

ABC from Assessment 21 Background to ABC

Assess By Computer (ABC) is a suite of tools for all aspects of setting, taking, marking, invigilating and administering exams. Under its unique Human-Computer Collaborative philosophy, the computer does the routine work, leaving the human in control of the important judgements. Its focus is on support for quick and consistent marking of free text answers, providing an effective alternative to multiple choice questions. Originally developed for high-stakes university final examinations, the system is increasingly used for all types of diagnostic, formative, and summative assessment and feedback. Thousands of students have taken hundreds of assessments over the past seven years.

Compared to manually marking papers, the ABC software is quicker, more efficient and more consistent but still leaves the final judgments to humans. It allows students to remain anonymous to the marker, and takes away the difficulties of reading illegible handwriting, the physical problems of handling bulk paper, and the possibility of human error in calculating and transcribing marks.

Why ABC for UWS

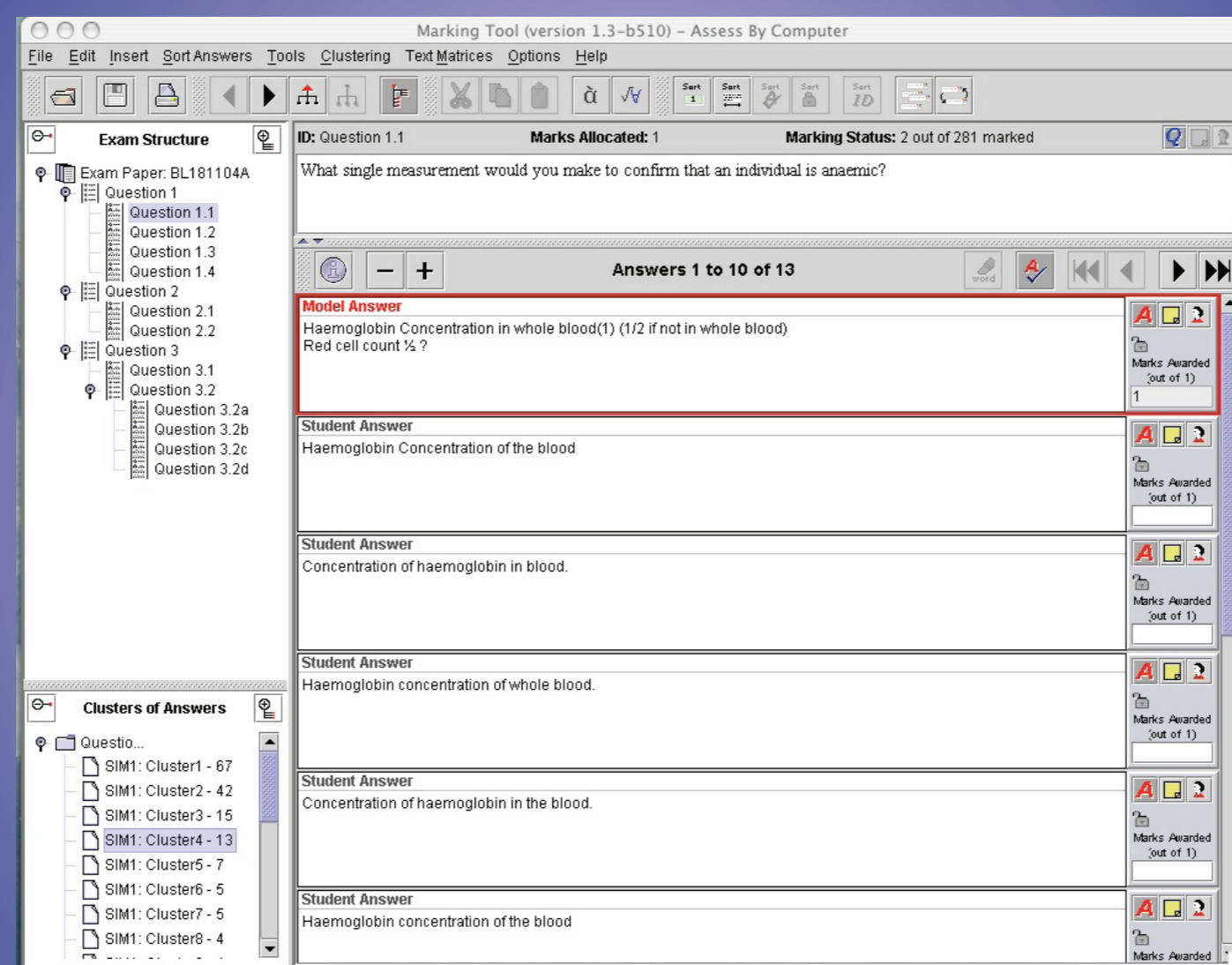
The introduction of ABC allows UWS to make e-assessment part of the examination process and fully benefit from the significant time and cost savings, while maintaining pedagogic standards.

