Negotiating Contested Discourses of Learning Technologies in Higher Education

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ABSTRACT

This paper explores the way that learning technologies frame teaching practice in higher education using both autoethnography and discourse analysis (interpretative repertoires). The analysis juxtaposes our own experience in the form of data from two interviews, with teaching and learning policy documents from the group of five Australian Technology Network universities, as a means of investigating the centrality of these technologies in the reconfiguring of teaching practice in higher education for the networked university. The data yielded three distinct discourses: technology as a bridge to globalised opportunity; technology as delivery of learning; and technology as communication and building relationships for learning. The first repertoire provides a utopian vision which glosses over the complex practice of implementation. The second repertoire also omits details of implementation, presenting learning technology unproblematically. The third repertoire, not present in the policy documents, but central to the autoethnographic accounts, focuses on both the possibilities and challenges of learning technologies in practice, and points to the potential for a complementary approach which foregrounds the student-teacher relationship. How these discourses can be reconciled is a central issue for academic teaching practice in higher education.

Keywords

Learning technologies, higher education, policy, practice, discourse

Introduction

The current climate in higher education

Soucek (1994) suggests that the function of tertiary institutions has changed since the 1980s "from guardianship of knowledge and wisdom to ancillary production of knowledge for corporate capital" (p.54). During this time there has been a redefinition of the role of the teacher, "from progressive educator and participant in educational politics to one of competent performer of relatively neutral tasks related to efficient and profitable delivery of pre-specified curriculum, and of being a responsible manager of learning contexts" (Seddon, 1998, p.5). There is widespread concern at the effect that "supermarket" policies have had on teachers' professional lives (Moloney, 2000, p.73). In the current climate few academics have been openly critical of policies within their own institutions, although according to Gaita (2000), far from betraying the institution, such open criticism is the mark of "the true champions of a university" (p. 41). The rhetoric that accompanies online learning at the policy level does not necessarily match actual practice (Conele, de Laat, Dillon, & Darby, 2008, p. 511). With networked technologies central to the changing nature of universities (Lewis, Marginson & Snyder, 2005; Cornford & Pollock, 2003, p. 6), competing agendas concerning online learning have emerged within institutions, with consequences for practice (Lewis et al., 2005, p. 72). It is our contention that educators are confronted with policies that potentially disregard both the learning needs of diverse students and the recent research on teaching and learning, we have a responsibility to engage with those policies, interrogate them, and make a space for constructive debate.

The contest over online learning

Teaching and learning in higher education across the globe is said to be undergoing profound change and transformation by the technologies of learning (Castells et al., 1999; 1996; Kellner, 2003), and organisations have invested in "big" solutions with mixed results. Others argue that online learning, or "e-learning" has heralded "successive false dawns" (McMullin, 2005, p. 67) or "stalled" (Zemsky & Massey, 2004). Pollock & Cornford (2002) discussed three failed online learning projects, and identified the issues contributing to this as not the technology itself, nor any negative attitude of staff, rather "the underlying problem is the sheer volume and complexity of the work required to configure people, machines, objects, texts, and money" (p.371).
This complexity does not seem to be acknowledged in the implementation of institution-wide implementations of online learning (Barnett, 2000; Hannon, 2008), particularly in its demands on people, time and resources. While online learning may be still in a developing phase, its technologies are integral to the reconfiguration of both pedagogy and the organisation of learning. Learning technologies bring with them interests, internal and external stakeholders and a politicised “covert curricula” (Roberts, 2004).

Teaching staff in universities are caught between two trajectories: on the one hand, the promise of the economies of scale with “big” solutions in online learning, with heavy investment in proprietorial online learning, huge commitment of resources and support, and on the other, teaching and learning practices opened up by innovative uses of learning technologies. Lewis et al. (2005) described these two perspectives as inherent in the “networked organisation” (p. 72), from which emerged contested discourses within institutions (p. 72). They noted how networked technologies in organisations did not follow a single logic, but were “socially embedded and therefore highly variable” (p. 71).

With the online technology administered and managed by an information technology unit, there is the risk that “learning experience takes a back seat to the management functions” (Siemens, 2006). The focus of learning management systems (LMS) on “content” and the management of students places pedagogy and engagement in the background. Hotrum (2005) observes that LMS are “progressively being regarded as a hindrance to effective online learning.” With the emergence of easy to use collaborative Web services, Hotrum suggests that “a new generation of Web-based tools and approaches is evolving that are better suited to meet the need for dynamic online learning content, interaction, collaboration, and networking.” The transformative potential of “social software” marks a clear shift away from pedagogies based on managed “content” and repositories of learning objects towards student-centred learning focussed on knowledge production (Gibbs & Gosper, 2006; McLoughlin & Lee, 2008).

