CAA as innovation capable of affecting change

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Abstract

This paper attempts to argue that the future for computer-assisted assessment lies in its ability to affect change in the thinking of educators in the HE environment. As an innovative practice with considerable proven success CAA has the capability of triggering much wider and informed debate in the sector that responds in real ways to issues of lifelong learning, employability and development of key skills. These debates control the current educational climate in the sector and CAA has made great strides in focusing the needs of the 21st century student.

King Alfred's College (KAC) has recently piloted two CAA projects focusing on self and peer assessment and mapping key skills. Both projects have been successful in their own right, but arguably more significant than that has been the institutional debates that have been triggered by these innovations. Both projects have focused on timely and significant aspects of learning in the 21st century and in doing so have revealed inadequacies of provision and out-dated thinking. Strategic development demands ownership at every level within and beyond the institution and the lively internal debates have enabled KAC to begin to achieve its strategic outcomes in learning and teaching.

This paper aims to provide the first step for the College in honestly reflecting on this journey from innovative CAA practice to re-defining learning and teaching strategy. It is anticipated that this will initiate further debates focusing on national and global perspectives in innovative practice and change.

Key words

Innovation
Change
Strategy
Learner-centred
Deep learning
Virtual learning
Quality
Employability
Lifelong learning
Key skills

Introduction

The purpose of this paper is to critically reflect on developments in learning and teaching at King Alfred's College, Winchester as a result of innovation in computer-assisted assessment (CAA). The aim is to provoke further debate about the potentiality of CAA in affecting change in similar institutions and the sector as a whole. By sharing experience, through case study evidence, the intention is to highlight pivotal points on a journey that resulted in a radical re-think of institutional positions in learning and teaching.

In the beginning

The birth of the journey began three years ago when the Teaching, Learning and Assessment Committee (TLAC) awarded a grant to pilot a computer-based training package based in self and peer assessment. This form of assessment is central to the work in the School of Community and Performing Arts. However, the reduction in tutor-student contact was having a negative impact on the quality of the learning experience generated by this form of assessment. Students did not have enough *learning space* to digest the conceptual requirements associated with this practice. The new virtual environment, produced through the computer-training package, was aimed at supporting face-to-face learning. Briefly, the package consists of the following elements:

- Information retrieval source
- Electronic journal
- E-mail connection to tutors
- Series of Internet hyper-links
- Electronic conference

Students access the programme through progressive levels as their confidence in the skills of self and peer appraisal develops. The culmination of this learning process is contribution to an electronic conference across College evaluating practice in self and peer assessment. The project has been largely successful with student participation rates high (89% in pilot 1) and tutors reporting clear evidence of progress in understanding the conceptual frameworks that operate within this form of assessment. Student feedback suggested that once they had mastered the technical elements of accessing the programme it had provided them with clear and uninterrupted learning space that had proved most valuable.

In the middle

With the programme operating across a number of awards and in the process of being adapted for other awards one could be forgiven for declaring the journey at an end. However, unknown to everyone including the programme author a storm was brewing. In the process of planning, piloting and reviewing this form of assessment crucial debates had been triggered focusing on the following questions:

- What place does computer assisted assessment have in assessment strategy?

- What place does virtual learning have in the learning environment?
- What role does the learner have in university education?

These questions were asked in one frame or another by a range of professionals involved in learning and teaching within the College. The debates that followed involved professionals from the learning support unit and the academic staff and began to challenge traditional views of teaching. These views involved an over-reliance on traditional lecture and tutorial delivery and a lack of consideration of unsupervised learning environments. The College had a 'teaching' policy that placed the role of the academic tutor as central, rather than the active learner.

To declare that these questions were easily resolved would be a fabrication of reality. The analogy of the 'storm' effect made earlier in the paper was a useful one, as storms have loud and destructive times that can contrast with much calmer moments when all appears reconciled. This descriptor more closely defines the reality of this stage of the journey as opinion was outed, tested, evaluated and, at times, changed. It is without doubt that this stage was difficult as professionals were asked to re-evaluate their practice and develop new and unfamiliar approaches to learning.

