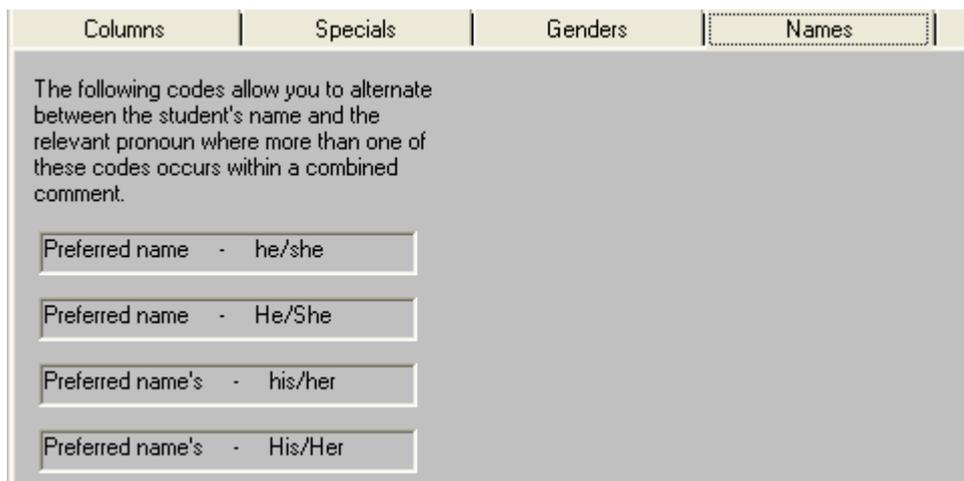
Figure 1245: Name insertions

The fast way to insert the first of these has been mentioned earlier. You do not have to click on the {a} button and select this tab. Just press Ctrl-N while in the word processor itself.

Please note: In a combined comment where the preferred name is repeated in several comments it will automatically be replaced by the relevant pronoun (he or she) on every second occurrence.

39.5 Markbook specials

These allow you to automatically insert one of the possibilities down the left hand side of the screen shown below for the markbook selected from the right hand side.
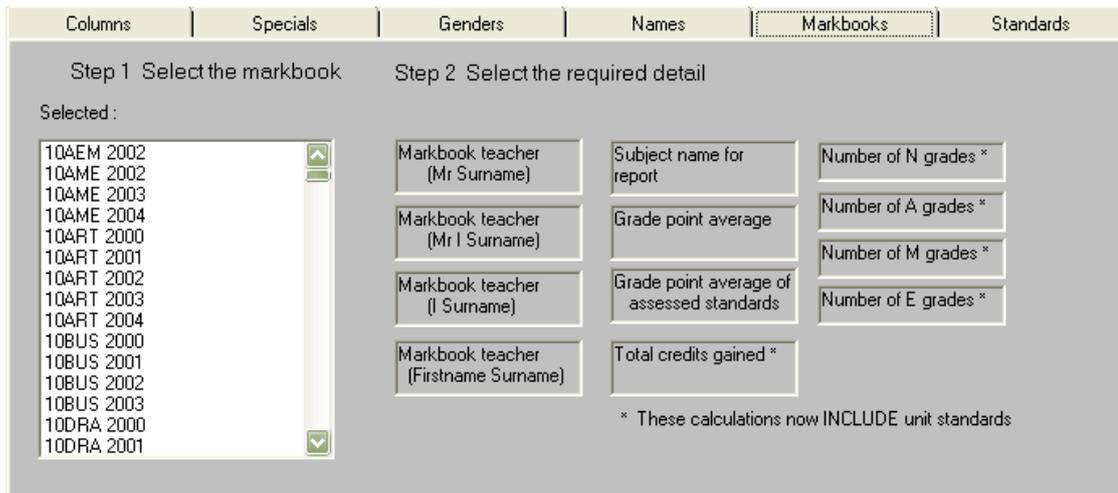
Figure 1246: Markbook insertions

We have already discussed a more general approach to this in the 'Column insertion' process earlier in the appendix. This routine, however, does offer the two extra possibilities ('Grade point average' and 'Total credits gained') at the bottom of the list of possibilities.

39.6 Standards

These apply to unit standards and achievement standards taken by the student and the tab has four sub tabs.

The first, shown below, allows you to insert a number relating to the label which you click. This could be, for example, the total number of Level 3 units attempted, or the total credits gained at level 2.
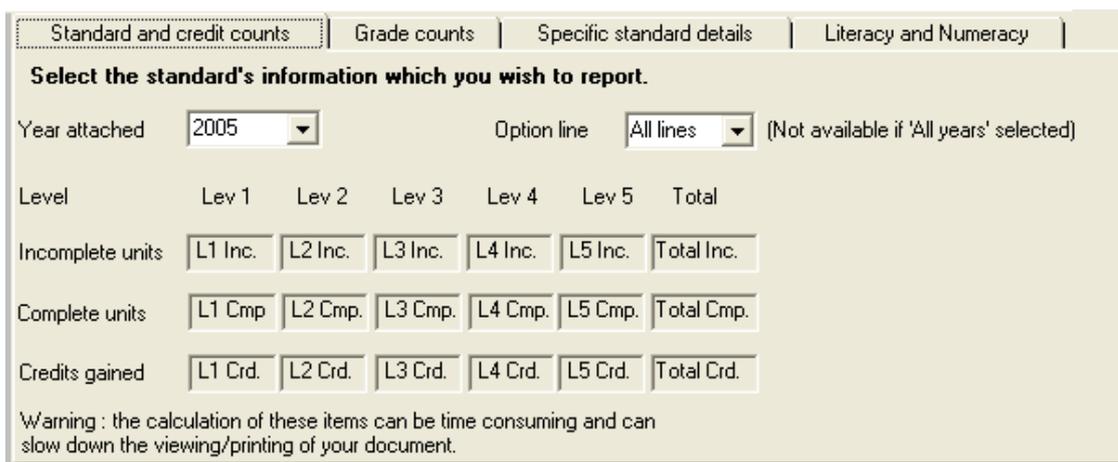
Figure 1247: Number from standards