The production of instructionally designed online content is one of the trajectories of learning technologies, in which curriculum is relatively fixed, and produced for delivery by many instructors to learners en masse. The other trajectory is the opportunities provided by networked communication to treat curriculum as always unfinished, as “content for meddling with” (McWilliam, 2005). Each trajectory points to different structural arrangements for teaching and learning in institutions, with different notions of learning, of expertise and of the division of pedagogical labour. As the shape of online teaching and learning is still in flux, its contested nature is being played out in a struggle of discourses, where online learning is being shaped by the terminology and the framing notions of institutional, technological and pedagogical interests.

Two examples of the contested discourses of the “networked university” are described by Lewis et al., (2005), where a concern with centralised, standardised control of teaching with technology, co-existed with an interest in the collaborative and democratic use of technologies (pp.72-3). They noted these discourses, though “highly contested”, were not necessarily opposed. A contentious recurring issue for academics concerns how academics negotiate governance of their day to day work, caught between the opposing poles of collegiality and managerialism (Marginson & Considine, 2001). This inquiry takes up an instance of this discussion.

**Our research agenda**

In this paper, our intention was to follow the mismatch suggested by Conole et al. (2007) between the rhetoric of online learning and its practice, by selecting and contrasting discourses from both these realms. Our questions were: how do rhetoric and practice connect or fail to connect? And what are the underlying issues or dilemmas in each discourse? Both discourses concerned online learning in the changing environment of higher education: the realm of rhetoric is represented by the institutional policies from the five Australian Technology Network (ATN) Universities that reflect a similar orientation towards learning technologies; the realm of practice is represented by the interview accounts of the two authors about their own experience with learning technologies. Our intention was to select a case of authentic, situated practice that represents the typical enactment of those teaching and learning policies in higher education practice, that of teaching in a mass learning environment enabled by networked technologies. Our decision to deploy autoethnographic interview accounts by the authors, arose, in part, from experiences in our day-to-day practice of being confronted with issues of large class teaching, approaches to tutoring online groups, reports of intensification of work, all of which raised the ambiguous role of networked technologies and the way they occurred in institutional policy texts and in practice. Our intention was to provide an “emic” or insider perspective on how we
negotiated our own pedagogical practice with institutional imperatives in this networked environment. We did not intend to make universalising claims, but to enter this contested space, and track our personal judgements about online pedagogies and their intersection with institutional policy, on the assumption of relevance: that other teaching academics also encounter pedagogical dilemmas at the intersection of policy and practice in the new higher education environment. While the setting and participants in this study were local, the learning technologies, the policy context, and the teaching and learning practices are replicated globally in higher education. In this paper we bring a innovative approach to analysing practice by deploying a type of discourse analysis which bridges local and global contexts. This strategy problematises discourses of online learning, aims to expand the agency of teaching academics, and thereby reclaim our practice.

Local context

Our current interest in online learning technologies occurs in a particular policy context. In 2004 the Vice Chancellor at The University circulated a discussion paper to all staff entitled *Towards an online strategy 2005-2015*. We refer to the institution in which we worked during the period of research as “The University” because we do not wish to imply that the situation there was unique in terms of a general push towards online learning in Australia, or indeed across the higher education sector internationally. The discussion paper in question documented a vision of how The University would use new technologies in its service to staff, students, alumni, prospective students and partners. At the heart of this vision was the desire to develop a sustainable, customer-focused, competitive, cost-effective, standardised and disaggregated teaching and learning framework that made use of e-learning and online technology. In particular, the online strategy advocated the use of “learning objects” – decontextualised online content that could be shared within and outside The University – as a means of increasing efficiency and reducing costs. While the paper reiterated a commitment to “high levels of customer service and well-developed customer relationship management strategies” (*Towards an online strategy* 2004, p. 3) there was no mention of the difficult-to-measure, but nonetheless valuable, student-teacher relationship.

Data and methodology

A mixed methodology was designed to match the discourses of the public, institutional policies of teaching and learning on the one hand with those of academic practice on the other. Following the researcher-practitioner tradition, an “inside-out” approach (Mann, 2004, p. 206) was used, in which personal enquiry into practice combined with critical reflection becomes “a valid source of knowing” (p. 207). Our approach juxtaposed this with an “outside-in” (p. 207) perspective which applied empirical approaches of coding and categorising to all the data, using a discourse and content analytic approach to analyse the intersection of policy and practice, that is, draw analytical comparisons between the public and personal discourses. This approach located the researchers in the enquiry setting with a focus on practice settings, “both in terms of the discourse in which practices are described and understood and in terms of socially and historically constructed actions and their consequences” (Kemmis & McTaggart, 2008, p. 292).