The journey was further complicated when a second TLAC award was granted to a project involving the virtual mapping of key skills as a methodology for bringing notions of employability and lifelong learning into the student's agenda. In the post-Dearing climate it has been perhaps too easy for academics to simply absorb change without question and continue to jump through hoops even when we don't understand where the hoops have come from! The key skills pilot, in particular, took the learning and teaching journey at KAC into a much broader perspective developing from a cross-College view outwards to a cross-sector view. Statements in the strategic plan had embraced concepts such as employability and lifelong learning without always testing their accountability at ground level i.e. the view from the student.

The mapping key skills through virtual learning project asks students to focus on their personal development of key skills over their time in university education. From the start of the pilot interesting findings were uncovered. Many of the students failed to fully appreciate the need to develop skills that are transferable into the workplace. Many of the courses failed to identify sufficiently the key skills it targeted through curriculum delivery, making the mapping exercise far more challenging than it needed to be. Academic staff began to debate the value of key skills and how best to deliver them. The most hotly debated skill related to the use of information technology (IT). The majority view centred on a belief that skills in IT develop best in context and that one off training courses failed to embed principles and practices, thus dis-empowering real development. The introduction of CAA as practice had uncovered a complex range of capabilities in IT across the student body. Limited skills in IT were not restricted to the students as some members of academic staff came face to face with the necessity to up-date these skills. The learning associated with the implementation of these two CAA projects revealed limitations in the College's network and adjustments were necessary

to ensure maximum accessibility. From the outset of both pilots, staff and students were encouraged to move beyond technical problems and consider the value of the projects in terms of the contribution they made to the learning environment.

Both ICT projects are aimed at supporting deep learning as advocated by Entwistle, N. (1992) as a concept capable of affecting change in HE learning environments. As the Lifelong learning momentum gathers pace the composition of the student group changes. More mature students are entering KAC than ever before and with them comes a mature approach to learning. Entwistle, although slightly sceptical about the large costs involved in initiating ICT based learning projects, supports this form of learning as capable of supporting face-to-face learning by providing flexibility and freedom. The KAC staff development opportunities that have developed from these two pilot projects have focused on their ability to contribute to a problem-solving approach to learning in sympathy with a philosophy that recognises the significance of deep learning.

The TLAC committee commissioned an audit of ICT based learning across all awards and began the process of sharing best practice. Even the strategy of 'sharing best practice' is troublesome. As a strategy it only works if all colleagues subscribe to it. It has been important to divorce the practice from the individual as it is the practice that is held up as 'effective' and therefore we avoid the label of 'best person'. Some way through the journey colleagues began to realise the vitality of pedagogical research and that this was not restricted to those colleagues working within the School of Education. As draft Research Assessment Exercise (RAE) criteria were published it became apparent that research into the effective delivery of subject-based material had reached new heights of credibility. Advice from the funding council (HEFCE) indicated that more support for research in learning and teaching is necessary if standards in university sector education are to improve. In September 1999 HEFCE published the circular ' Institutional learning and teaching strategies: A guide to good practice' and this provided many points for debate coupled with useful advice on how best to affect change at institutional level. Arguably, the most significant message is delivered through the following declaration:

'The shift from 'teacher-centred' to learner-centred provision…..involves a profound transformation of attitudes and roles which cannot be achieved through a bit of staff development, some projects funding, or a new policy'. (HEFCE 99/55: 17/18)

