Perspectives on the quality of online education
New conceptions of curriculum, student roles and learning?

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Abstract: One perspective in the current quality debate is that the rise of the virtual learner is a search for quality and personal satisfaction in learning. This accords with contemporary quality principles which are person-centred and concerned with client satisfaction. While there may be many questions about the effectiveness of online learning, there are well-founded research conclusions that it achieves higher student satisfaction and levels of engagement. In addition, there is a growing understanding of the factors that affect learner engagement in online learning and also a burgeoning of evaluation instruments that focus on the quality of the learning experience. This paper addresses current definitions of quality in online design and examines emerging expectations of what constitutes a good online experience from the perspective of students, designers and researchers.

Key words: Student experience, e-learning, higher education, quality

1. INTRODUCTION: THE QUALITY DEBATE

There are several definitions of quality as 'fitness for purpose' (Ashcroft & Foreman-Peck, 1994; Broad, 1999). It has also been suggested that the term is used five ways in the higher education debate: 'excellence', 'perfection' (or consistency), 'fitness for purpose', 'value for money', or 'transformation' . Early approaches to quality tended to focus on quality control: on management, seeing students as 'products' rather than clients (Bersin, 2002). Biggs (2001) suggests that quality may also be transforming, as it changes teachers' conceptions of their experience, and also the culture

of the institution. In the field of online learning in higher education, no consensus has emerged on the overall impact of information technology on the long-term nature and quality of university teaching, yet institutions are acknowledging that they are responsible and accountable for integrating ICT to enhance the student experience. The aim of the paper is to provide several perspectives on the quality agenda as it relates to online education and to focus on the key pedagogical and design issues facing educators and designers.

1.1   Design guidelines

The *Quality Assurance Agency for Higher Education* (1999), acknowledges that there are differences in the way learning and assessment activities are conducted on campus that may not be appropriate for students studying in the off-campus, distance mode, who have little contact with academic staff. In another study Abbey (2000) addresses the issue of quality learning via Web-mediated communication, and defines quality learning as going beyond the acquisition of facts to achieving a cognitive outcome, and fostering higher order thinking at the level of synthesis and evaluation of concepts. A number of reports and documents provide design guidelines and benchmarks for distance education environments. For example the Institute for Higher Education Policy (National Education Association, 2000) provide 24 benchmarks for course design, delivery and learning outcomes. In their report no specific recommendations are made except to suggest that intended learning outcomes are regularly reviewed to ensure clarity, consistency and appropriateness. Penn State University in *Innovations in Distance Education*, (1999) have taken this a step further and advocate that learning and assessment design need to capitalise on the unique characteristics and situations of the distance learner.

These recommendations are in line with those of Berge et al (2000) who also suggests, that to assess student understanding in respect to online learning alternative forms of assessment should be used. However, like all the reports cited here, while there are several recommendations, few pedagogical guidelines have been created for practitioners.

1.1.1   Is quality a matter of design?

Others argue that no single design or perspective is adequate for the design of technology enhanced learning environments (Sfaard, 1998). The same message about multiplicity comes from Spector (2000) who notes 'technology has yet to make significant improvements in the quality of education by any reasonable measure' (p. 243). Spector continues to argue

that most failures can in fact be attributed to the belief that there is one best approach, one perfect theory or one final solution. The McKinnon Report (McKinnon et al, 2000) provides a student satisfaction benchmark that monitors student ratings of their learning experience and overall satisfaction with assessment based on the Course Experience Questionnaire, (CEQ) administered when students have graduated. Data coming from the CEQ only measure satisfaction with existing assessment arrangements, but not do provide any indicators of quality beyond student satisfaction. Teachers and designers need a principled basis for designing new forms of learning and assessment, closely aligned with instructional goals and utilising the interactive features of online technology (American Psychological Association, 1993).

We may conclude from this review of literature that the notion of quality defined in terms of student satisfaction is important, yet few guidelines have been provided on what practices to adopt when designing educative, authentic or valid assessment processes that are suited to distance education and online environments. Most often, quality issues are tied up with implementation, infrastructure and delivery of services to students and they provide a big picture view of the systems that need to be in place to enable educational services to be managed at an institutional level. Other perspectives on quality can be gleaned from the literature on educational evaluation.

1.1.2   Linking quality with evaluation processes

In a major study of technology-supported learning designs, Alexander & McKenzie (1998) reviewed 104 projects relating to innovative technology adoption and found that students had improved attitudes to learning, improved access, and improved opportunities to interact and develop information literacy skills. However, opportunities for learning do not always translate into actual learning outcomes, as the authors found when they evaluated student perceptions of technology and the value of ICT for learning. The major findings were as follows:

– Student perceptions and expectations of technology are a major influence on their attitudes and approaches to learning. Will they gain recognition for using technology? Will it be counted in their grades? In designing a course, this might mean evaluating student contributions to a bulletin board as part of the formal assessment process.
– Often students' experiences of working in groups is one of frustration, despite claims that technology is bringing about peer relationships and better communication.