Two sources provided the data for analysis of these discourses: public documents on teaching and learning policy from five ATN universities, and interview transcripts from two academics who had been working at one of the ATN universities: Bretag (interviewed on 5 August 2005), a lecturer teaching communication courses in a business faculty, and Hannon (interviewed on 26 April 2007), an academic developer based in the university teaching and learning unit. This work is part of a larger project which began in 2005 when Hannon interviewed Bretag for his doctoral research. In early 2007, after conducting research together on the use of computer mediated communication to develop a community of learners (Bretag & Hannon 2008), we decided to revisit the initial interview with the idea of reversing our roles. Using the same interview questions, Bretag interviewed Hannon (see Appendix 1). We then contextualised our analysis of the interview data with a content analysis of five ATN university policies relating to learning technologies. From both these sources, patterns and themes of discourses were analysed.

Teaching and learning strategy documents were from the five ATN universities (Curtin University, University of South Australia, Royal Melbourne Institute of Technology, University of Technology Sydney and Queensland University of Technology). These universities are grouped together under the ATN banner because of their shared development history from colleges to universities in the 1990s, and because of their common focus on “undertaking
solution based research”, underpinned by a commitment to equity and access (Australian Technology Network of Universities). The five ATN documents were:

- RMIT 2010: Designing the Future, (RMIT University, 2007)
- Curtin University of Technology, Teaching and Learning Enabling Plan, (Curtin University of Technology, 2006)
- Queensland University of Technology, Approach to and context of teaching and learning, (Queensland University of Technology, 2007)
- University of Technology, Sydney, Setting the Pace 2006-2009: Strategic Directions for the Current Decade (of Technology, Sydney, 2007)
- University of South Australia, Teaching and Learning Strategy 2006-8, (University of South Australia, 2007).

There were three stages of analysis. Both ATN documents and interview data were analysed using the qualitative analysis software program N6. The first stage of analysis used a simple content analysis by weighting to indicate the keywords most used relating to issues of higher education teaching and learning with technologies. The second stage involved coding sentences and paragraphs to identify the concerns and preoccupations of authors and speakers, then the coded units were organised into themes or categories. In the third stage, these categories of most concern were examined for the regularities in the accounts as they reflected attempts to resolve particular dilemmas, or achieve certain ends. These were identified as interpretative repertoires, for which an associated vocabulary and rhetorical techniques were deployed.

Autoethnography

Rather than seeking to generate a “theory”, the aim in this research was to juxtapose policies relating to learning technologies with our own experience, as a means of exploring and participating in this contested field of inquiry. As practitioner researchers we wanted to situate our own and each other’s experience within the broader policy environment, using autoethnography. Patton (2002) describes autoethnography as “self-awareness about and reporting of one’s own experiences and introspections as a primary data source” (p. 86), and Ellis and Bochner (2000) define it as “writing and research that displays multiple layers of consciousness, connecting the personal to the cultural” (p. 739). Research which utilises autoethnography may include personal narratives, first-person accounts, personal essays, opportunistic research, self-ethnography, and autobiography to mention just a few approaches (as cited in Ellis & Bochner, 2000, p. 739). In keeping with the tenets of qualitative research (see Cresswell, 1998), at times we strategically change to the first person in a conscious attempt to foreground our own positions and experiences. While the personal revelation used in autoethnographic research has been critiqued as a potential risk to the integrity of research, Bruni (2000) counters this view by offering a revisioning of research ethics protocols based on the uniqueness of each research enterprise (p. 30). We would argue further that in foregrounding our own insider status, we interview each other using the same interview structure, and then coded the interviews to reveal “interpretative repertoires”, as described in the following section. In this research, autoethnographical material (as exemplified in the coded interviews) was contrasted with the coded policy documents of the five Australian ATN universities. By insisting on the legitimacy of our own experience, and applying the same rigorous analysis to it, we have responded to Smyth and Hattam’s (1998) call for academics to be “reflexively engaged” in policy issues which directly impact on our practice.

