

Role of the Educator in Supporting Learning in an Online Environment – Vision for the Future

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Abstract: There is often a perception that human-computer interaction online is an impersonal activity. However, online teaching practitioners at the University of Southern Queensland have identified that a critical principle of online pedagogy is that the “human” touch must be created and maintained throughout the learning experience, enabling learners to be members of a facilitated, interactive learning community. The focus on high levels of interaction creates quality online experiences but this approach can be time and labour intensive. The authors have explored teaching and learning issues in the online environment, and a number of ways to address these issues. They have also trialled the use of tutors from both national and international arenas to support on-site educators. The purpose of this paper is to examine the role of the educator in supporting the online learner by reflecting on the experiences of practitioners, online learners, and the literature.

Keywords: Role of online teacher, mentoring, international tutors, peer-learning partnership

Introduction

Tertiary institutions today have access to information and communication technologies, creating new learning and teaching opportunities, and challenges to existing practice. Laurillard (2002) argues that universities must adapt to this change and become leaders in the application of technologies as learning tools, and adopt strategies that facilitate active learning. This challenges the conventional approach where the teacher has the role of an expert delivering knowledge to the learner.

The University of Southern Queensland (USQ) has met this challenge by adopting online education as part of its learning environment. The authors have been designing for, and teaching online for some years. This work has enabled the authors to reflect on the design strategies implemented by referring to student feedback, personal teaching experience, and current literature in the field. In addition, the authors have used their work in a major research project (Postle, Carmichael, Mangubhai, McDonald, Reushle, Sturman, & Vickery, 2003) funded by the Australian Government organisation of DEST (Department of Education, Science and Training) as a basis for further research into the identification of critical ways to design online environments for effective learning. As noted by a survey respondent in the project,

Online means being able to truly take account of what students want, re-shaping the environment to make the most of students' collective experience and expertise, mobilising them to construct knowledge for their own purposes.

The authors' reflection on experience, learner feedback, statistical analyses and the current literature has revealed a number of critical issues relating to the online teacher. In this paper, those issues are elaborated upon and some means of addressing these issues are discussed.

1. Changing Role of the Educator in an Online Environment

In 1998, McCann, Christmass, Nicholason & Stuparich proposed that Internet delivery would allow Australian universities to compete cost effectively in the world market, thus enhancing Australia's world leadership status in terms of innovation in distance education. The study (1998, p. vi) noted that

the use of information technology can mean significant savings in resources with a shift from physical to virtual resources (lecture halls and libraries to online services) and with a shift in the relative allocation of resources for course development and for teaching.

In an Evaluations and Investigation Program (EIP) report, King (2001, p. 48) refers to a comment made by Michael Dolence who envisages educators becoming managers of educational delivery. This suggestion heralds extreme change to existing practices. Dolence suggests that,

a significant number of our academic staff should stop teaching and marking, and become managers of educational delivery, including the training and supervision of sub-contracted staff, perhaps from other countries who can do these things - that is an absolutely essential component of any scaleable approach to e-business in universities. Academics should authenticate the content of courses and manage quality assurance processes but not be responsible for delivering those courses intended for mass overseas markets.

However, many leading scholars in the field of online learning challenge this "commercial" approach to education. Laurillard (2002, p. 22) argues for the idea of a "conversational framework" for learning which she believes captures the essence of university teaching as an "iterative dialogue between teacher and student(s)". She proposes that technology can be used to engage students by exploiting "the communicative, interactive, and adaptive capabilities of the technology" to facilitate this iterative dialogue.

However, this increased demand for interactivity and negotiation between teacher/student and student/student has had an impact on the role of the educator, who now has more of a role as "guide on the side" rather than "sage on the stage". This changed role is summarised by McCabe (1998) (Tab. 1).

Traditional Tutor Roles	Online e-tutor Roles
Sage on the stage	Guide on the side
Lecturer	Consultant, guide, and resource provider
Provider of answers	Expert questioner
Provider of content	Designer of learning experiences
Solitary tutor	Member of a learning team
Total control of teaching environment	Shared control with the learner as fellow-learner
Total power over the teaching experience	Shared power with the learner

Table 1: Changing roles of the educator

These proposals raise the issue of cost effectiveness and sustainability in online delivery. Highly interactive online discussion requires low teacher/learner ratios, creating a higher resourcing cost for the university, hence the tension exists between cost effectiveness and

quality online learning experiences. The University of Phoenix, which targets working adults, has a teaching and learning model that puts a great value on small class size and stipulates that class participation is mandatory. Interaction is conducted asynchronously, through threaded discussions that place a high emphasis on learner participation and interaction. For online classes, the University recognises that facilitating class discussions requires a high level of faculty involvement, and classes are typically kept to about nine students per class. The university covers the additional faculty cost by charging more for online courses than campus courses. The course completion rate is 97% and graduation rate is 65% (De Alva & Slobodzain, 2001). Instead of cutting costs by reducing interaction, the University of Phoenix uses technology to connect learners and course leaders, and learners are prepared to pay for the stipulated high levels of interaction.