– Students do not feel that quantifiable learning gains are always achieved from technology use.

Given these results and the additional finding that ICT adoption does not bring about pedagogical change in the Alexander & McKenzie (1998) report, Collis & Moonen (2001) conclude that while learning gains cannot be proved, they still remain optimistic about technology integration. They contend that students are experiencing new forms of learning with new activities and resources and new kinds of teacher contact. Other researchers would say that what determines the educational value of ICT is how it is used in practice (Schacter, 1999), and that evaluation remains central to assuring quality. Whether these new learning activities have arisen out of new conceptions of curriculum and can lead to innovative pedagogical practices is a matter of importance to online educators and instructional designers.

2.   STUDENTS AS CLIENTS?

The quality debate has brought a greater focus on student satisfaction, with an insistence on them being viewed as 'users' or 'customers' (Belfer, 2000; Yeung, 2001). This is a more 'consumer-centric' model (Skolnic, 2000, p.57), and is perhaps better aligned with the more learner-centered view of education today (McCombs, 2000). In the changed culture of Australian universities since the 1990's, suggests Pennington (1998, p226):

> It is inevitable, and appropriate, that students be seen as clients of their institutions, as well as partners in the educational process. Understanding student needs and assessing how well they have been served will increasingly be an essential element to be taken into account in reviewing the performance of an institution, both internally and for external purposes.

However, because this focus is so comparatively recent, there has been limited research on student experience in tertiary education and the persistence of older quality models from the world of business management still tend to be 'top down' in their approach. Accrediting bodies today are struggling with mismatches between traditional accrediting paradigms and new educational realities. Nevertheless, while there is a wide raft of understandings of how quality relates to the student experience, the growth of learner-centered design principles for online education is notable (Herrington, Oliver & Reeves, 2002).

Pond (2002, pp. 3-4) offers a comparison of old and new paradigms for quality assurance in education, emphasising the change from prescriptive to flexible measures to meet client needs. Despite the growth of formal and

external quality assurance processes, Pond concludes that quality education, may be quite simply... 'one in which the learner's expectations for his or her learning are met or exceeded; that he or she has knowledge and/or skills that he or she did not possess before the learning took place' (p. 4). To have viability and credibility in 21st century quality measures, argues Pond, ...'we must open ourselves and the process to other stakeholders: the community, employers, professional organizations, peer institutions, and especially to the students themselves' (p. 6).

2.1.1 Does Web-based learning also mean new conceptions of curriculum?

Another perspective is offered by Collis & Moonen (2001) who use the term *pedagogical reengineering* to describe the change in online pedagogy from one that is teacher-centred to one that is focused on learner activity. Pedagogical reengineering is based on the premise that courses are built up of components or units of instructional that are bound together in sequences or combinations. By introducing technology and Web-based learning, these components can be changed and made more flexible and student-centred, thus leading to course enhancement through the adoption of learner-centred pedagogies and authentic forms of assessment.

A key element in pedagogical reengineering is the use and application of media to teaching and learning scenarios where students are active participants and contribute actively by generating knowledge. By changing roles and by enabling students to make contributions towards learning resources, assessment also becomes more learner-centred and performance based. For example, in some activities students can post new URLs to the course site so that others can share and critically evaluate them, and these resources become part of the learning activity. Similarly, the move towards peer assessment is an indicator of pedagogical extension via the Web, as online communication tools, shared workspaces and asynchronous dialogue make networked learning and assessment feasible (Oliver & McLoughlin, 2001). This participatory/contributions oriented approach to learning:
– recognises students as contributors;
– involves opportunities for students to communicate, contribute to, and participate in an online community and
– reflects the status of students as contributors to course content, and creators of new knowledge products.

It is certainly the case that online technologies and Web-based learning have led to a reconceptualisation of learning, pedagogy and assessment. This is reflected in the various theories of learning, which emphasise activity, participation in communities of learning, engagement, self-direction

as evidenced by the contributions-oriented student model proposed by Collis & Moonen (2001).

The 'student as participant approach' is enabled by Web-based technology, which gives students access to learning resources, communication tools, databases and asynchronous networks. Such models of e-learning accentuate the movement away from transmission-oriented approaches towards active learning where the student generates products and resources that can be re-used and shared with others.

3.   FUTURE DIRECTIONS FOR QUALITY IN ONLINE LEARNING

Judging by present trends, there is no doubt that Web-based learning and training will continue to expand, with the growth in markets, the trend towards lifelong learning and the need for universities to offer flexible, on demand educational services. In this scenario, it is likely that quality assurance processes for online assessment will intensify, with benchmarking procedures developed to compare learner performance to exit level or industry standards. Key questions that tertiary providers may have to respond to are: How is this graduate performing in comparison with a professional in the field? What are the minimum exit standards for this student entering the profession?

