

AccelerusTM

Assessment, Reporting and Analysis Software



Accelerus... an Overview

Accelerus is a total assessment and reporting solution for schools looking to gain the benefits which computerisation can bring.

Accelerus separates out the functions of teachers and of administrators, drawing a distinction between assessment and reporting. The Accelerus approach combines ease-of-use with a powerful database system.

The Components of Accelerus

Accelerus has separate components, some of which are used by the Accelerus administrators and others by teachers.



Accelerus Central

Accelerus Central is the nerve-centre of the Accelerus system. It is used by Accelerus Administrators to set up

Accelerus in accordance with the school's needs. It stores student results in a central, historical repository and allows schools to present these in reports to parents in formats determined by each school.



Assessment Writer

The Assessment Writer is Accelerus's teacher component, containing all the functions required by teachers. Not

only does it allow them to record their assessments of their students in their class markbooks, comment databases may be set up and drawn upon when teachers are composing comment assessments.

The Assessment Writer can be installed on teachers' laptops, home computers or computers on campus. Computers need not be networked.

Optionally, the Assessment Writer allows the results and comments entered by teachers to be transferred into the Central database, either via the internet or the school's network.



Accelerus Update and Update Server

Keeping teachers' markbooks and the Central database synchronised is the role of Accelerus's Update components. A two-way update is performed: Accelerus Central is updated with teachers' assessments, and teachers receive any changes from the Central database which affect their classes.

Update Server is used in conjunction with the Assessment Writer, so that teachers may update from home or anywhere where they have internet access, or via the school's network.

Accelerus Update allows updating of teachers' markbooks across the school's network only.



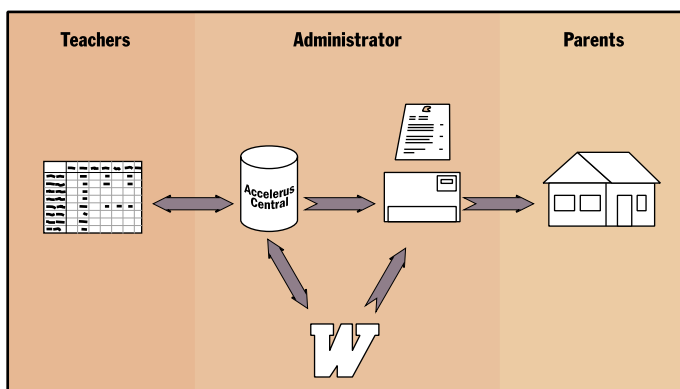
Assessment Item Editor

The Assessment Item Editor, is designed to be used by teachers, but only for very particular set-up functions. It allows the Accelerus Administrator to delegate some Central set-up tasks to other staff, such as Subject Coordinators, which they do "off-line", not having direct access to the Central database.



Results Analyser

The Results Analyser is a powerful utility, through which all results in the Central database can be accessed, reported upon and analysed. It is the means through which Coordinators, Home Group teachers, or any other teacher, may have access to Central's assessment data, while maintaining the integrity of the data.



The Accelerus workflow assists teachers in assessing students and provides the foundation for quality reporting to parents.

The Accelerus Approach

Ease-of-use is imperative for any system which is to be used by large numbers of people, with differing skill levels. A powerful database system is necessary to be able to store and draw upon student results, and present these in school-defined formats. Accelerus meets these competing demands, using a modular approach.

Teachers use Accelerus to assess students by recording results, comments and performance details. An “off-line” approach is used for teachers, whereby they are able to work on their class markbooks at school or home.

The Accelerus Administrator sets up and maintains the central Accelerus database, including coordinating the design and printing of reports.

Preserving the integrity of data is paramount. The Accelerus approach ensures this, allowing the central repository of data to be directly accessed only by authorised administrators. It is through a two-way update process that teachers’ class markbooks and the central database are synchronised.

The Ease-of-Use of Accelerus

The Accelerus approach means that teachers need only learn a simple program which is based on a traditional written markbook. There is no need to learn about navigating a database or setting a report layout.