The second tab, shown below, allows you to have inserted into your document the number of each grade which a student has attained, or any of the other possibilities shown below. You also have a choice of a 'Generic' markbook (the program will ask you to select the markbook at the time of loading/printing), an option specific markbook (the program will work out which

markbook is relevant to the student for the option line selected) or a specific markbook. You can also select the year, the assessment method and unit or achievement standards (or both).
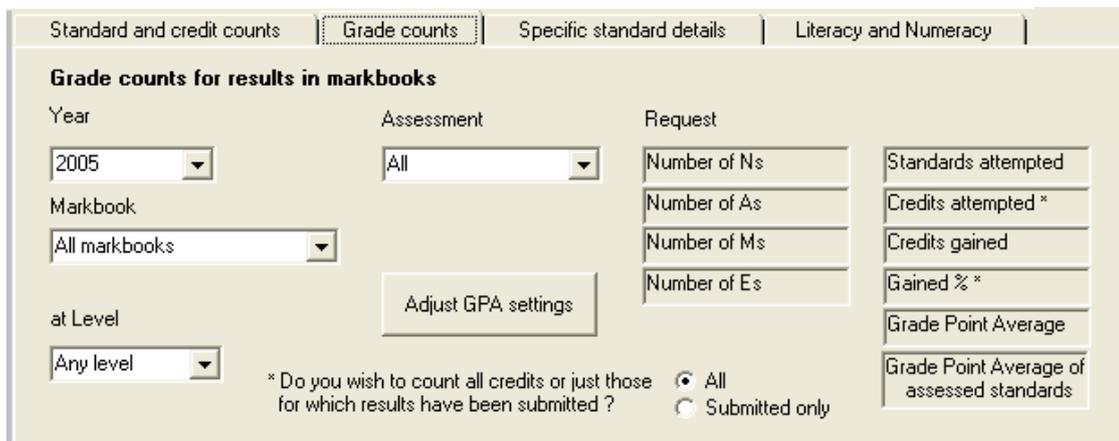
Figure 1248: Numbers or results etc

You will notice the button labelled 'Adjust GPA settings' in the middle of the screen. This accesses the following screen via which you can specify your preferred settings for use in the calculation of grade point averages.
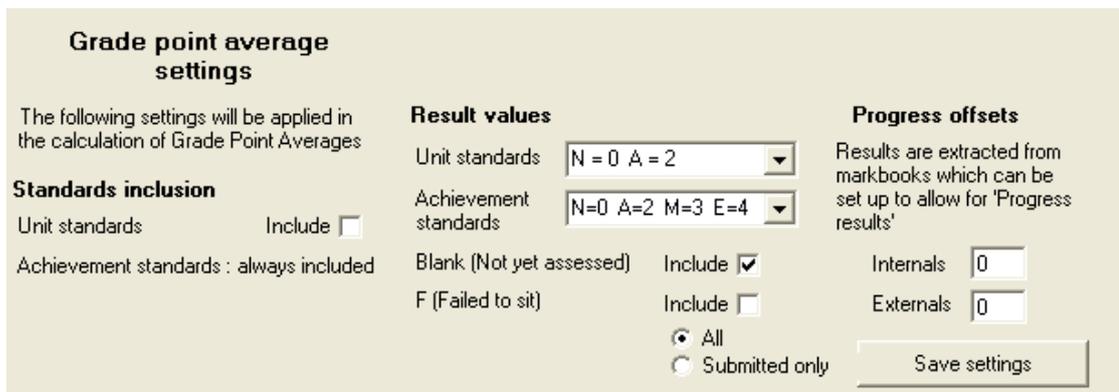
Figure 1249: Grade point average settings

The third 'standards' tab is now obsolete as far as its original intention was concerned. This was in earlier days when unit standards were subdivided in elements and these into performance criteria.