- A 'ready-made' system that easily adapts to UWS requirements
- Easy to install and run on any system. Works on almost any computer or laptop and in Windows, Apple or Linux
- Minimal staff training required - typically two hours each for the basics of setting and marking

- Handles a range of simple and structured question types from essay to multiple choice, including diagram drawing
- Used for both formative and summative assessments
- Reduces time spent on routine tasks by highly paid academics
- Encourages quality feedback that actively promotes learning, aids motivation and increases student retention
- Students are assessed in a more natural setting with the ability to review and modify, yet maintain a tidy script that is easily marked
- Delivered online for distance learning, in-work assessments and multiple exam sites
- During assessment backups are taken every 3 minutes
- A natural extension of distance and e-learning for IT literate students
- Robust security systems provide efficient detection of plagiarism and cheating
- Provides a fast, accurate picture of students' knowledge and skills
- An assessment method that is in line with modern teaching methods
- Assessment21 offers a set of easy to use yet sophisticated tools that handle the whole assessment process from exam and question setting to student feedback and results analysis:

Marking

Marking lies at the heart of ABC. All answers to a question are displayed on screen simultaneously; this alone makes marking around three times faster than traditional pen and paper methods, and it can be as much as eight times faster - depending on the assessment type and marking process used. Text answers can be grouped by keyword or by similarity, ensuring consistent marking.



The whole process of managing multiple assessment authors, member groups and markers can be dramatically streamlined with ABC, eliminating the time-consuming, expensive paper trail and bringing significant cost savings. ABC

- Delivers feedback and results, aiding time critical decision making and reinforcing learning
- Allows marking to become quicker, more accurate and consistent
- Supports single, double blind and sampled marking
- Split marking for large assessment numbers or specialised questions
- Online, real time analysis of marking progress
- Provides faster feedback, which means gaps in knowledge can be quickly identified -actively helping students learn more quickly
- Eliminates the lengthy, expensive paperwork associated with multiple site examinations
- Reduces the time spent on routine marking, allowing more time to be spent on teaching
- Human Computer Collaboration (HCC) improves the accuracy and objectivity of marking
- HCC keeps the tutor in the loop and fully in control of the final outcome
- Accommodates multiple marking approaches
- Allows marking off line on any computer - no paper to carry or handle
- Allows users to review a marking scheme and, if necessary, change marks for questions already marked.
- Functions for checking for consistency, plagiarism or spotting common misunderstandings.

Setting

As well as multiple choice, ABC handles complex, high level question types, including diagrammatic and formulaic; making it applicable to assessment in a wide range of subjects and disciplines far beyond the Basic Skills e-assessment has traditionally been relevant to.

ABC helps successfully deliver e-assessment, making cost savings while meeting the quality standards set by regulatory requirements.

- Can deal with complex, multiple format questions and high stakes summative assessments
- Simplifies and streamlines the set up of assessments, without radical changes to existing procedures

- Resources needed to set and print question papers are reduced
- Links with student registration systems
- Uploads marks into student administration systems
- An off-line authoring tool, requiring no specialist technical or programming skills, that can be used anywhere on any computer
- Can be used for ongoing coursework (formative) as well as summative assessments, with immediate automated marking and open book exams

Running

ABC works over the internet, and can be used on almost any computer, solving the problem of students in remote locations, workplace assessments and multiple assessment sites.

- The opportunity to reflect and review before submitting answers can improve results
- Browser assessment tool with a 'cheat proof' monitor that runs in virtually any browser
- Clear screen design allows students to concentrate on questions and their answers rather than mode of delivery
- Assessment takes place in a familiar electronic environment, key strokes not pen strokes
- Students say they feel they are judged on content and knowledge, not writing ability
- Online delivery makes assessment accessible to all
- Candidates' work is backed up constantly with no risk of loss, and all data is securely protected.

Invigilating

ABC allows assessments to be managed like conventional exams, so new systems can be phased in seamlessly.

ABC handles multiple simultaneous locations and student groups, local or remote, automating time consuming routine admin tasks and virtually eliminating the logistical problems of handling paper.

Its unique monitoring tool alerts invigilators when a candidate moves away from the exam page, a more practical and resilient method of restricting plagiarism than lock-down.

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