

Testing Times

WELCOME TO THE 6TH AND FINAL TESTING TIMES



Marking Time

For many of us, in the thick of exams, assessment and marking is at the forefront of our minds and as I also reflect on the three years of the project, there is no doubt in my mind that computers have the potential to revolutionise assessment practice and processes. The potential is vast, the field is still young and needs sustenance – in the form of inspiration and creativity, as well as resources and true commitment. As with the introduction of most technologies, at times the path can be rocky, strewn with boulders - often organisational and cultural in shape. There are deep-rooted barriers, resting in tradition and ignorance and at times an unwillingness to acknowledge weaknesses of the past and fears of the future. Yet there is the scope to effect change on a dramatic level, the future development of CAA must take account of pedagogy, to an extent that will require a rethinking of formative and summative assessment methods at a strategic level. It must also seek to achieve the organisational and administrative efficiency gains of which it is capable. The technologies already exist to meet many of these aspirations, though their rate of change acts both as a helping hand and a hindrance.

CONTENTS

Marking Time	1
Pebbles in the Pond	2
SCROLLA	3
6th International CAA Conference	3
LTSN Review	4
Plagiarism	6
Blueprint for CAA	7
Oscar's farewell	8

The inspiration and creativity required to take CAA forward is coming to the fore. The interest and activity in CAA over the past few years has seen the funding of projects such as the Engineering Assessment Network, TRIADS, JISC managed learning environment and CAA project and the Scottish Centre for On-line Learning and Assessment. There are many more projects and initiatives, some of which are addressing issues such as interoperability, standards and integration with virtual learning. Others are researching and developing CAA from within a specific discipline, while CAA at an individual level has been recognised through the award of a National Teaching Fellowship.

The CAA Centre has been delighted, and at times overwhelmed, by the response to our activities. The survey conducted in 1999 elicited a solid response that has helped to build a community of practitioners. This has been consolidated by steadily growing participation in four international CAA conferences. The Blueprint for Computer-assisted Assessment seems to have met the needs of individuals, departments and whole institutions. During the life of the project we have held over 40 institutional workshops and published over 60 articles. Our web-site receives over 2,500 actual visitors a month and we have collaborated with numerous other projects and LTSNs, helped foster further bids for CAA funding, acted as a knowledge broker and tried, at all

times, to respond to the needs of the sector.

Limited additional funding is allowing us to produce a series of 'Bluepapers' – reports which address specific issues in CAA, and to hold three regional workshops aimed at introducing heads of department to CAA. (Further details will be published on our web-site). However, the Centre is alas no longer in a position to offer support and advice on an individual basis. Our web-site will remain available and is currently undergoing final updating and modifications to reflect the status of the project.

It may be argued by some that there is no longer a need for generic CAA research, development, support and guidance. The high levels of demand which we have, and continue to experience, would appear to contradict this view. It is fortunate however, that in addition to other funded projects, the Generic Centre and LTSN's have identified assessment as one of their key themes. While CAA does not seem to have specifically made its way onto more than a few LTSNs agendas, their potential at a discipline and generic level to support and co-ordinate developments is unparalleled.

I thank you for your support and participation in this project. It has been immensely satisfying to witness the evolution of a community of practitioners. Collectively we have established a voice and a presence in the sector - let us use it to encourage those at a national strategic level to re-recognise the importance of the role which they, and we, can play in researching and developing this exciting field.

DR JOANNA BULL, PROJECT MANAGER
& HEAD OF TEACHING AND LEARNING RESEARCH - UNIVERSITY OF LUTON

Volume 1

Number 6

January

2002

Testing Times



Pebbles in the pond

A REPORT ON THE EXTERNAL EVALUATION OF THE CAA CENTRE

I think from your response and responses to other questions what I'm picking up is that from the CAA projects, we've had that sort of pebble in the pond effect, with very big ripples coming out both at personal levels and around the way that institutions might work - those ripples are still spreading."

The above quote comes from the Facilitator of a Focus Group, which was held as part of the external evaluation of the CAA centre, its work and impact. The scope of this external evaluation includes identification of project stakeholders and articulation of key evaluation issues. The focus of the evaluation is fourfold:

- an analysis of the impact of the project on the sector
- a review of how well the consortium has worked
- an indication of whether or not the project has achieved its objectives
- any additional outcomes that arise.