The possibilities do still have a place however if you wish to insert the code, short title, long title etc of a particular standard.
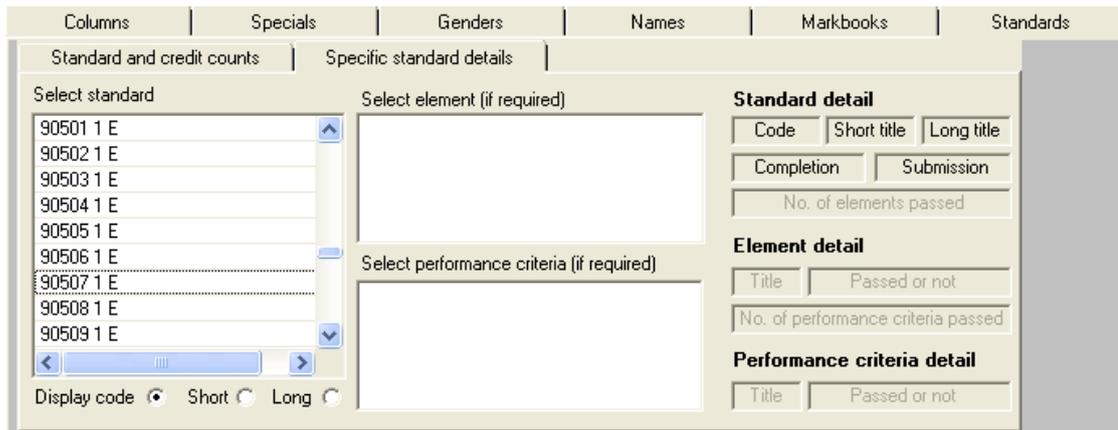
Figure 1250: Standard codes

The fourth tab allows you to report on the students degree of attainment as far as Level 1 and Level 2 Literacy and Numeracy are concerned. Some involve 'words' which can be imbedded into the middle of sentences. E.g. Johnny has met the requirements of Level 1 Numeracy – where the word 'has' has been returned from the calculation done in response to the bottom entry in the first column above.
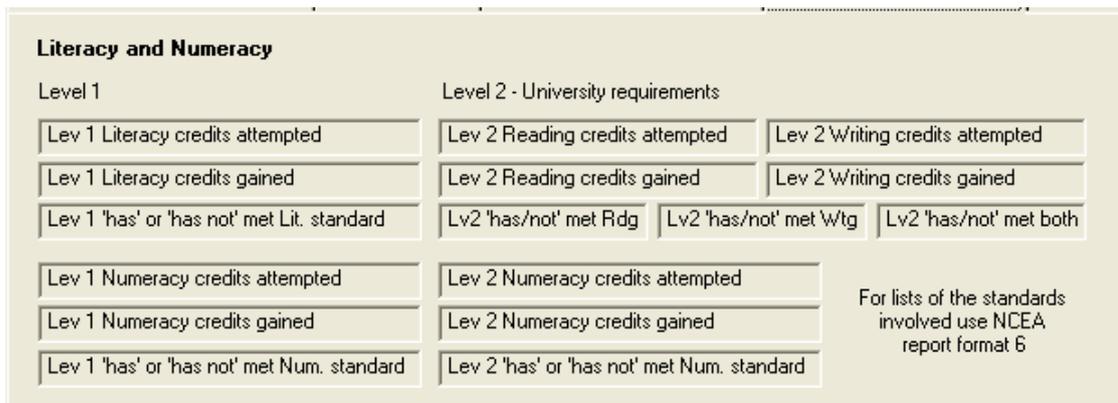
Figure 1251: Literacy and Numeracy options

39.7 Curriculum Framework specials

These are not student specific. They allow you to count the number of students who have reached one of the levels of attainment which you have configured for your school for the curriculum framework objectives.
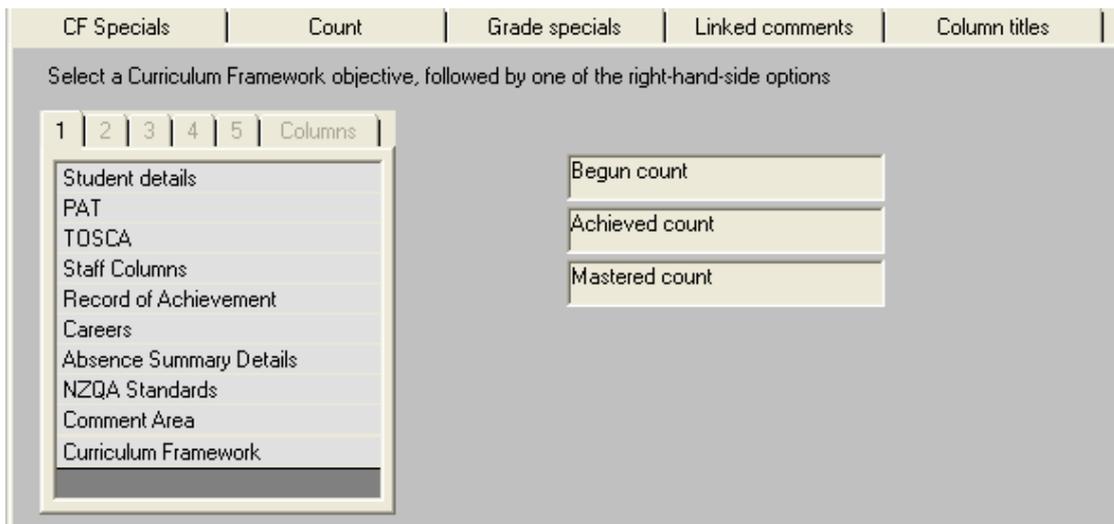
Figure 1252: Curriculum Framework specials

Select the objective (under 'Curriculum Framework' in the column picker, followed by one of the possibilities on the right hand side of the screen above.

