Quality and Web-based learning objects: Towards a more constructive dialogue

Peter G. Taylor
Griffith University, Brisbane, Australia
peter.taylor@mailbox.gu.edu.au

Abstract: The use of Web-based ‘learning objects’ is rapidly expanding in all areas of the operation of Australian universities. As universities invest in and develop these new technologies, the need increases for educators to critically evaluate the impact of this paradigm shift (Alexander & McKenzie 1998). The failure to undertake independent verification of its outcomes is a problem for all claims of quality related to teaching, and is seen as a key contributor to the failure to recognize and reward achievements in this area (Brennan & Shah 2000). It also means that the academic community is not well placed to reflect on and debate strategies to achieve more powerful forms of learning—“forms that bring students to deeper understandings and engage them in making meaning” (Hutchings 1996, p. 231). This paper gives attention to the purpose of some conversations about quality. It does so in relation to a specific initiative currently under development, namely a scheme to allow for peer review of Web-based learning objects. The IEEE’s Learning and Technology Standards Committee (http://ltsc.ieee.org), defines a learning object as “any entity, digital or non-digital, which can be used, re-used or referenced during technology supported learning”. Here the term is restricted in its scope to Web-based entities. The background considerations in this paper include discussion of: the need for such a scheme; the nature and purpose of peer review; and, the nature and purpose of conversations.

Keywords: Dialogic conversations; peer review; learning objects.

It seems that everyone wants to engage in conversations about quality—the Federal Government, university administrators, staff and students. But are we all talking about the same thing? And why do we want to talk about it? It is the latter question—the issue of purpose—that is the focus of this paper. Universities have long-prided themselves on the quality of the learning they promote, so are we using the term to re-claim a familiar standard, in ways that align our work with those traditions? Or are we responding to external concerns to be more business-like, seeking to re-frame our practices as ‘quality practices’ in ways that allay fears and promote confidence? Or perhaps we are engaging in conversations about quality because they provide an essential means to come to discover and to make meaningful what we mean by ‘quality’ in relation to rapidly emerging practices, in ways that will create new traditions. There is no reason to fear the relatively rapid emergence of quality as a topic of conversation. And this is an excellent time to reflect on the purposes and processes of higher education.
The discussion here first turns to these background issues, before foregrounding the scheme itself as an example of a disciplined dialogic conversation.

**The need for the peer review scheme**

In addition to the need to develop high quality resources, there is also need for recognition and reward for this work. McInnis (1999), McConville (2000), and Winter and Sarros (2002) comment on the broader transformations in staff workloads and related decline in staff morale in Australian universities. McConville’s (2000, p. 23) research identifies issues related to teaching/learning, especially “increased student contact and the implications of new technology based teaching”, as the major contributors to increased workload. McInnis (1999) states that two thirds of his respondents “report that developing course materials for new technologies has had a major impact on their [increasing] work hours” (p. xiv).

Beyond recognition and reward there is also a need for the existence of particular learning objects, and the knowledge behind their design and construction, to be disseminated throughout the academic community. MERLOT and the OKI are American responses to this challenge. In Australia, the Learning Resource Exchange (LRX) Project, funded by DEST (then DETYA), exemplifies this intention (see http://www.lrx.com.au). Notwithstanding those developments, there is ongoing tension between commitments to competition and to collaboration in the Australian higher education sector, as well as elsewhere (Barnett 2000, Cunningham et al 2000). The development of learning objects is exposed to these same conflicting priorities. Staff are encouraged to make use of resources created elsewhere, yet providing access to those resources may reduce the ‘competitive advantage’ of those who authored them, and their institution.

A third imperative towards this new conversation is the need to address the scholarship of teaching about these learning objects. Any credible argument about their quality requires a rigorous and scholarly basis. Boyer’s (1990) advocacy for the scholarship of teaching was intended specifically to extend the concept of scholarship to include teaching, and through this to raise its profile (and recognition). Consistent with these intentions, attempts to review the quality of learning objects can provide an opportunity to develop understandings of how the scholarship of teaching could and should be used to inform the design, construction and evaluation of these objects. This focus reflects a commitment to scholarship as a primary marker of the value-adding work of academics’ work. Thus, one of the most important reasons for reviewing the quality of learning objects is to develop a basis for recognising and validating the scholarship involved in their design and construction.