1.1 Teaching Philosophy and Theoretical Underpinnings

Technology gives learners fingertip access to vast stores of information, and educators, researchers and entrepreneurs are investigating how this information becomes knowledge. How the differences between information and knowledge are addressed is a concern for educators, and debate is evident in the literature (Buckingham Shum, 1999; Laurillard, 2002; Jonassen, 2001). There is a concern that information may be slickly packaged and delivered by using the latest technology, and that the “packaged information” will be viewed as knowledge.

The “packaged information” approach would leave education locked into the “transmission” mode, with “experts” preparing and delivering information, and the “novice” learners as passive receivers of the information. Advocates of the constructivist approach to education (Jonassen, 2001) question the effectiveness of the transmission approach to teaching. The constructivist literature suggests that learners construct their own meaning from information and that one way of effectively constructing that knowledge is through joint construction with other learners (social constructivism), such as the interactive and collaborative activity that is encouraged and facilitated in USQ online courses.

1.2 Learner-centred and Learning Centred

Mayes (2001, p. 17) has observed that never before has there been so much agreement about the pedagogical fundamentals of teaching and learning. He observes that

the shared theoretical assumptions are those of constructivism, and they result from two distinct shifts of emphasis - shift from a representational view of learning to a constructivist or constructionist view where learning is primarily developed through activity...Second shift is away from the focus on the individual, towards a new emphasis on social contexts for learning.

This approach favours instructional methods that use a constructivist approach to teaching and learning, with a focus on dialogue, learning partnerships, and the joint construction of knowledge. This approach is used for the design of many of the online courses at USQ, and is particularly evident in the use of discussion forums to facilitate online interaction. In the EIP project, conducted at USQ in 2003 (Postle et al., 2003), respondents to the staff survey stated that the adoption of online approaches to teaching and learning provides a number of advantages over traditional distance education. One of the most significant points discussed was the increased opportunity for interaction, particularly between teacher and student, and between students, both synchronously and asynchronously. Students enquiring about the quality of online education offered at USQ have indicated that one of the most important factors in choosing between online universities is the quality of instruction, student support and level of interaction available with the online teacher. The synchronous and asynchronous tools (discussion groups, email, and virtual chats) provide environments for collaborative group learning, where learners can actively exchange ideas and co-construct their knowledge within the context of an online learning community (Wenger, 1998).

The fact that online education brings with it increased opportunities for interaction implies increased levels of participation on the parts of both the teacher and learner. Again, this raises the issue of workloads and sustainability. To illustrate levels of interaction, data collected for the

EIP project for a particular online course recorded that, over a period of one semester (15 weeks' duration), the teacher accessed the discussion board 485 times, posted 485 messages, sent 104 emails, posted 62 announcements, created/modified a group 9 times, accessed the Gradebook 35 times and the Digital DropBox 202 times. This gave a total of over one thousand hits by the teacher on the Blackboard platform for the semester. Emails responding to personal (direct) student emails were not logged on the Blackboard system. This level of interaction raises the question, is this level of teacher participation sustainable? What might need to be done to ensure that teachers can cope in this environment and what is a suitable workload for one online teacher? How might the need for reasonable learner/teacher ratios be met in a cost effective way?

1.3 Responding to Learner Expectations

In online courses offered by USQ, there is often an emphasis on the use of asynchronous communication enabling students to log on at any time and read and post messages to the discussion forum. This continuous access has changed learner expectations and created altered demands on teacher time. A recent study conducted by Cashion and Palmieri (2002) identified a range of key features which students believe constitute a high-quality online learning experience. One of the features was the importance of *responsive teachers* who exhibited high levels of interactivity, availability, and who negotiated response times which they subsequently adhered to. As reported in an ANTA (2002, p. 6) research report, "An important success factor in online learning is developing rapport with the students: knowing them, their progress and their interests intimately to help to enrich their learning experiences as much as possible".