Accelerus uses standard Windows conventions to ensure that even the most complex tasks of the Accelerus Administrator are as intuitive and easy as possible.

The Flexibility of Accelerus

Accelerus is easily configured by each school to match its needs. From the marking schemes which are used, through specialised student groupings, to the use of Microsoft Word for reporting, the school has full control over the system.

Accelerus is easily adapted to meet the needs of any school, and is the assessment and reporting package of choice in Australia’s most progressive schools—both secondary and primary, in the Government, Catholic and Independent sectors. Special State-specific needs are able to be met by Accelerus, whether it is standardisation of results, outcomes-based reporting, or recording progress on the Curriculum Standards Framework.



Accelerus... *for Teachers*

Accelerus Assessment Writer is used by teachers to record students' performance, results and comments on a class-by-class basis.

Ease of use is the primary focus—a familiar grid layout shows a row for each student and a column for each item of assessment. Results may be typed into the grid where they are validated according to school-defined parameters.

Teachers may type their own comment assessments or individual and personalised comments may be composed by drawing upon comment segments from comment databases, which may be freely edited.

Accelerus Assessment Writer

Accelerus Assessment Writer is used by teachers to work on their class markbooks. A familiar “rows-and-columns” approach, based on a teacher’s traditional mark book, makes the entry of assessment data an intuitive task.

- ◆ All assessments for a single class are entered in one markbook file.
- ◆ Multiple class markbooks may be open at one time.
- ◆ In addition to editing in a grid, student details may also be entered and viewed one student at a time.

Personal Preferences

Teachers may configure their class markbooks for their own personal needs.

- ◆ Adjust row height and column widths to see more or less detail.
- ◆ Hide, resize and rearrange columns.
- ◆ Restrict the displayed assessment items to those for the chosen report cycle, or any combination of items.
- ◆ Sort students by the contents of any column.
- ◆ Change the details which are displayed for a student.

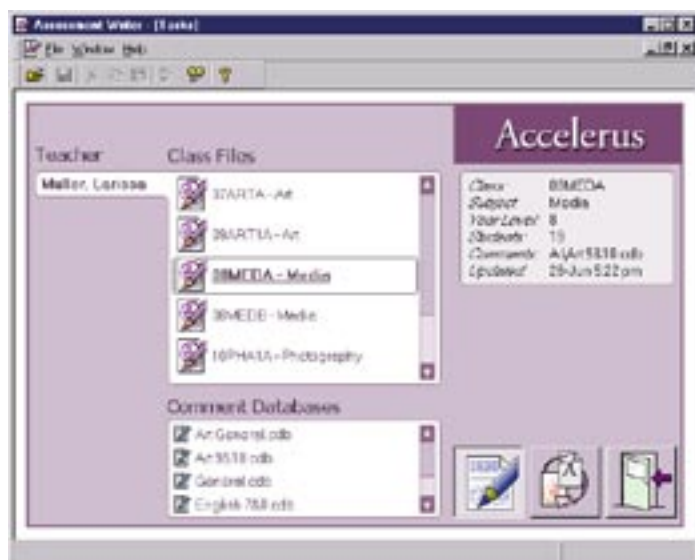
Assessment Items and Marking Schemes

At the heart of Accelerus is the concept of assessment items and marking schemes. Each area of student performance to be assessed is defined as an assessment item. Each assessment item has an associated marking scheme which determines the type of the item (eg. comment, numeric, etc) or the acceptable values for that assessment (eg. A, B, C, ...).

Accelerus allows schools to set up their own customised marking schemes, and to define both an entry value and a reported value, where appropriate. For example, a Satisfactory/Not Satisfactory marking scheme could be set up, allowing teachers to simply enter an ‘S’, which may be printed as ‘S’ or in full as ‘Satisfactory’ in student reports.

Assessment items are either defined centrally and apply to all classes of a subject, or class teachers may define their own. Only centrally-defined assessment items may be included in students’ reports.

- ◆ As teachers enter their students’ assessments, or select from available options, the status bar shows the full description of the current assessment item, the valid responses and other useful information.
- ◆ Assessments may be the result of a calculation or formula. Calculations, which may be defined centrally or by individual teachers, allow assessments to be based automatically on one or more other assessments.
- ◆ Assessment items may be locked to prevent changes being made. Locks may be applied by individual teachers or centrally, typically after reports have been printed.