**The nature and purpose of peer review**

Peer review has been a central part of the quality assessment and decision-making processes in higher education for many years. Indeed, it is seen as an essential characteristic of faculty work. According to Shapiro and Coleman (2000, p. 987) “[p]eer review is the bedrock of the evaluative process and can best ensure that the quality and standards of the scholarship meet the standards of the academic community.” It is linked to the ‘moral authority’ of peers, and this is why “virtually all quality bodies make peer review a central part of their assessment practices” (Brennan & Shah 2000, p. 17). However, while academics express few concerns about peer scrutiny of research activities, many tend to be sceptical of peer review involving teaching. Brennan and Shah (2000) provide an explanation of this, linking the failure of legitimization of this type of peer review to the absence of shared “values and standards which
are a part of the cultures of academic disciplines” (p. 17). A third reason involves the lack of experience of staff in this form of peer review. It is important to acknowledge that systematic peer review of teaching, where it does occur, is a relatively recent phenomenon. Patricia Hutchings (1996) suggests that, in this culture, the potential success of peer review of teaching processes (or resources) depends on the establishment, through collegial and collaborative efforts, of agreed criteria for judging teaching effectiveness. Conversation provides a means to seek agreement on this issue.

This is both a professional and a strategic issue. The argument here is that, if academics want their professional autonomy to be respected, then it is essential that quality assurance mechanisms be developed, and that those mechanisms be acceptable to the academic community, and to those beyond it. Acceptance within the scholarly community demands justifications that go beyond technical standards and/or ‘client demand’. It requires that the design, construction and use of learning objects be demonstrably and critically informed by, and contribute to, relevant scholarship. Such a scholarly focus on learning objects requires constructive conversations about their nature and role in relation to the purposes and practices of higher education.

The nature and purpose of conversations

Conversations are framed and interpreted in terms of purposes. Jenlink and Carr (1996) identify four ‘idealised’ types of conversations—dialectic, discussion, dialogue, and design—reflecting different intentional settings. Dialectic conversation is a form of “disciplined inquiry into whatever is being examined” (p. 32). Its procedures are those of logical argument, and the underlying intention is the formation of rigorously defensible interpretations. The process of dialectical conversations tends to be closed, with participants inclined to engage in ideological debates. In terms of a conversation about quality, a dialectic conversation involves a disciplined inquiry into what is meant by ‘quality’, with participants justifying their preferences through reference to well developed and articulated conceptualisations.

Discussion is the form of conversation where participants tend to argue their own position, and is “more subjectively influenced by opinion and supposition” (p. 32). Thus personal experience and assumptions tend to be at the centre of the conversation. Here emotion, rather than logic, is central to the formation of coalitions. It tends to result in the formation of discourse communities of like-minded individuals, where mutual ‘liking’ has to do with shared passions and/or commitments to informal and relatively undisciplined ideologies. In terms of a conversation about quality, a discursive conversation involves sharing personal preferences about what ‘quality’ means, with participants seeking to convince others of the value of their preferences through examples, anecdotes and related affiliation-building strategies.

Dialogue is a form of conversation focused on the sharing and construction of meaning. It helps to develop collective mindfulness, and thus, “is a community-building form of conversation” (p. 33). The dialogic processes require individuals to “first examine their personal assumptions or opinions and then suspend these assumptions before the entire group” (p. 33). Through this process participants are exposed to a diversity of assumptions, and the reasons these assumptions are held. More importantly, participants are required to suspend judgement on alternative assumptions, and to refrain from advocating their own preferences. Thus, “suspension creates a space wherein [participants] not only examine but
also begin to collectively create new assumptions and meaning as a community” (pp. 33-34). In this conversational space it is possible to build critically conscious collective purpose and mindfulness, while valuing the diversity of assumptions and opinions expressed. In terms of a conversation about quality, a dialogic conversation involves a sustained attempt to build a collective meaning for ‘quality’, with participants sharing and examining alternatives, then seeking to develop a meaning that is acceptable to all.

The fourth type of conversation – design – is focused on the creation of something new through “disciplined inquiry grounded in systems philosophy, theory, and thinking and practice” (p. 34). In particular, design conversations tend to look beyond existing constraints, seeking to design new systems that avoid or minimise those constraints. They require that participants suspend assumptions about what ‘ought to be’, as well as ‘what is possible’. Thus design conversation “goes beyond the suspension of personal opinions and moves into a suspension of mindsets themselves”. These types of conversations tend to be unusual in everyday experience, and to be associated with the work of creative teams. In terms of a conversation about quality, a design conversation would involve a disciplined inquiry into what ‘quality’ might be, including a careful consideration of the nature of the system that would make that version of ‘quality’ viable and valuable.