To address these questions a multi-faceted evaluation is being carried out, following the philosophy of utilization-focused evaluation outlined by Patton (1997). This consists of the following components:

- An end of project focus group with the project's Management and Steering Committees
- Selected semi-structured interviews with representatives from the four project institutions (Glasgow, Luton, Loughborough, and Oxford Brookes) and two other institutions
- An analysis of the project Web site and associated materials
- A meta-evaluation and validation of the evaluation activities and outputs of the project internal evaluation processes

The purpose of this approach to data collection is partly to focus in on particular aspects of the evaluation through different data collection approaches, but also to triangulate between the data. In addition it is felt that with this approach it will be possible to gather responses from a greater number of participants.

The focus group centred around the following themes; impact on staff and students, outcomes and resources, institutional and strategic issues, dissemination and collaboration, research questions, efficiency gains, personal benefits, changing practice, and barriers and key issues. Overall the group was very positive about the centre and its work and felt that it had had a real impact both institutionally and nationally. The Blueprint document in particular was highlighted as a major resource and outcome for the project. Networking and its value in projects of this kind, both in terms of support and access to expertise, appeared across many of the themes. As has been reported for other learning technologies, consideration of CAA issues acted as a catalyst for discussing more generic learning and teaching issues. It was also reported that the project was timely within individual institutions and that the CAA project helped to drive forward other agendas and institutional initiatives, as the following quote illustrates.

[Institutional acceptance for me has been a big issue being involved in this project as a member I can really drive things forward at [Institution's name] from a central level and we've got a couple of very large projects out of this and a large scale implementation of a central web -; it really did coalesce a series of initiatives which were happening around the same time and switched a lot of interest on to CAA but it enabled us to make a decision which would have to be taken about how to support computer assisted assessment. And we made a decision as a result of being involved in this project to have a virtual learning environment which I think has borne fruit.]

Similarly, the same participant later stated the following.

[...CAA came at the right time from the point of view of what to do about standardising around the modular programme and the resource based learning materials that had been expensively generated in support of these programmes at [Institution's name]. And so one of the strategic issues was well what could computers do, what can they contribute to the more effective use of these materials? Certainly the CAA project has been a means to coalesce interest in computers around the area of assessment and at the same time,.... gave the university the chance to give some answers, present some answers to that question. So that was a very big strategic issue in [Institution's name] at the time. A lot of money

Testing Times



had been invested in resource based learning.]

The project also afforded the opportunity to consider underlying theoretical questions about the nature and role of CAA and its use. It provided a snapshot of where institutions were at a given moment in time both in terms of CAA and other learning technology developments, which could then be used both as a historical record and a benchmark against which to contrast future developments. More generally it raised issues about the relationship between teaching, learning and assessment and existing practices.

In terms of perceived benefits the group felt that the opportunity to work across a consortium of different institutions was valuable. Individuals also cited their own personal gains by being involved in the project. They felt that during the lifespan of the project there has been a shift in the perception and role of CAA and that there was evidence that staff were beginning to think not just about CAA, but about assessment more generally and the nature of their own professional practice. As might be expected barriers included, a lack of staff time, technical difficulties - standardisation and interoperability in particular, innovation overload and a preconceived and narrow notion of what CAA is and what it can do.

Overall, from the Steering group and team member perspective, it is clear that the project has been successful in a number of ways; through the professionalism of the centre and associated staff, through the outputs and materials produced, with the development of a national network of expertise and at institutional level through alignment of the CAA initiative with relevant institutional strategies.

The next phase of the evaluation will consist of more in-depth interviews within institutions to expand on the emergent themes discussed here. The final report on the evaluation overall will be submitted later this year.

Dr. Grainne Conole, CAA External Evaluator,
Director - Institute for Learning and Research Technology
University of Bristol

<http://www.ilrt.bris.ac.uk/>



The Scottish Centre for Research into On-Line Learning and Assessment (SCROLLA) has been established following a grant of £ 560k from the Scottish Higher Education Funding Council. SCROLLA is a collaborative project between the University of Edinburgh, Heriot-Watt University and the University of Glasgow. Three initial research themes have been identified: ICT policy, networked learning and computer aided assessment. Colleagues at Glasgow University are dealing with aspects of networked learning and have already run a successful symposium in November 2001 (for details see the website at www.scrolla.ac.uk). Academics at Edinburgh University are investigating ICT policy across all levels of education and will organise a symposium in May 2002. The assessment remit lies with Heriot-Watt University and a symposium on CAA will be held on February 6th on the Riccarton campus. This symposium is by invitation only but if you want to know more about the event, especially if you are working in Scotland, please contact:

j.s.paterson@hw.ac.uk



6th International Conference

6th International Computer Assisted Assessment (CAA) Conference

This excellent event, hosted by Loughborough University, is *the* conference for those interested or involved in CAA. This year the conference focus is on the use of information technology in the assessment process and promises to appeal to a range of stakeholders including those involved in CAA implementation, pedagogy, colleagues who are technically minded and those involved at a strategic level.