Discourse analysis using interpretative repertoires

A discourse analysis approach to spoken or textual accounts focuses on language use: rather than analysing social representations or cognitive processes, it is concerned with how utterances and accounts are constructed, and the
social effects of what they may represent. Discourse can be viewed as a “social practice” (Wetherell & Potter, 1988, p. 168), and as having an “action-orientation”, with “particular consequences” (p. 171). These effects range from actions in local contexts, the “speech acts” of Austin (1962), where talk may be described as accusing, excusing, justifying, and so on, to accounts which may be described as having broader effects such as arguing a particular institutional position.

Much discourse analysis occurs in local settings, focused on the specifics of an encounter, and one of the criticisms and challenges of such analysis is how to make connections beyond the situated context (Alvesson & Karreman, 2000, p. 1127). In our methodology we wished to bring an “outside-in” perspective to both sets of data, the author interview transcripts and policy documents, and make the link between the local, conversational, “transient” discourse to the extended, durable, “meanings ‘existing’ beyond” (p. 1130). We selected the particular discourse analytical technique of “interpretative repertoires”, developed by Potter and Wetherell, (1987), to make this link between the local setting and the social world of practice: in our study, to connect the discourses of the localised interview transcripts and public policy documents. An interpretative repertoire was defined by Wetherell as: “a culturally familiar and habitual line of argument comprised of recognisable themes, commonplaces and tropes” (Wetherell, 1998, p. 400). Hence speakers and writers deploy rhetorical and lexical patterns to accomplish particular tasks. An analysis of interpretative repertoires can explore the discourses individuals draw upon to construct their social world through talk and texts in order to achieve particular ends. An example of an interpretative repertoire may be the use of the term “flexibility”, and the effects this produces when used in powerful policy documents.

Interpretative repertoires tend to be deployed to resolve a dilemma in the social context for the speaker/writer (Potter & Wetherell, 1987, p. 152). In the current study, repertoires were analysed to identify in the authors’ own talk or text how they attempted to resolve contextual dilemmas in their practice and accomplish particular tasks, and their use of specific rhetorical techniques to do this. We analysed the discourse of each of our interview transcripts, identified repertoires in these accounts, and compared these with the repertoires expressed in the ATN university teaching and learning strategy documents.

Findings

The two sets of data (ATN policy documents and authors’ interview transcripts) were coded using the qualitative software N6. The findings below consist of content analysis for keywords, coding into categories, and interpretative repertoires identified from both sets of data.

Keywords

The data was examined for recurring keywords relating to how institutions and academics engage with learning technologies. Total occurrences of keywords, truncated for variations using an asterisk, are shown in Table 1: Occurrences of key terms.

<table>
<thead>
<tr>
<th>Key terms</th>
<th>ATN documents (Total 25,696 words)</th>
<th>Authors’ interview transcripts (Total 19,510 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>improv* (improve, improving, improvement)</td>
<td>135</td>
<td>6</td>
</tr>
<tr>
<td>communit* (community, communities)</td>
<td>57</td>
<td>10</td>
</tr>
<tr>
<td>engag* (engage, engagement)</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>respons* (response, responsible, responsibility)</td>
<td>41</td>
<td>8</td>
</tr>
<tr>
<td>techn* (technology, technological, technical)</td>
<td>37</td>
<td>50</td>
</tr>
<tr>
<td>flexib* (flexible, flexibility)</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>online</td>
<td>27</td>
<td>75</td>
</tr>
<tr>
<td>value</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>innovate* (innovate, innovation)</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

The key terms mentioned most frequently were:
- For the five ATN institutional policy documents: improve/improving/improvement (135 occurrences), followed by community/communities (57), then engage/engagement (43 occurrences), technology/technological/technical (37), flexible/flexibility (28), online (27).
- For the authors' interview transcripts, two keywords were mentioned with much greater frequency than all others: online (75), and technology/technological/technical (50).

**Categories**

The process of coding the texts from both data sources resulted in a total of 29 codes, with the coding unit being the paragraph. The codes were grouped into four categories in response to the question: what issues of concern are expressed around use of technologies for learning? These are shown with their coding frequencies in Table 2: Categories and codes for each data source.