Respondents to the teacher survey in the USQ EIP study (Postle et al. 2003) expressed concern that student access has become linked to demands for courses to be "serviced" seven days a week, 24 hours a day. The issues surrounding "student expectations" raise some complex questions that link to the concepts of "power and control" in online environments. The increased levels and quality of interaction have meant students have the potential to access staff any time of the day, and at any point in the course. This level of access is different from the "traditional" print-based distance education learner/teacher interaction, where learners receive a learning package and basically study in an independent learning mode. Interaction is often restricted to a telephone tutorial, maybe a residential school, and written feedback on assessment items.

A respondent interviewed in the USQ EIP study (Postle et al. 2003) flagged a common concern:

at the moment I am trying to discover strategies that will enable me to work with much larger groups of online students as there does not seem to be any quota imposed on online enrolments, numbers for my course are growing each semester, availability of tutors with the necessary knowledge, expertise and skill to teach are not easily forthcoming, and I recognise I need to find other ways of addressing this issue of response to student interaction. This may mean I will need to adapt my own teaching philosophy to accommodate the restrictions imposed by larger numbers of learners. This may mean less personal contact and less interaction.

Allan (2002, p.135) suggests that in order to respond to learner expectations, online tutors need to develop a number of new skills including the need to:

- distribute time,
- deal with overload,
- develop skills in reading and following threads,
- develop an online voice,
- develop skills in knowledge construction.

2. Integrating Roles of the Online Educator

Therein lies a dilemma – the tension between economic efficiency and perceived sound, online pedagogy. One solution to reducing the variable costs of online delivery is offered through a “differentiated staffing model” which we believe goes some of the way towards addressing the issue of balancing high quality online learning interactions with sustainable teaching workloads. A differential staffing model has been trialled in the Department of Further Education and Training (FET) at USQ for online “classes” of more than twenty-five students. This model has the USQ teacher assuming the lead role in a course and “mentoring” a number of online tutors who maintain facilitation roles (including providing feedback on assessment items). However, rather than using personnel who may have limited content background and little or no online teaching and learning experience, the Department has looked beyond the pool of on-campus teaching staff and employed a number of tutors outside the institution from both national and international arenas.

It is evident from a growing body of literature (McDonald & Reushle, 2002; Jacobsen, 2002; Laurillard, 2002; Salmon, 2002) that well-designed support and resources are required in order to guide teachers, both experienced and novice, through technological and pedagogical preparation. Personal experience of the authors, informed by reflection on the literature, has guided the design and development of a number of support strategies for these tutors, including:

- modeling, by the lead teacher, of the process of building “social presence” in an online environment;
- provision of model feedback and responses to learner queries;
- regular online interaction between the teachers and the tutors, both asynchronous and synchronous;
- timely responses, by teachers and administrators, to tutor queries;
- provision of detailed assessment marking criteria; and
- ongoing moderation of assessment feedback and grades.

The following have formed the core resources for the mentoring of the online national and international tutors in the Department:

- the lead or “master” teacher;
- a *Manual for Tutors/Course Examiners of Online Studies* (Reushle et al., 2002) located on a secure website.
- an online education and training program. The program aims to provide learners (in this case, the online teachers and tutors) with first-hand experience of their roles and responsibilities as online teachers and administrators by immersing them in the teaching/learning environment (that is, the Blackboard learning management system).
- staff development papers, available from the Manual website. The papers address topics such as, “Using Discussion Forums Effectively”; and “Teaching in USQOnline”.

Desirable characteristics of effective online tutors have been outlined by Hislop (2000):

Motivated	Motivated instructors have a strong interest in working to make their on-line class successful. They are willing to make the effort to deal with technology and a new teaching and learning environment.
Approachable	Approachable instructors encourage students to interact with them. Being approachable reduces barriers to interaction in the online environment.
Visible	Visible instructors make their presence felt frequently in the online environment. This helps add substance to the online experience and to provide glue to hold the community of learners together.
Explicit	Explicit instructors provide timely, detailed directions about what the students need to do and how the class will operate. They are also explicit in addressing

course content. This helps to ameliorate the limitations of the restricted communication channels in the online environment

- Proactive** Proactive instructors make an extra effort to reach out to students in ways beyond what would be necessary or typical in a traditional environment. For example, a proactive instructor might put extra effort into contacting an inactive student.
- Discrete** Discrete instructors manage a class without dominating it. They facilitate online discussions while encouraging students to provide most of the comments. They also know when to comment publicly and when to switch to private communication with a student or students.
- Collaborative** Collaborative instructors are willing to work with staff and other instructors engaged in online education. They are also comfortable working with students in a coaching role rather than a more hierarchical style.
- Technically Capable** Technically capable instructors have sufficient technical knowledge and adeptness to be comfortable with the online environment. Online instructors do not need to be technical experts but they need basic technical skills to get started. They also need to be able to deal with the inevitable technical glitches and technology changes (with technical support help).
- Credible** Students accept credible instructors as experts in the subject of the course. Past research has shown the importance of credibility, particularly in technical fields, including information systems. For online classes this may be even more important since the student's connection to the university is embodied largely in interactions with the instructor.