39.8 Count specials

This area allows you to count the number of students who satisfy a particular criteria and to have the resulting number reported in your document.
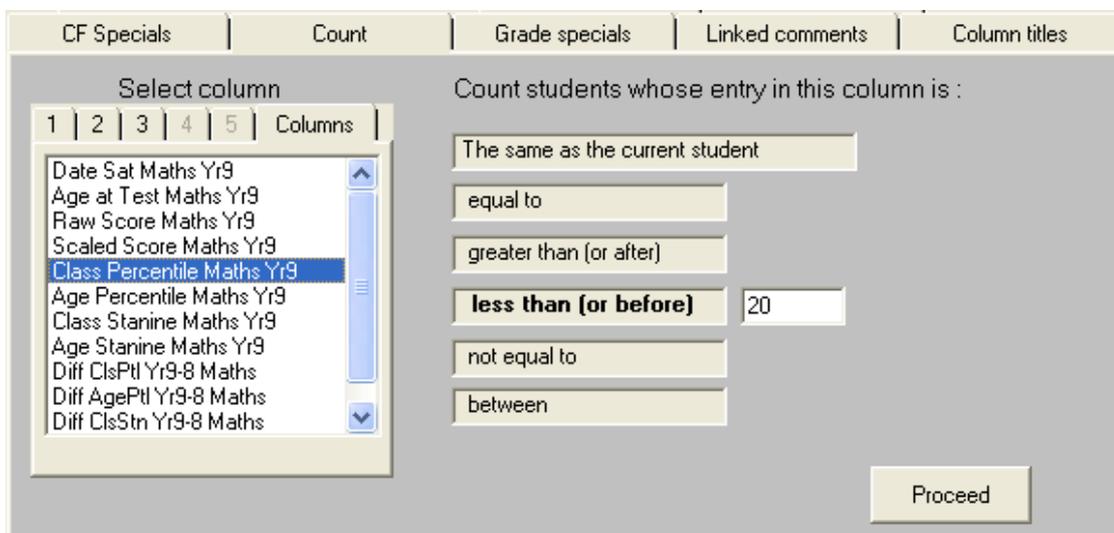
Figure 1253: Grade specials

In the example above, the document will report the number of students who have scored less than 20 in their PAT Maths Yr 9 Class Percentile.

39.9 Grade specials

This area is very similar to the previous one. First select the column in which you are interested, followed by the entry to be counted (which may be a range – see the note on the screen below), and finally click on the operation you wish to have performed :

- Count the number of students with the specified entry or in the specified range
- Calculate the percentage of students with results which meet the same criteria.
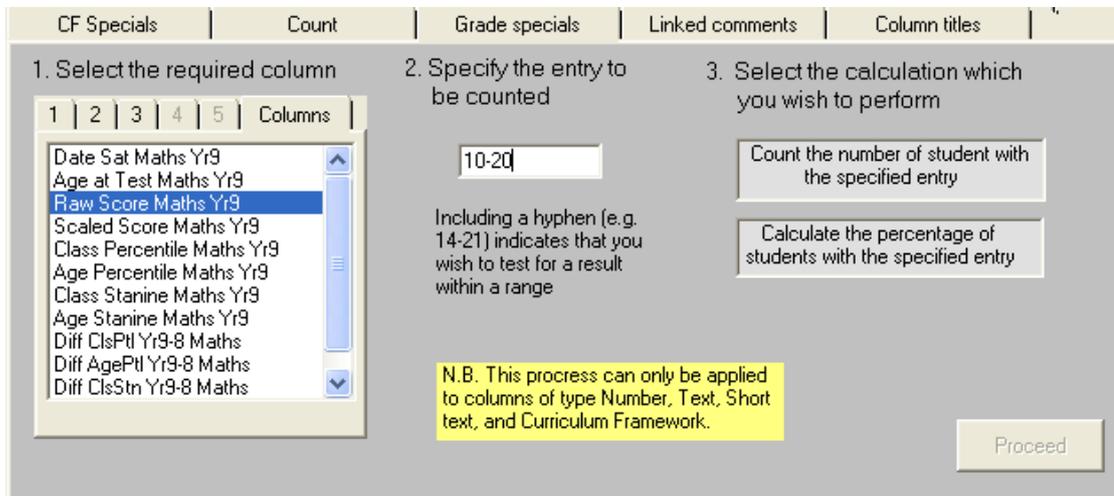
Figure 1254: Grade specials

39.10   Linked comments

This area allows you to insert a comment into the text where that comment depends on the result which the student has in a particular column.

You must set up the possibilities in the screen below by first selecting the column then specifying the range of possible entries in that column along with the text which you wish to appear in the document if the student has the matching result.
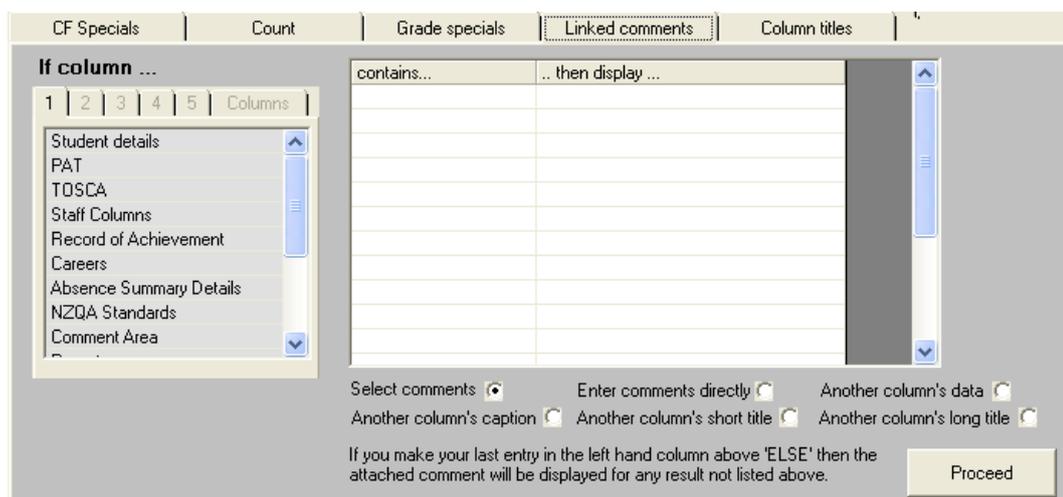
Figure 1255: Linked comments