From the Assessment Writer's Tasks window, teachers see an overview of their classes.

Comments

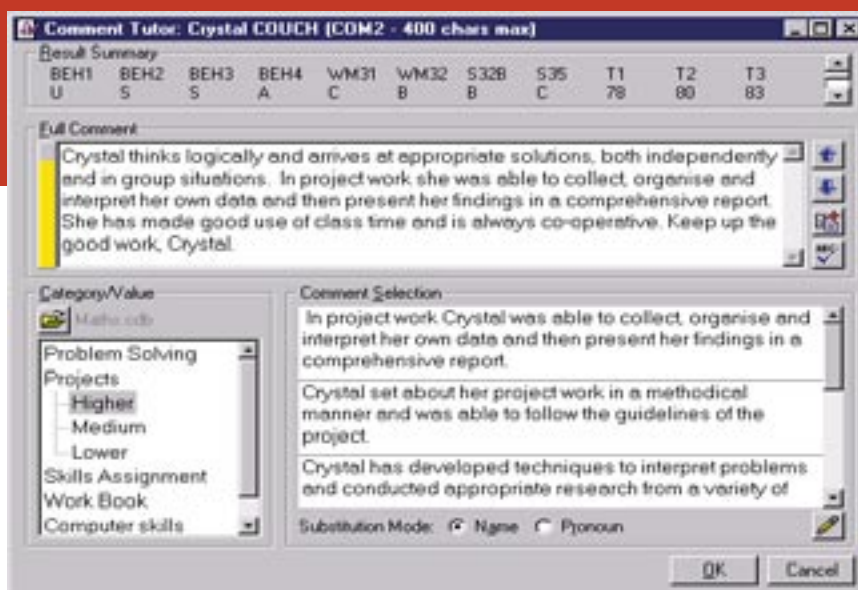
Each subject may have any number of comment assessments. These are free-text comments with an optional maximum defined length. Teachers may type their comment assessments completely from scratch and/or may draw upon comment segments stored in comment databases.

- ◆ Comment databases are simple files created using the Assessment Writer.
- ◆ Comment databases may be individually created and maintained, or centrally-defined and distributed. For example, a faculty may set up comment databases that are distributed to all teachers in the faculty.
- ◆ Comment databases group comment segments by category and value for ease of selection.
- ◆ In the Assessment Writer, the Comment Tutor window makes it simple to draw upon the comment databases to compose individual and meaningful comments on students' progress and performance.
- ◆ The Comment Tutor supports both preferred name and pronoun substitution.
- ◆ Comment segments may be freely inserted into the current comment and then modified as required.
- ◆ Teachers may create or modify their comment databases to their own writing style and language.

Ease-of-Use

A number of additional features make Accelerus Assessment Writer the right environment for entering student assessments.

- ◆ Assessments may be selected from drop-down lists or typed.
- ◆ Spelling and punctuation checking helps keep typing errors to a minimum.