Having presented these background considerations, the discussion returns to the questions that opened this paper, questions concerning the purpose of ‘quality conversations’. The next section of the paper applies those considerations, first in a general sense, and then in relation to a particular example—a scheme for peer review of learning objects.

The purpose of quality conversations

The paper began by posing three questions as to the possible purpose of engaging in conversations about quality. Are we using the term to re-claim a familiar standard, in ways that align our work with those traditions? Or are we responding to external concerns to be more business-like in seeking to re-frame our practices as ‘quality practices’, in ways that allay fears and promote client confidence? Or are we engaging in conversations about quality because they provide an essential means to come to discover and to make meaningful what we mean by ‘quality’ in relation to rapidly emerging practices, in ways that will create new traditions.

Conversations that seek to re-claim a familiar standard necessarily draw on particular expressions of tradition—to what ought to be done. As Halpin and Moore (2000, p. 135) point out the reference to ‘tradition’ within arguments is used to justify and legitimate particular courses of action, policies and sets of practices—they are used to exert power or to reinforce relations of power. Any particular ‘tradition’ is invariably presented as understood and uncontestable. In this sense, conversations that draw on ‘tradition’ are likely to be either dialectic or discussive in nature. And they are likely to lead to further solidification of relatively entrenched preferences and/or prejudices.

Conversations that seek to re-frame our practices as ‘quality practices’, in response to external concerns to be more business-like, are also likely to be either dialectic or discussive in nature. It is difficult to engage in either dialogic or design conversation in ways that span this agenda. Business-like tends to be identified and represented by ‘insiders’ to the university system, or by ‘external’ critics of the system, rather than business people who might want to actively participate in such conversations. In fact the latter group tend to be conspicuously
absent from such conversations. Again, the outcome is likely to be further solidification of
relatively entrenched preferences and/or prejudices.

Conversations that seek to discover and to make meaningful what we mean by ‘quality’ in
relation to rapidly emerging practices in ways that will create new traditions, given their focus
on creation, are necessarily dialogic or design in nature. However, they are most consistent
with the ideal of dialogic conversation. This form of conversation requires a high level to
discipline, ie, the willingness to share opinions, assumptions and prejudices, to give reasons
for these, and then to suspend these while listening to the views and reasons of others. But
there are neither well developed ‘traditions’ nor ‘off the shelf’ templates to provide a ready-
made basis for making decisions about ‘quality’ in relation to the rapidly emerging practices of
developing and using Web-based ‘learning objects’. This makes it all the more important to
engage in disciplined dialogic conversations focused on discovering and making meaningful
what we mean by ‘quality’ in relation to these practices and objects. The discussion now turns
to an instance where that challenge is being addressed.

An example: peer review as a dialogic conversation
The process of peer review, as noted earlier, has been a central part of quality assessment in
higher education for many years. In its traditional form this most often involves independent
‘double blind’ review. This process requires that the expertise of the designated reviewer and
the basis of decision making are accepted.

In relation to the quality of Web-based learning objects, a number of reasons for attempting to
design a process of peer review were identified earlier. They included the need to:

- provide independent verification of their quality;
- recognise and reward those involved in their design and creation;
- disseminate information about the nature and availability of existing learning objects;
and,
- develop a scholarship of teaching focused on the design, construction and use of
learning objects.

There are additional imperatives that point to the need for any process of peer review to
involve dialogic conversations. First, the development and use of these resources depends on
multiple forms of expertise—pedagogic, multimedia, and disciplinary—access to which often
requires a team-based approach. While any credible review process needs to draw together a
similar set of expertises, there are significant differences in the motivations and intentions that
tend to be associated with each form of expertise (Taylor 1999, pp 133-134).

Second, the criteria for any such review need to be agreed. Review decisions are more likely to
be credible and valid if they are made in relation to such agreed criteria. In addition, reviews
that involve multiple forms of expertise will require some form of consensus-seeking
conversation. There is a related issue here, namely the potential tension between participants
in this conversation who may feel that their particular expertise is more important to the
creation and/or evaluation process that the expertise of others. The discipline of dialogue
provides a conversational context that addresses this possibility.