39.11   Column titles

This area simply inserts into the document the basic title or the long title of the selected column. Surely it would be much easier to simply type the required text into the word processor, but

clearly at some time in the past someone requested this facility and we thought that it was such a good idea (at the time) that we included it.
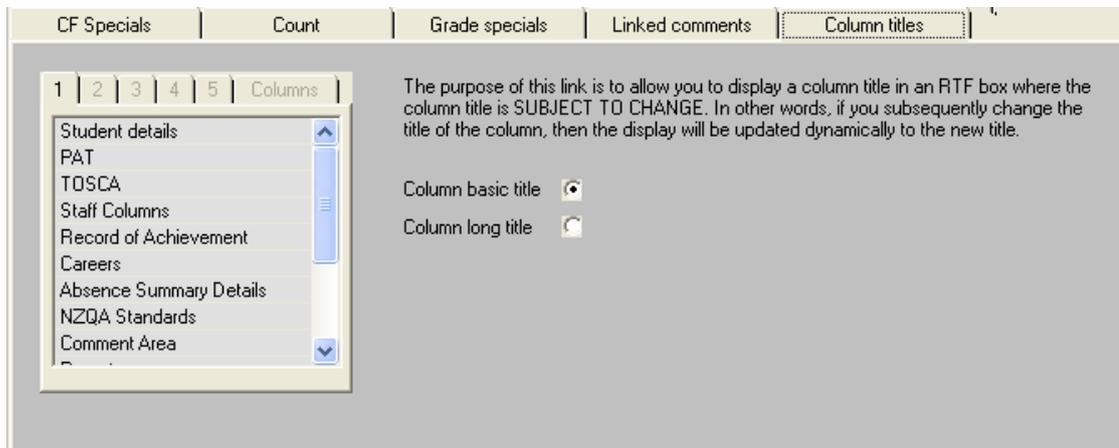
Figure 1256: Column titles

39.12   Activities

The section allows you to return a reasonably complex text extract related to the current students activities.

Select either the calendar year or the student's year as required, followed by the category required then tick on the option which you require.
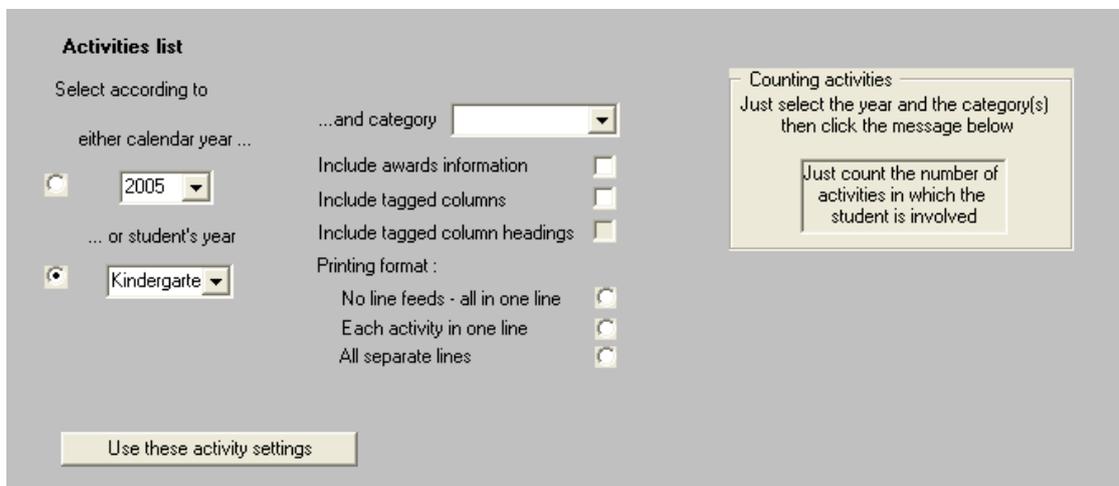
Figure 1257: Activities

This will generate a summary related to the student the format of which will depend on the setting you select from the three possibilities displayed above :
- No line feeds – all in one line
- Each separate activity on one line
- All activities and their component details (e.g. awards) on separate lines.

This is intended to form part of e.g. a student's leaver documentation.
A new possibility is to report just the total NUMBER of activities taken by the student.