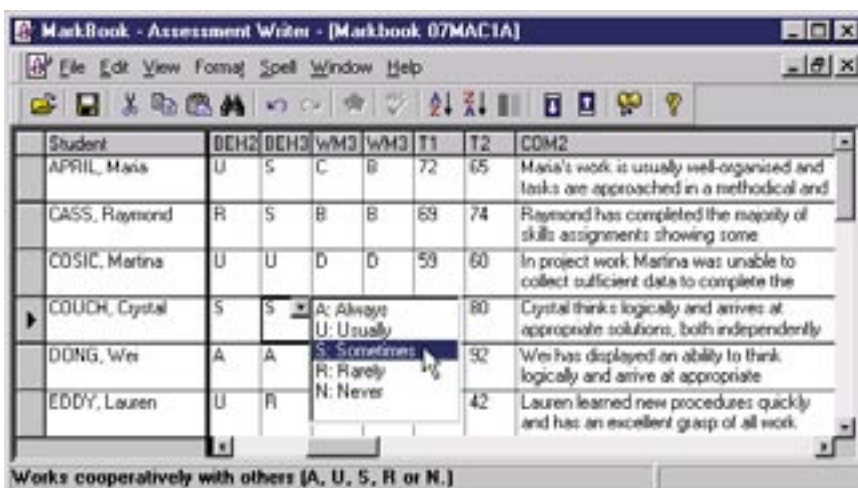


The Comment Tutor allows teachers to easily create detailed, informative and relevant comments for students. Comments are sorted by category and value, acting as a valuable reminder of issues to be remarked upon. Comment segments may be freely combined, edited and spell-checked.

Security

Security is important when dealing with student assessments—not just in ensuring the information is safe from unauthorised modification, but also that the data is protected in the case of inadvertent computer failure.

- ◆ Automatic validation of assessments ensures greater accuracy of entry.
- ◆ Fill-down and fill-up simplify repetitive entry.
- ◆ Search and replace, undo and redo, and other editing tools are available.
- ◆ Teachers may print out students' results, and other information from their markbook files.
- ◆ Backups of each markbook file are made automatically.
- ◆ Each markbook file is encrypted to prevent unauthorised access and modification.
- ◆ A password may be assigned to each markbook file to provide additional security.



Entering student assessments is easy, with many time-saving and useful features available.

Accelerus... *for Administrators*

The Accelerus Administrator uses a central database to maintain teacher, student, subject and enrolment details. Such details may be imported with ease from any school administration or timetabling package with export capabilities.

Individual class markbook files are created from this information and distributed to teachers. Through a two-way update procedure, teachers are kept up-to-date with class enrolments and withdrawals and the central database is updated with student results. These results form the basis of the student reports.

Central Database Set-up

The Accelerus Central database stores all information regarding students, teachers, subjects, classes, assessment items and results. The database is designed to store data for multiple years, thereby allowing tracking of student results, viewing and printing of past results and reports, and analysis of results. Accelerus administrators customise and manage the database using Accelerus Central.

- ◆ Accelerus allows each school to define its own marking schemes, its student groupings, such as Home and Pastoral Care groups, and the reporting cycles that apply each year.
- ◆ Schools that have computerised administration and/or timetabling systems may extract much of their data and import it into Accelerus. Imported details can intelligently update existing data, or completely replace it. Data import files are standard comma separated value (CSV) files which, if required, may be manipulated in Microsoft Excel.
- ◆ Accelerus Central also allows full manual insertion and maintenance of all record types.
- ◆ Items of assessment are set up for each unit of study or subject. Each subject may be as individual or similar to other subjects as required. A limit is not imposed on how many assessment items each may have, or their type.

Data Maintenance

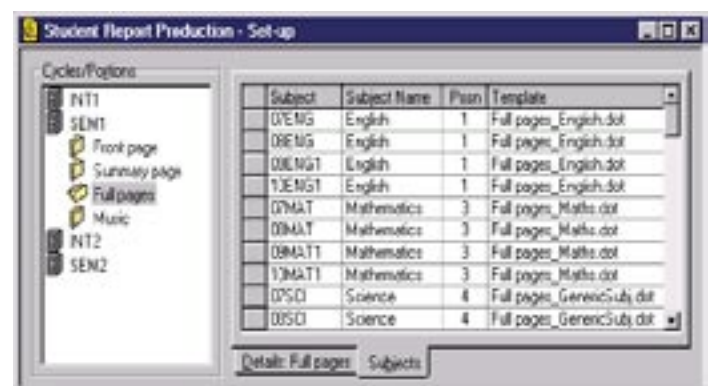
Accelerus Central includes a wide range of tools to aid Accelerus administrators.

- ◆ Students may be enrolled in, withdrawn from, and moved between classes.
- ◆ Organiser tools make repetitive set-up tasks easier.
- ◆ Results may be locked to prevent changes, such as when reports for a particular cycle have been completed.
- ◆ Accelerus administrators may centrally correct errors found in teachers' assessments and comments, as well as import result or absence data into the central database.