Another issue is that benchmarks must be transparent to the learners, and must represent authentic behaviour and expectations, rather than abstract decontextualised knowledge. These immediate trends are emerging in higher education and will impact on instructional design. Other directions mentioned in this paper relate to a re-conceptualisation of curriculum as participatory, with students contributing resources rather than content being prescribed. This emphasis on knowledge building and participation has already brought about an increased focus on authentic assessment, which better reflects real world performance. On the horizon looms the question: If authentic, quality learning and its demonstration depend upon performing in a genuine, real life situations what are the actual limits of online learning? How can teachers be better prepared to adopt new designs and pedagogies that tap the potential of online learning?

REFERENCES

Abbey, B. (2000). Instructional and Cognitive Impacts of Web-based education. Hershey: Idea group Publishing.

American Psychological Association. (1993). Learner-centered psychological principles: Guidelines for school reform and restructuring. Washington, DC: American Psychological Association and the Mid-continent Regional Educational Laboratory.

Alexander, S., & McKenzie, J. (1998). An evaluation of information technology projects for university learning. Canberra: Committee for University Teaching and Staff Development.

Ashcroft, K., & Peck, 1. F. (1994). Managing teaching and learning in higher education. London: The Falmer Press.

Belfer, K. (2000). A learner centered assessment of quality for online education course climate. Paper presented at the ED Media 2000: World conference on educational multimedia and hypermedia, Tampere.

Berge, Z. L., Collins, M., & Dougherty, K. (2000). Design guidelines for Web-based courses. In B. Abbey (Ed.), Instructional and cognitive impacts of Web-based education 32-41. Hershey: idea group Publishing.

Bersin, E. (2002). Measuring e-learning's effectiveness, 2003, from www.elearningmag.com/elearning/article/articleDetail.jsp?id=11692

Biggs, J. (2001). The reflective institution: assuring and enhancing the quality of teaching and learning. Higher Education, 41(2), 221-238.

Broad, M. C. (1999, t). The dynamics of quality assurance in online distance education. Retrieved 15/1/03, 2003, from http://www.usq.edu.au/electpub/e-jist/docs/old/vol3no1/contents.htm

Collis, B., & Moonen, J. (2001). Flexible learning in digital world. London: Kogan Page.

Innovations in Distance Education (1998). An emerging set of guiding principles for the design and development of distance education. Pennysylvania: Pennsylvania State University. Online at http://www.outreach.psu.edu/de/ide.

Herrington, J., R.Oliver, & Reeves, T. (2002). Patterns of engagement in authentic online learning environments. In A. Wiliamson, C. Gunn, A. Young & T. Clear (Eds.), Winds of change in the sea of learning: Proceedings of ASCILITE 2002; 279-286. Auckland: Unitec.

McCombs, B. L. (2000). Learner centered psychological principles: a framework for technology evaluation. Paper presented at the US Department of Education Regional Conference on Evaluating Technology in Education, Atlanta, Georgia.

McKinnon, K. R., Walker, S. H., & Davis, D. (2000). Benchmarking: A manual for Australian universities. Canberra: Australian Government publishing service.

National Education Association (2000). A survey of traditional and distance learning higher education members. Washington, DC: National Education Association: http://www.nea.org/he/abouthe/dlstudy.pdf

Oliver, R. and C. McLoughlin (2001). Using networking tools to support online learning. Innovation in open and distance learning: Successful development of online and EWeb-based learning. F. Lockwood. London, Routledge: 160-171.

Pennington, D. (1998). Managing quality in higher education institutions of the 21st Century: A framework for the future. Australian Journal of Education 42(3): 256 - 270.

Pond, W. K. (2002). Distributed education in the 21st century: Implications for quality assurance. Online Journal of Distance Learning Administration 5(2).

Quality Assurance Agency for Higher Education (1998). Guidelines on the quality assurance of distance education. UK. Online at http://www.qaa.ac.uk/dlg/intro.html.

Schacter, J. (1999). The impact of educational technology on student achievement: What most current research has to say. Santa Monica: Milken Exchange on Education Technology.

Sfaard, A. (1998). On two metaphors for learning and the danger of choosing just one. Educational Researcher, 27(2), 4-13.

Spector, M. (2000). Designing technology enhanced learning environments. In B. Abbey (Ed.), Instructional and cognitive impacts of Web-based education; 241-261. Hershey: Idea Group Publishing.

Skolnic, M. (2000). Evaluating online learning. In J. Gidley (Ed.), The university in transformation:Global perspectives on the futures of the university; 55-67. Westport: Bergin & Garvey.

Yeung, D. (2001). Quality assurance of web-based learning in distance education institutions. Online Journal of Distance Education Administration, 2(4), online at: http://www.westga.edu/~distance/ojdla/winter44.html.