The call for papers and conference details can be found at:

<http://caa2002.lboro.ac.uk/caaconference>

Testing Times



LTSN ASSESSMENT SERIES

The LTSN's *Assessment Series* published in December 2001 is a collection of 12 guides/briefings providing an overview of important issues, good practice and innovation in the field of assessment.

1 A Guide for Senior Managers by Mantz Yorke

This opening aims to stimulate reflection on the range of issues facing stakeholders at Head of Dept. level and above. Yorke distinguishes between the roles and responsibilities of 'leaders', 'managers' and 'administrators' within institutional approaches to assessment systems whilst linking these to QAA guidelines.

Rather than prescribing solutions, the content raises questions, that promote debate around the strategic issues faced as mass higher education struggles to balance absolute and relative philosophies within modular schemes.

2 A Guide for Heads of Department by Alistair Mutch & George Brown

No2 in the series offers practical suggestions on how to develop (or reflect upon) a departmental assessment strategy that can effectively translate national/institutional policy in a workable fashion.

The guide is sensitive to variation in organisational context and briefly outlines 5 approaches to strategy development. Appendix A contains a very useful themed series of issues to facilitate debate of underlying principles before moving to a series of grouped questions that foster correlation between theoretical objectives and procedural reality.

3 A Guide for Lecturers by George Brown

Brown provides a systematic approach to 'aligning' discrete elements of the assessment process from an individual's perspective that is rich in practical advice, hints and suggestions. The guide is constructed to allow self-review of practice whilst the potted descriptions of over 20 types of assessment methods offer colleagues looking to extend their range of assessment, many good ideas.

Brown's section on alignment and examples of 'Methods', 'Sources' and 'Instruments' also provides a very useful reference when looking to design an assessment schema. The guide closes with a 'compulsory examination for all assessors' where open books and discussions are strongly recommended.

4 Assessment: A Guide for Students by Phil Race

A guide for first years. The content is loosely organized in a 'FAQ' format with most sections presenting the answer to a question posed by its heading eg 'How important is assessment?', 'How do you feel about assessment?', 'Why am I assessed?'

The section, 'What kinds of assessment may I meet?' provides a table of assessment types and a column of 'Top Tips' outlining techniques on how best to approach each assessment type. There is also a short section for lecturers with advice and suggestions for how the guide can be used with groups and as part of staff development.

5 A Briefing on Key Skills in HE by Roger Murphy

'Key-skills' entered university discourse when the Dearing Report recommended they should form part of degree level programmes. Dearing singled out communication, numeracy, IT and learning to learn as the four skills being of greatest importance for the creation of a life-long learning society.

Assessing these key skills is a complex exercise. In this briefing Murphy makes use of five substantial case studies drawn from five UK universities to illustrate and compare different institutional approaches to key-skills assessment.

6 Briefing on Assessment of Portfolios by David Baume

Changes in course design and teaching approaches that have contributed to the increased use of student portfolios on a range of courses in higher education are mapped in the first section.

In subsequent sections different aspects of portfolio design and development are covered, and portfolio assessment is discussed in detail through a case study of portfolio use on a HE teacher-training course. The briefing concludes with advice on how portfolio assessment procedures can be improved through careful analysis of student and assessor performance.

Testing Times



7 A Briefing on Key Concepts by Peter Knight

This guide explores the tension between norm and criterion referencing and the varying purposes of formative and summative assessment. Reference is made to validity of assessment in discursive subjects and the application of 'fuzzy' performance indicators. Affordability of assessment solutions is touched upon. The importance of systems design and leadership are highlighted as key to resolving problems.

8 A Briefing on Assessing Disabled Students by Dave McCarthy and Alan Hurst

This timely briefing offers a useful review of recent changes in legislation and how education needs can review practice to comply with legislative requirements and improve assessment quality for all. There are also useful examples of 'reasonable adjustments'.