2.1 The Mentoring Process in FET

The process of mentoring in the Department of FET online context involves someone (the mentor) having a significant beneficial effect on the professional development of another individual, generally as a result of personal one-on-one contact. Traditionally, mentoring has been used to assist promising junior executives climb the career ladder. However, in this case, the process is used by experienced online teachers to support the new tutors who are working in USQ online teaching contexts for the first time. The Department of FET strongly believes that the mentoring of online tutors contributes to the recruitment, development and retention of a diverse and innovative online workforce (Clutterbuck & Ragins, 2001).

Teachers and tutors have adopted a peer-learning partnership role (Eisen, 2001). This relationship has been considered more appropriate than the traditional mentor-protégé relationship which is often perceived as hierarchical and, as Shapiro et al. (1978, cited by Eisen, 2001) indicates, tends to foster a power imbalance and a one-way flow of information from the mentor to the novice. Such an arrangement, Eisen (2001) notes, is not suitable for groups of professionals as it fails to affirm and tap into the expertise individuals have already developed. Tutors are selected by the Department according to their recognised domain expertise and interest in the online environment.

2.1.1 Evaluating the Process

In 2004, an in-depth evaluation of the online postgraduate programs (*Evaluation of Faculty of Education Online Postgraduate Programs*) was conducted. The overall goal of the evaluation was to provide an opportunity for learners and tutors to give feedback on the current online programs. The evaluation aimed to consolidate the strengths and address weaknesses of the programs, to realign the programs to meet current client needs (market requirements), and to provide guidelines for future course and program design and development. Using qualitative methodology, the evaluation was conducted through a “course” established in the Blackboard

environment. To gain a balanced view of stakeholder opinions, several online focus groups using the discussion forums in the Blackboard Group Pages facility were conducted. These consisted of a purposeful sample of participants from the USQ student, graduate, teacher and tutor groups. In addition, an Advisory Group was created from invited educators researching and publishing in the field of online learning, and USQ students and graduates. This Advisory Group provided expert review, advice and verification of findings.

Raw data (72,000 words) was collected in the online environment and the evaluators collated and analysed the data under a number of key themes. Of relevance to this paper were the opinions of learners and tutors of the quality of the online learning experience. A number of significant responses emerged from this evaluation:

The interactive element has made me much more motivated and interested in the learning materials. Getting to understand material from everyone else's perspective has been an incredibly worthwhile and efficient way for me to get my head around the material and develop my own perspective.

...part of my quite constant sense of "exhilaration" throughout some of the courses came from having access to and working so closely, cooperatively, collaboratively, with education professionals from around the world.

...the program exceeded my expectations in terms of flexibility, content, relevance and interactivity...positive immediate personal feedback is one of the treasures of the program. Will this personal response be affected by the 5th generation distance education? I didn't realise how important the social aspect would be, but I have craved and appreciated the interaction with tutors and other students.

Conclusion

The adoption of online technologies at USQ has meant that educators are experiencing change in terms of their teaching and learning philosophies, their relationships with learners, and their work patterns and activities. The physical space defined by a classroom has been replaced by a virtual space defined by a learning management system. Educators at USQ have developed considerable insights into how to use online technologies in order to strengthen the concept of a learning community. Many of these roles are changing from being the "experts" in their field to being facilitators of learning. In many cases, they are also combining this role with others that define them as learning partners, learning managers and often "master" teachers or mentors working with a diverse team of other teaching professionals. Initial evaluative feedback from "apprentice" tutors supports the mentoring or peer learning processes that has been trialled at USQ. They have indicated their approval of the modelling, by "master" teachers, of "expected interaction online", and the effectiveness of their preparation to assume a more active and autonomous role in the courses in which they teach.

Much progress is being made in getting the best out of the online environment. Nevertheless, it is pointed out that many of the difficulties that online teachers continue to raise focus on the tensions between teaching philosophies, learner expectations and traditional organisational mindsets. While the experienced teachers are well aware of the importance of shared understandings, there is also the acknowledgement that the rapid pace of change in the information and communication technologies requires a great deal of flexibility and adaptability by teachers, learners and institutions.

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