39.13   Pastoral

The next tab has two possibilities. If you are using Student Manager to design a Pastoral document then there will be two tabs available. The first, shown below, allows you to design a document relating to the currently selected pastoral transaction. These are used in the 'Pastoral' area of Student Manager for designing a letter home relating to a particular offence – e.g. the 'Smoker's letter'.
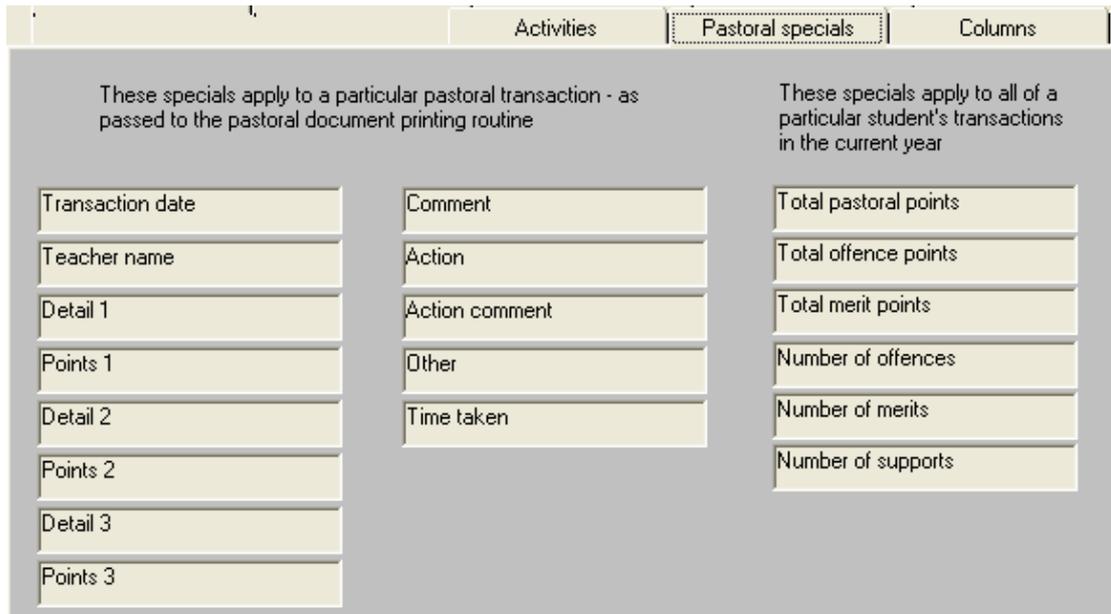
Figure 1258: Pastoral insertions

A pastoral letter can be printed from within the pastoral section of Student Manager and the letter will relate to the transaction currently being viewed there.

If, on the other hand, you are designing an ordinary document, then only the following tab will be available to you.
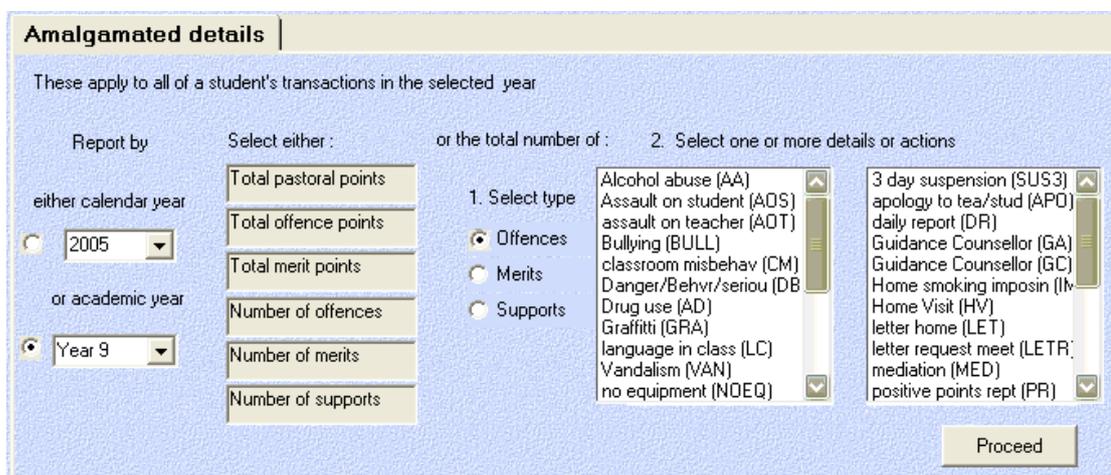
Figure 1259: Pastoral counts

Firstly, select the year (calendar or academic) for wish to extract information. This is done at the top of the screen, as shown above.

Secondly, you can either select one of the 'Total calculations' from the left side of the screen, or you can choose offences, merits or supports in the middle of the screen, followed by one or more from either the associated details list or actions list.

You can use this to report, for example, how many detentions a student has had in the nominated year, or how many times he has been caught smoking or using drugs. Selecting more than one from a list generates a combined total. You may only select from one of the two lists at a time.

Please note: If you are using Student Manager then this information will be extracted from the relevant part of that database.

39.14   Caregivers

In Student Manager, it is possible to extract information relating to a particular caregiver – or e.g. the first emergency caregiver, or the first with their 'Financial' flag set to 'Yes'. There is a considerable range of choices.