9 A Briefing on Self, Peer and Group Assessment by Phil Race

In the first part the terms 'self', 'peer', and 'group assessment' are clarified and points of similarity and difference between the three types are identified. In subsequent sections the reasons for involving students in the assessment process are outlined and the advantages and disadvantages of using non-traditional assessment methods are discussed.

Most importantly, it is now widely recognised that relying on a too narrow range of assessment instruments is detrimental to student learning. The final section deals with the challenges posed by establishing valid criteria for assessed group work.

10 A Briefing on Plagiarism by Lorraine Stefani & Jude Carroll

The briefing discusses how plagiarism can best be defined to ensure students have a clear understanding of the concepts involved. Stefani and Carroll argue that any definition aimed at students should make a clear distinction between cheating and poor referencing skills. To illustrate the type of difficulties novice academic writers face the authors make use of quotes from students grappling with the complex issues surrounding plagiarism.

The second half of the briefing gives an overview of how plagiarism can be reduced through the adoption of new assessment techniques and also offers some practical advice on how changes can be implemented and embedded in an institution's assessment procedures.

11 A Briefing on Work-based Learning by David Gray

Whilst there are many types of work-based learning, this briefing's main focus is on where adult learners undertake research-based fieldwork within their work environment as part of an accredited higher education programme.

The briefing is divided into four sections: 'What is work-based learning?', 'Principles of assessment and work-based learning', 'Measurement issues in assessment', and 'Methods of assessment in work-based learning'. The largest section, 'Methods of assessment in work-based learning' uses 3 case studies to illustrate and discuss the wide range of methods utilised to meet the specific needs of independent adult learners in the work place.

12 A Briefing on Assessment of Large Groups by Chris Rust

In this excellent briefing based upon the experience of practitioners solving real problems in novel and reliable ways, Rust argues that the assessment of large groups can be seen as problematic and may result in assessing less well or less frequently. The guide then goes on to identify the root causes and impact eg negative effect on student learning as formative assessment and feedback declines and associated increase in strategic study patterns.

This briefing also provides a number of case studies showing innovation in large group assessment methods that meet organisational and pedagogical objectives. These include the use of peer marking exercises (non-summative) that can help improve exam performance, the use of Yellow and Red cards in assessed group work and the application of statement banks.

Free copies of the boxed set of guides have been distributed to all UK HE institutions. Further hardcopies are available from the LTSN Generic Centre at a cost of £75.

Individual guides/briefings are also available for RTF and PDF download from the Generic Centre website:

<http://www.ltsn.ac.uk/genericcentre>

Testing Times

PLAGIARISM - THE STUDENT PERSPECTIVE

In Testing Times 5 we reported on the results of the JISC funded review of plagiarism detection software. Whilst electronic detection tools are useful, they are limited and they can never be more than a small part of an effective anti-plagiarism strategy. In this issue we move away from technical solutions and explore other issues surrounding plagiarism; some of which were investigated in another strand of the JISC project.

STUDENT CHEATING BEHAVIOURS

Most research into student cheating behaviours has been conducted in a US setting where findings have consistently been that over 50% of students have committed some type of academic offence. British investigations have confirmed this. In one study 267 3rd-year psychology students from four UK institutions completed questionnaires about essay-writing tactics. 61% admitted to paraphrasing without acknowledgement and 45% to having copied without acknowledging the source¹.

STUDENT UNDERSTANDING OF PLAGIARISM

New undergraduates in UK universities are given extensive information on how to prepare and present written assignments. And yet, ignorance about what constitutes plagiarism remains. One reason for this may be the sheer volume of information new students are presented with. At the beginning of a three-year degree programme students can expect to receive approximately 3000 pieces of information². It is possible that much of the advice on assignment preparation gets only cursory attention.

Another problem may be that some aspects of referencing cannot be effectively learned in separation from writing in a specific discipline. Students find it difficult to transfer skills learned in generic academic writing modules to writing in their own discipline².

A further problem is that plagiarism is not easy to define. It can be viewed as a continuum of unacceptable practices, with the offence of submitting someone else's essay as your own located at the 'criminal' end and inadequate referencing caused by poor academic writing skills located at the 'inadvertent' end.