What the guide fails to note is the importance of any of these initiatives as potential *catalysts* for change. Change has to start somewhere and it is often irrelevant where the source comes from. In KAC's journey it was two funded projects that initiated the journey towards significant and meaningful change. A summary of the learning and teaching journey at KAC is indicated in *fig 1.*
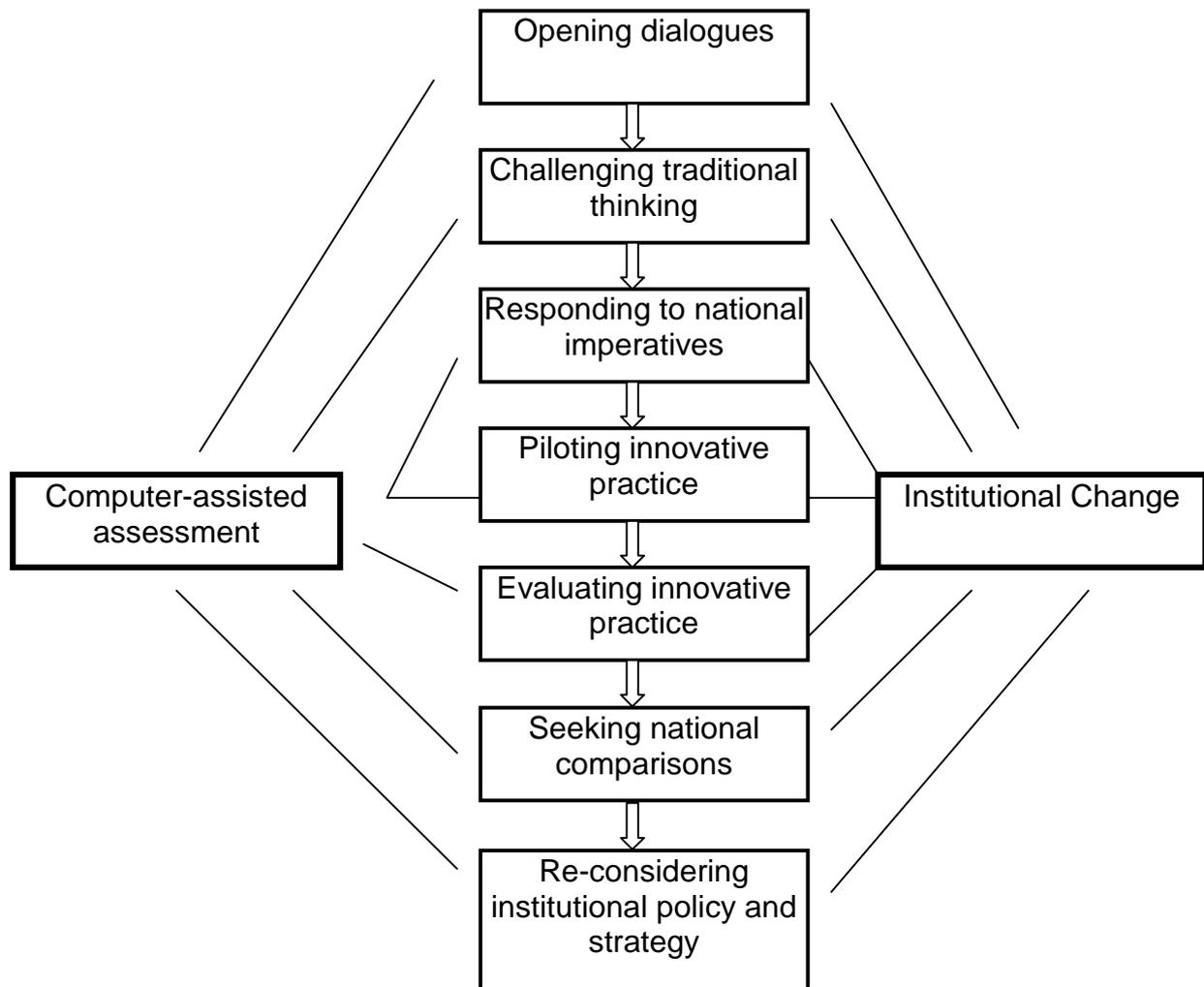
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Figure 1: Journey from CAA projects to institutional change

What change?

'CAA as capable of affecting change' is a tale from KAC that cannot be denied.   Computer–assisted assessment practices have been introduced into radically different learning environments that accept and celebrate the shifting needs of the learner in the 21st century.   The virtual learning space, as a feature of many delivery strategies across the College, is facing the realisation that this space holds increasing importance in our society.   The success of these two projects has opened up new lines of development. Colleagues are now beginning to realise the potential of a virtual learning environment and while KAC is not in a position to be at the front of the 'e-university' race, its progress in utilising virtual learning methodologies is contributing to its strategies in lifelong learning and employability.   Such contributions are real and tangible, moving beyond strategy into implementation.   A commitment to implementation brings results and a chance to reflect before adapting and moving forward.