39.15   Attendance details

This tab, shown below, allows you to report on either a number or percentage relating to absences / attendances.
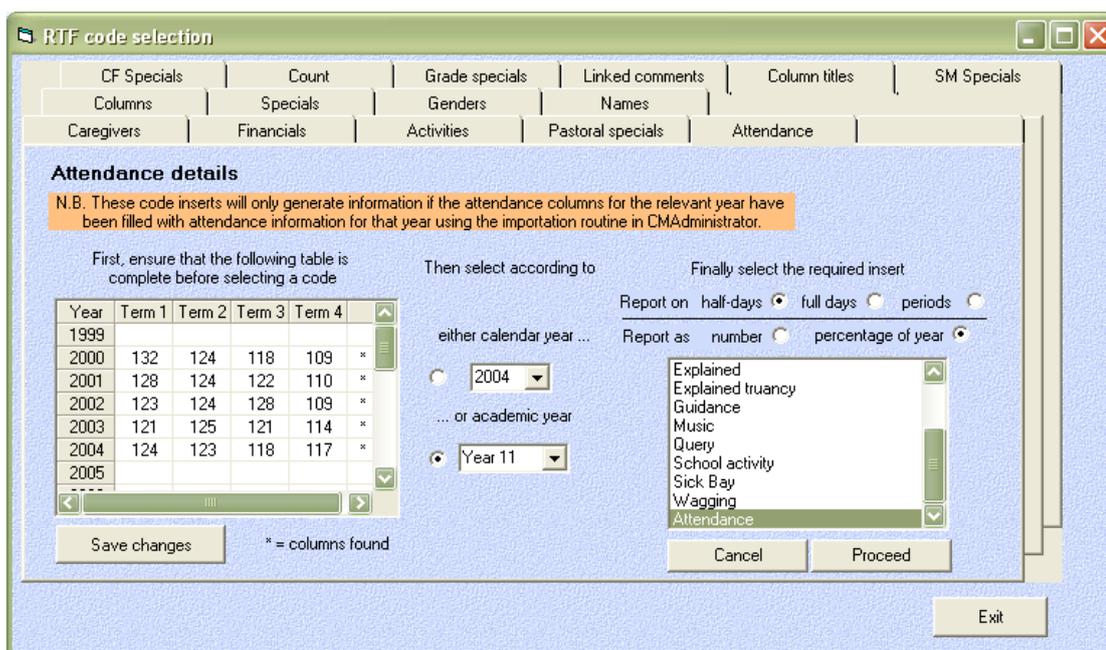
In the illustration above, the number of half-days per term for the last few years have been filled in on the left hand side of the screen.

Please note: These are fictitious entries.

Once this has been done, an asterisk in the right hand column of the table indicates that, indeed, the absences columns for that year have been installed into the database. As mentioned in the orange-backed message, you must have both installed the relevant columns AND imported the relevant summary data via CMAdministrator in order for this process to be able to return sensible information.

Assuming that you have done this then you have the following choices.

- Do you wish to retrieve data relating to a particular calendar year or to the current student's particular academic year. This is done by making the required selection from the two popup boxes in the middle of the screen.

- Do you wish to report half-days, full-days or periods. If you select 'Periods' then you will not have any choice in the next selection.

- Do you wish to report the number of absences (or attendances) or their percentage of the full year.

- Finally, what is the absence reason which you wish to report on. Note that at the bottom of the list you can report 'Attendance'. This will determine the total number of half-days or full-days absent, and subtract this from the total half-days (or full-days) determined from the left hand table.

Thus it is possible to report e.g. on a student's percentage attendance over a number of years.

Similarly, by 'filling a (suitable) column with' the percentage attendance, or numbers of wagged-half days and a second column with relevant academic results (e.g. total level 1 NCEA GPA) it is possible to generate a correlation regression analysis between the two.

40 CMTeacher Appendix 3 - The column selector

The MUSAC column selector pops up whenever you are required to select a column. This can be when you are :

- designing a document
- designing a graph
- applying a filter to a column
- selecting an insertion code in the word processor
- applying a formula to a column
- ... and other possibilities

The column selector can appear slightly differently in different circumstances. Its height depends on its location (as has been set for that location within the software).

It may or may not offer special features (detailed below) such as electronic markbook columns, generic option columns and the like. For more, see PAT Stanine What-If? Feature.

The selector appears as shown below with a series of five tabs across the top. You need only use these tabs when RETURNING to a previous selection, as will be explained shortly.
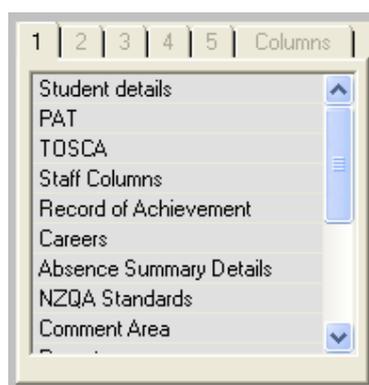
Figure 1260: Selection of the first category

This illustration shows the column selector with those entries which your package has in the first column category displayed. When you click on one of these (e.g. 'PAT') the display will change to the relevant second category entries, as shown below.

Figure 1261: Selection of the second category

These are the PAT tests for which you have installed columns. Selecting 'Mathematics', the year categories are displayed, as shown below. If there are no subsequent categories to display then the display will list the columns available.

Figure 1262: Selection of the third category

On selecting 'year 9' the program found that there were no Category 4 entries, so it displayed the columns installed under Year 9. The 'Columns' tab at the top of the selector indicates that you have reached columns and, by clicking on a particular column it is selected and this information is returned to the part of the program which requested your selection.
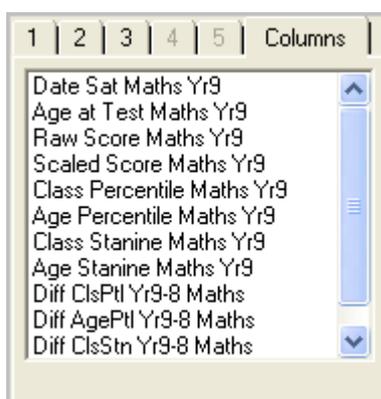
Figure 1263: Selection of column(s)

In some areas you will be required to multi-select columns. You do this by clicking on the various columns which you require.