A small survey at the University of Staffordshire School of Law confirmed that students do not have a clear understanding of the exact nature of plagiarism. At the law school, where development of academic writing skills is given high priority, 64% of students still felt that more time needed to be spent on learning about plagiarism³.

SOLUTIONS

Embedding academic writing support in the subject curriculum, and adopting new assessment techniques are effective strategies for improving referencing skills and reducing plagiarism. Using a wide range of assessment methods (CAA, orals, open-book exams, portfolios, peer assessment etc.) ensures students get opportunities to demonstrate fully their subject knowledge and skills.

¹ Norton, L.S., Tilley, A. J., Newstead, S. E. and A. Franklyn-Stokes (2001) "The Pressures of Assessment in Undergraduate Courses and their Effect on Student Behaviours" *Assessment & Evaluation in Higher Education*. 26(3) pp. 271-277.

² Carroll, J. & J. Appleton (2001) *JISC Report: Plagiarism A Good Practice Guide*: Oxford Brookes University. Available in pdf at <http://www.jisc.ac.uk/mle/plagiarism>

³ Chester, G. (2001) *JISC Report: Pilot of Free-text Electronic Plagiarism Detection Software*: Joint Information Systems Committee. Available in pdf at <http://www.jisc.ac.uk/mle/plagiarism>

Also see the LTSN briefing on plagiarism:



Testing Times

BLUEPRINT



NOW AVAILABLE FOR PURCHASE

Authors: Joanna Bull and

Colleen McKenna

ISBN: 1-904020-00-3

Format: Paper, 168 pages

Retail Price: £25.00 (UK HE/FE)

£35.00 (non-UK HE/FE)

£45.00 (non-education)

Details on ordering from website:

<http://caacentre.ac.uk/bp>



The 'Blueprint for Computer-assisted Assessment' is a comprehensive document addressing the pedagogical, operational, technological and strategic issues faced by those adopting CAA.

The Blueprint offers research-based good practice, drawing on the experience of the CAA Centre consortium, which was led by the University of Luton and included the Universities of Glasgow, Loughborough and Oxford Brookes.

The Blueprint will be of interest to the following groups within the HE/FE sector: Teaching and Learning support services, Educational/Learning technology support services, senior staff with specific responsibility for teaching and learning strategy and policy, academics currently using technology for teaching and learning, and staff developers.

What the Blueprint covers:

Chapter 1 Computer-assisted assessment - discusses the key issues surrounding computer-assisted assessment.

Chapter 2 Why use objective tests? - considers pedagogical issues associated with objective testing.

Chapter 3 Writing questions - offers practical advice on the construction of objective test questions and provides examples of basic and complex question types.

Chapter 4 Designing feedback and scoring - examines techniques for giving feedback and scoring objective tests.

Chapter 5 Analysing and improving objective test questions - suggests ways of using statistics to analyse and improve questions and tests.

Chapter 6 Constructing tests - considers methods of organising questions into tests, analysing the spread of questions and integrating objective tests with other assessment methods.

Chapter 7 Range of technologies - gives an overview of the range of technologies available for CAA.

Chapter 8 Use of multimedia - explores the potential for using multimedia in assessment.

Chapter 9 Innovative uses of CAA - addresses recent innovations in CAA and the use of related activities, such as computer-mediated communication.

Chapter 10 Student support and staff development - considers the provision of student support and staff development for those involved with CAA.

Chapter 11 Operational and technical issues - outlines operational and technical issues associated with CAA.

Chapter 12 Risk identification and analysis - addresses risk identification and analysis.

Chapter 13 Wider implementation of CAA - examines strategic implementation and quality assurance of CAA.

Chapter 14 Evaluation - suggests methods of evaluating CAA.

Chapter 15 Managing change - within your institution offers advice on managing change within the institution.

READERS' QUOTES

"This is an excellent handbook for me as an educational technologist supporting the implementation of CAA."

"It was really very useful and continues to be so."

"Thank you for producing such a comprehensive resource."

"I found the Blueprint to be an excellent document which I shall refer to often. It gives status and credibility to CAA."

"I wish I'd had something like this to study before I embarked on designing my own tests!"

Testing Times



As Oscar retires from academic hitchhiking he bids the Centre and visitors farewell



*Text by Ian Hesketh, Joanna Bull and Elisabeth Coughlin, design and layout by Val Martin Revell.
For enquiries or remarks please contact Ian or Joanna at info@caacentre.ac.uk*