Two-Way Update

Once central set-up tasks have been completed, markbook files are created for each teacher. Teachers work on their markbooks without being connected to the central database. Periodically, teachers run an easy two-way update process.

- ◆ All assessments teachers have entered for their classes are updated on the central database.
- ◆ Teachers' markbooks are updated with any changed data from the central database, eg. changed enrolments, any new assessment items, etc.



In Accelerus Central's two Student Report Production screens—Set-up and Print—the central database meets Microsoft Word and the creation and generation of student reports takes place.

Accelerus... *for Parents*

Accelerus allows schools to produce more consistent, comprehensive and creative reports.

By using the world's most popular word processor, Microsoft Word, Accelerus is capable of producing high quality reports. All the features of Word (such as graphics, tables, text boxes) may be utilised in the creation of student report templates.

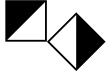
Any number of report cycles, with differing reporting needs, may be run during the year. So, schools can keep parents up-to-date with single-page interim reports or multi-page reports with a separate page per subject or combinations of formats.

The Final Product

Parents want timely, accurate and clear reports on their child's progress. Schools want to provide this information in an efficient and well-presented manner. Accelerus makes this possible.

Accelerus draws a distinction between assessment and reporting. Teachers use Accelerus Assessment Writer to assess students; the Accelerus Administrator uses Accelerus Central to coordinate the design and printing of reports of the assessments entered by teachers.

- ◆ Reporting needs as simple as a ticked box, or as complex as a full-year weighted average of multiple assessment tasks, can be accommodated.
- ◆ Report templates may be shared between subjects for guaranteed consistency, or each subject may have completely separate templates.
- ◆ Individual subject reports may be printed on separate pages, or multiple subjects may be combined on a page. Combinations are also easily created.
- ◆ Cover sheets and/or summary pages may be printed for each student, optionally listing all subjects for which the student has reports.
- ◆ Many tools are available to keep track of and control the output of reports, including checking for any missing results in reports and easily reprinting changed or missed reports.
- ◆ Student reports may be output to a printer, a Word document or Acrobat pdf file, or combinations thereof. For example, a copy may be printed for parents and a file copy stored for archival purposes, simultaneously.
- ◆ A full range of report selection options are provided. Reports for the whole school or for particular year levels, student groupings, subjects or teachers, down to a single subject report for an individual student, may be printed.
- ◆ Accelerus automatically collates the reports for each student, with subjects printing alphabetically or in a school-defined order.

		Student: Craig Murphy	
		Home Group: 8C	
		Subject: Science, Semester One 1999	
COURSE DESCRIPTION: In Chemistry, students study a process (source - water, its purification, solutions, solubility and the water cycle). Acids, bases, neutralisation and indicators are other chemistry topics. The topic Electricity includes a study of circuit components, electron flow, series and parallel circuits, conductors and insulators. In Astronomy students study the mass and size of planets, the solar system, stars and galaxies. A study of the Senses includes smell, touch, taste, hearing, sight and how the sense organs work.			
WORK HABITS:			
Cooperative and accepts advice	Usually	Respects the rights of others	Consistently
Works well independently	Usually	Behaves well in class	Consistently
Completes set tasks and homework	Consistently	Contributes to class discussions	Rarely
Shows initiative	Usually	Works well with others	Consistently
ASSESSMENT TASKS:			
Workbook: maintain an ordered collection of completed work, including notes, worksheets, research and homework.		<input type="checkbox"/>	
Practical Investigations: complete so fully in the lab and write about them in the standard practical report format.		<input type="checkbox"/>	
Assignments and Research: demonstrate research skills through completing a range of research activities and present the results appropriately.		<input type="checkbox"/>	
Tests covering the topics studied this semester.		<input type="checkbox"/>	
FINAL EXAMINATION:			
<input type="checkbox"/>			
TEACHER'S COMMENTS:			
Craig goes about his tasks in an organised and methodical manner. He has completed the majority of the required homework tasks, doing so competently and accurately. Craig has displayed an ability to think logically, and can work independently or with others if so required. He is cooperative in class, both with his teacher and fellow students, although he is somewhat reluctant to contribute to class discussions, needing to be encouraged to take a more active role. Improvement is possible in his practical work, also. Overall, though, an excellent semester's work, Craig.			
Teacher: Ms E Zachariah			

Reports are created from Microsoft Word templates utilising all the features of Word.