There is now significant evidence of commitment towards the concept of virtual learning in a global environment. KAC has a number of international partners and the success in using ICT to support face-to-face learning at a local level has resulted in several new initiatives with these partners. Effective communication is the common goal in the quest to frame quality learning experiences. Many at KAC would subscribe to the view expressed by Davies 1988:

'Lifelong learners … become potential customers for universities throughout their lives. Universities for their part are no longer willing to be confined to their campuses. The world of learning has, through the use of new technologies, and the adoption of open pedagogies and learning frameworks, become truly global.' (pp 64/65)

All this contributes to a healthy learning and teaching environment that has yielded a radical re-write of the institutional strategy for learning and teaching. The strategy has moved some distance from a teacher-centred to a learner-centred approach with identifiable targets for implementation. The submission of this paper comes at a time when KAC awaits feedback from the funding council on our newly defined strategy. However, almost regardless of feedback there is a new sense of maturity and ownership about our work that centres on six principles –

As a learning community we:

- Involve students in active learning processes
- Recognise the value of prior knowledge and experience
- Develop learners' personal and professional capability in a manner that helps them gain and enrich their employment
- Prepare students for lifelong learning by providing intellectual and physical environments which encourage them to understand and manage their own learning
- Stimulate the growth of innovative and pluralistic learning and teaching strategies
- Encourage staff to contribute positively to developing learning and teaching through their own reflective and scholarly activities

The sceptics amongst us might declare that principles are only as a good as the practices that develop from them: a view that is shared across College. In response KAC has worked hard at re-defining the structure of learning and teaching in an attempt to centralize it. In the process it has had to compete in open debates with research as academics come to terms with the duality of their roles. The committee structure has been pondered over and adjusted to ensure improved communication between Academic Board and School committees in learning and teaching. This has ensured that the College can respond to the funding council's Teaching Quality Enhancement Fund with a measured sense of pro-activity rather than jumping through those mysterious hoops referred to earlier in the paper. Senior management at the College have played a major part in this learning and teaching journey and committed increased funds to support pedagogical research and innovation. This

contributes to a healthy climate where professionals feel rewarded for their work, as opposed to it being marginalized in favour of subject-based research.

Where are we now?
Our journey has reached a crossroads. On the micro level CAA continues to develop as links are made with other institutions within the sector and technologies allow greater sophistication. On the macro level of institutional change we are faced with the latest guidelines and regulations from the Quality Assessment Authority (QAA). The changes within the HE sector are driven by an agenda based on *quality* and *standards* as outlined by the QAA (November 1999*)*. At KAC colleagues are in the midst of debating the true value of quality when we ask ourselves what are we measuring? A rational approach suggests that external bodies like the QAA have responsibility to measure the *quality* of our learning and teaching opportunities. How well is CAA integrated into an overall assessment strategy, is an example of a reasonable question. This type of question has unearthed a new chain of debate focusing on the interdependency of developments in quality assurance and learning and teaching. Quality enhancement is more than systems: it is an opportunity to focus on effective practice in learning and teaching to ensure that our students are provided with the best learning environments possible.

Structurally, this means that quality assurance and learning and teaching debates cannot be divorced. The HEFCE circular 99/55 advocated a methodology where quality assurance systems monitor the extent of implementation of targets set by a learning and teaching strategy. It is this approach that currently pre-occupies colleagues at KAC.

At the End
Like all journeys of change there is no end. On the face of it KAC will continue to respond to recommendations, guidelines and regulations produced by external agencies. However, the journey to date has enabled a vital distinction to be made. Before the journey started KAC could be charged with responding to these external agencies without a strong sense of its own identity. As the journey matures KAC brings together external demands with its own strategic developments in learning and teaching and this is indicative of a greater sense of ownership. To credit two CAA pilots with initiating this degree of change and development at institutional level would be ambitious, but I think I might just do that…….

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