Remember that, if you wish to return to a previously displayed category then you do this by clicking on the relevant tab at the top of the selector.

One area of use of the column selector which differs from the others is in the selection of a column or other data relating to a markbook. Markbook columns are not normal CM columns but, using the selector, they may be treated as if they were.

To select a markbook column, return to the category 1 display and move to the last entry on that display. This is 'Electronic Markbooks', as shown below.

Figure 1264: Selection of Electronic Markbooks

Click on 'Electronic Markbooks' and the list of available markbooks will be displayed, as shown below.
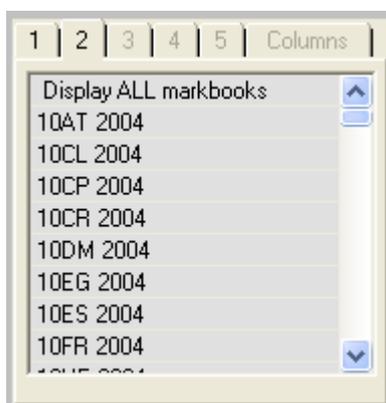
Figure 1265: Selecting a particular markbook

If you wish to select from a markbook in other than the current year then click on the very first option and all markbooks from all years will be displayed. Select the markbook from which you wish to select a column (I've selected '11MAT 2004') and its columns will be displayed, as shown below.

Any global columns with headings will be displayed. At the bottom of the display it is possible to select Teacher column 101 through to Teacher column 200. Since these columns may or may not be defined for a particular teacher all are displayed, on the understanding that you will select a column (or columns) which have been brought into use for a particular teacher – by the naming of the column(s).

Figure 1266: Selection of markbook column(s)

You may wish to select a column from a 'Generic Markbook'. This is done when you are designing a document (see CMTeacher section for full details) which is to be a report document for an as yet unspecified subject. When you elect to view the document you will be asked, at that point, to nominate the markbook from which data is to be extracted. Alternatively, you may wish to place on a report data extracted from whichever markbook a particular student has in his or her e.g. A option. To do this you would select Markbook Option A from the display below.

'Generic markbook' and 'Option specific markbooks' are found at the bottom of the list of available markbooks, as shown below.

Figure 1267: Selection of Generic or option related markbooks

Once you have selected either the 'Generic markbook' or an option specific markbook then the possible data extractions from that are shown, in an extended format (a composite screen capture for this user guide) as shown below.
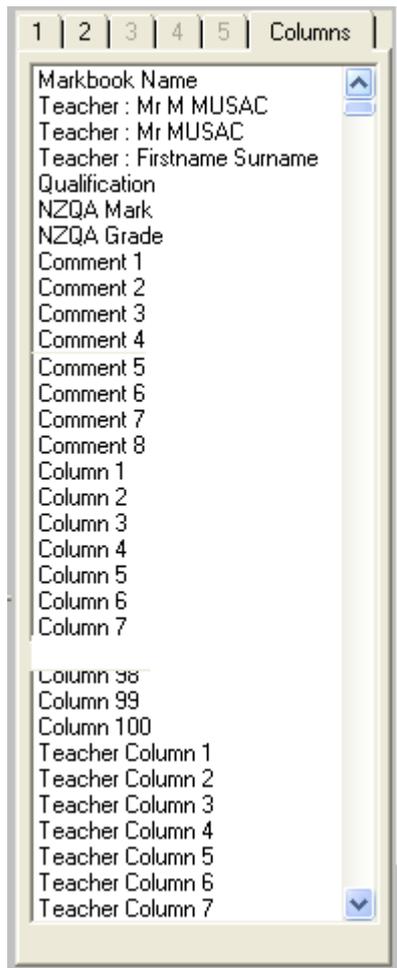
Figure 1268: Selection of generic or option related markbook column(s)

At the top of the list is the markbook's name, along with three formats of the teacher's name and a few 'other details' stored in markbooks. These are followed by the eight columns and these are followed in turn by first the one hundred 'Global' columns (i.e. those which apply to all teachers in the markbook) then the 100 teacher-specific columns.

41   CMTeacher Appendix 4 – Merging Dossiers

Support for Merging ceased at the end of 2009. The underlying coding in merging is not compatible with operating systems beyond Windows XP and with the availability of hosting and increased use of terminal servers within schools, coding updates into this functionality has been discontinued.

42   CMTeacher Appendix 5 –Documents

Many reports can be complex, and can be designed with the assistance of, or by, MUSAC agents specifically for your school. However, depending on your school type, MUSAC has provided under All Documents > National Standards or NCEA Details, some template reports. There are a range of National Standards documents for the entry and reporting of OTJs and related comments. For NCEA a number of documents are available for summarising and providing an overview of a student's NCEA profile.

NB: Data entry assessment recording for National Standards requirements have been available for primary schools since January 2011.

Figure 1269: National Standards: Reading progress

Figure 1270: Year 4 Curriculum Key Competencies progress

Figure 1271: Year 8 Interim progress report

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43   MUSAC Ltd Contact Details

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