Third, given the emergent nature of this work, these conversations should include the creators
of these learning objects as well as the members of any review panel. This enacts the
community building potential of dialogic conversations.
Finally, the review process must itself be user-friendly in order for it to be implemented and sustained. To achieve the outcomes implied above, it is essential that the scheme operate beyond any ‘honey moon’ period.

How might these conditions be achieved? The peer review process reported in Taylor and Richardson (2001), and developed more fully since then, is an example of one such disciplined design. The scheme was developed with funding support from the Australian Government’s Department of Education, Science and Training (formerly the Department of Education, Training and Youth Affairs—DETYA). It allows for independent peer review of web-based learning objects. Creators of these objects seek to have their resource reviewed through contacting one of the Editors whose journals or database repositories are affiliated with the scheme.

The scheme for peer review responds to the imperatives identified above in the following ways.

- **Provide independent verification of the quality of particular learning objects.** The scheme is designed to respond to this imperative through providing a ‘blind’ review service that is independent of particular institutions. The service is managed by editors of particular affiliated journals, eg, HERD and AJET.

- **Disseminate information about the nature and availability of existing learning objects.** The journal editors publish review recommendations as related information as for reviews of books. The information that is published includes descriptions of the learning object provided by the creator/s as well as the rationale for the recommendation, as agreed by the review panel.

- **The review process must draw on multiple forms of expertise.** Each review panel includes three reviewers, whose collective expertise includes pedagogy, multimedia, and the particular ‘discipline’ that is the object of the pedagogy, eg, statistics, biochemistry, critical thinking.

- **The criteria for any such review need to be agreed.** The reviews are based on a set of review criteria and standards that were developed through a number of peer-based processes, as discussed in Taylor and Richardson (2001). The current criteria and standards are available at the scheme’s home page. In the initial elaboration of the scheme, Taylor and Richardson (2001) indicate an expectation that these criteria will continue to change as a consequence of the operation of the scheme.

- **The review process must provide some form of consensus-seeking conversation.** The use of a password-protected on-line conferences to bring together the review panel once each panellist has completed their initial individual review of the resources and accompanying documentation. Comments are posted in terms of the roles of participants as a means to protect the independence of the process. These conferences are moderated by the review manager, and are focused on reaching an agreed recommendation on the value of the resource. That agreement is based on the designated criteria.

- **These conversations should be inclusive of the creators of these learning objects.** The managers of each review have a capacity to invite creators into that conference, either as participants, or as observers. This is possible because of the medium used for these conversations. This is a significant extension of the traditional review process, in line with but not modelled on, that used by the *Journal of Interactive Multimedia in Education* (JIME).
• The review process must itself be manageable and user-friendly. The scheme involves several aspects that respond to this imperative. First, the scheme uses a Web-based tool for managing the review process. This is hosted at the scheme’s home page. This tool allows a review manager to automate a number of aspects of the process, and automatically generates a number of the review-specific emails. Second, all information concerning the scheme is made public at that site. Thus both reviewers and creators have access to the same information. Third, potential reviewers have an opportunity to practise using the review criteria, through a Web-based trial review tool. Finally, reviewers agree to participate in the review process using the published criteria, and within an agreed timeframe. This means that the review process tends to be completed in time-effective ways.

Thus, this scheme for peer review involves a review conversation that is disciplined by its purpose, its management, the published criteria, and the need to complete the review process in an agreed timeframe. It cannot address directly the two other imperatives, namely to recognise and reward those involved in their design and creation; and, to develop a scholarship of teaching focused on the design, construction and use of learning objects. However, its existence is likely to make a positive contribution in both of these areas.

Conclusion

The rapid emergence of learning objects as a central component of pedagogical practice in Australian higher education is the context within which the peer review scheme has been developed. While its success is not yet assured, given that it is in its trial phase, it does represent an attempt to develop a disciplined context for dialogic conversation about the quality of specific learning objects. The scheme links conversation to collaborative and creative action, and provides an essential means to discovering and making meaningful what ‘quality’ might mean in relation to the design and creation of learning objects. Through these conversations it is hoped new traditions in relation to high quality pedagogical practices in these new learning environments will emerge, traditions that focus on and celebrate educational effectiveness.

References


Copyright © 2002 Peter G. Taylor: The author assigns to HERDSA and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to HERDSA to publish this document in full on the World Wide Web (prime sites and mirrors) on CD-ROM and in printed form within the HERDSA 2002 conference proceedings. Any other usage is prohibited without the express permission of the author.