Using Microsoft Word

Rather than being a simple "mail-merge", Accelerus uses Microsoft's COM technology (Component Object Model) to drive Word for report production.

- ◆ The use of Microsoft Word templates for reporting allows the school to have complete control over the final report output. Special reporting needs do not require programming skills. Anyone familiar with Microsoft Word is able to set up and change reports. From correcting typographical errors to complete report restructuring, the power stays in the hands of the school.
- ◆ Accelerus creates standard Word templates with the definition of all relevant Accelerus fields embedded in each. The Accelerus fields are then inserted into the template, with any other text or graphics.
- ◆ All relevant data fields—student, teacher, subject details, etc—are available as Accelerus fields. Also, for each assessment item for each subject, Accelerus fields exist for the assessment item description, the entered and reported value for each result.

Accelerus... *Technical*

Semaphore Consulting is an independent software development company established in 1988. Semaphore specialises in software solutions for the education and public sector.

Since Accelerus's inception in 1994, Semaphore has provided high level, quality support, having rightfully gained a reputation for the responsive, friendly and non-intimidatory assistance it provides to its Accelerus schools.

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SYSTEM REQUIREMENTS

Individual Teachers: Pentium or better processor, 16MB RAM, floppy drive, hard disk with at least 10MB available, Microsoft Windows 95/98/ME/NT4/2000/XP
Accelerus Administrators: Pentium II processor or better, 128MB RAM, CD Rom drive, hard disk with at least 100MB available, Microsoft Windows 95/NT4.0/2000/XP Pro
Microsoft Word for Windows versions 8, 9 or 10 (Word 97, 2000 or XP)

Files

- ◆ There is one central database which is used by the Accelerus Administrator. Either a Jet 4 database engine, supplied with Accelerus, or a user-supplied SQL Server 7.0 or 2000 database engine, may be used.
- ◆ Teachers use small (20–50KB) markbook files for entry of student results, making them readily transportable between school and home. All of a teacher's classes can fit on a single floppy disk.
- ◆ Comment database files are small binary files, distributed with ease to teachers.
- ◆ The teacher components of Accelerus use a compact binary file format, not a database.

Archiving

- ◆ Student assessments remain available from year to year.
- ◆ Students' reports from previous years are easily accessed and re-printed.
- ◆ Accelerus's Results Analyser component may be used to extract and analyse data from multiple years.

Networking Accelerus

- ◆ Accelerus may be run as a networked system and/or on stand-alone computers.
- ◆ Accelerus's teacher utilities do not need direct access to the Central database, and may be installed on computers at home or at school.
- ◆ When Accelerus is networked, the Central database is stored on a network drive. Any of Accelerus's components which access the data-base (Accelerus Central, Accelerus Update/Update Server and the Results Analyser) may be installed on other computers which are part of the network, with all accessing the same database.

Additional Services

- ◆ Accelerus comes with comprehensive, printed User Manuals, including step-by-step guides, as well as full on-line help.
- ◆ Included in the purchase price is an initial period of maintenance and support. Ongoing annual maintenance is available thereafter.
- ◆ Maintenance includes phone support for the cost of a local call, Australia-wide, as well as e-mail and fax support.
- ◆ Semaphore aims for one significant upgrade release each year, supplied to schools with up-to-date maintenance. Such releases incorporate new features requested by Accelerus schools and keep abreast of technological changes.
- ◆ *Accelerus News* is published regularly to keep Accelerus schools up-to-date with the latest developments, tips and tricks, and other useful information.
- ◆ Semaphore's web-site includes all software patches, newsletter back-issues, topical articles and other relevant information.
- ◆ Accelerus User Group meetings, to which all Accelerus schools are invited, are conducted Australia-wide.
- ◆ Customised on-site training is available, as well as small-group training seminars being conducted regularly.