<table>
<thead>
<tr>
<th>Coding</th>
<th>ATN documents</th>
<th>Authors' interview transcripts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude to new technologies</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Changing role</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Critique</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Engagement with technology</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Innovation</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Interculturality</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Leading</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Multiple roles</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Research</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Sharing and mentoring</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Teaching</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Time constraints</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td><strong>Institutional context</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility (of learning arrangements)</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>Institutional requirements</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Institutional support / Workload</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Policy vs practice</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Principles &amp; Values</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Strategy</td>
<td>111</td>
<td>0</td>
</tr>
<tr>
<td>Strategic Actions</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td><strong>Online technologies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication issues</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Complement to face-to-face</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Embodiment</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Limitations</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Marginalisation</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Technophobia</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Types of e-learning</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement with technology</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Student needs</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Student-teacher relationships</td>
<td>0</td>
<td>39</td>
</tr>
</tbody>
</table>

The four categories were ordered to reflect the density of coding, shown in Table 3: Categories from data sources.
Table 3: Categories from data sources

<table>
<thead>
<tr>
<th></th>
<th>ATN documents</th>
<th>Coded units</th>
<th>Authors’ interview transcripts</th>
<th>Coded units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional context</td>
<td>237</td>
<td>Academics</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>Online technologies</td>
<td>6</td>
<td>Online technologies</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Academics</td>
<td>0</td>
<td>Students</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>0</td>
<td>Institutional context</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

The order of categories in Table 3 provides an indication of the relative emphasis each category or issue was given by the authors of the ATN documents, compared to our interview transcripts: the institutional context was the predominant concern of the ATN documents, comprising 97% of codes for that data source; and for the interview transcripts, the main concerns were academics (39%) and online technologies (28%). A striking feature of the comparison of codes in Table 2 was that the concerns expressed by us in our interview transcripts were shared with only three codes with the ATN policy documents: flexibility, types of e-learning, and institutional support.

A strong disparity between policy documents and interview transcripts emerges from the coding. The two primary codes for the ATN documents, strategy, and principles and values, comprised 66% of codes for that data source, and were not coded at all in the Hannon and Bretag interviews. The coding for the two interviews encompassed a total of 26 codes, the main concerns indicated by five codes with over 20 coded units, which comprised 36% of codes for the transcripts. These five codes were: teacher-student relationships (39 units), teaching (35), policy vs practice (concerns with institutional pressure on teaching and learning practice) (27), complement to face-to-face (how technologies complement face-to-face learning settings (24), and student needs (21).

Interpretative repertoires

Interpretative repertoires were identified first by focusing on those categories which reflected the greatest concern expressed in the interviews and policy documents, then by locating specific uses of text or talk that attempted to resolve uncertainties or dilemmas of practice. Three interpretative repertoires were identified, or ways of writing or talking about the technologies of teaching and learning in higher education in the data sources. These were:

- technology as a bridge to globalised opportunity;
- technologies as delivery of learning; and
- technologies as communication and building relationships for learning.

The first repertoire was used exclusively by the ATN teaching and learning policy documents, and presents an institutional perspective on technology in higher education, where the reader is offered, via the institution, access or a bridge to a networked world. This repertoire reflects the concerns of the ATN documents coded as strategy, principle and values, flexibility. The remaining two repertoires were both drawn on by Hannon and Bretag in their interviews, but in contrasting ways: technologies as delivery of learning, and technologies as connecting people to build relationships for learning. These correspond to the areas most frequently coded for the interview transcripts: teacher-student issues, technologies and learning, and concerns with policy and practice. Each repertoire is discussed below.

Analysis and discussion

Technologies as a bridge to globalised opportunity

The ATN teaching and learning strategy documents reflected the imperatives for universities to position themselves in a global market, the need to respond to the demands of learners, and the fluid nature of the times and spaces of the learning environment. Keywords used frequently were variations on “improve”, “community”, “engage”, “response”, “technology”, “flexible” (see Table 1). These were associated with terms such as global passport, global engagement, connected, strengthen, incorporate, provide a real-world education, best practice, appropriate technology, define our global network. These keywords and terms located the university as an active agent in a disaggregated, global field of endeavour.
Technology was offered to prospective students as a key which offers access to the world: technological advances open up opportunities (QUT) provision of resource-rich, technologically-mediated forms of delivery that enable access (UniSA) Our flexible learning environment and effective use of technology in teaching and learning will underpin the University’s reputation for excellence in the facilitation of learning (UTS)

In the teaching and learning strategy documents, technologies both underpinned and enabled institutional goals. The authors of the ATN documents consistently framed a field of operations which reflected a volatile, globalised and unpredictable world of shifting markets and demands, “major challenges” in global education, and competition with other educational institutions. Having constructed such a challenging environment, a response was proffered by institutions in the form of self-descriptions: they were adaptable, internationalised and technologically cutting edge, and were able to offer their audience global reach, and access to opportunities in this unpredictable world. The rhetoric of “community” was linked with work and business:

- engage students and staff with the professions, industry, business and the community to maximise opportunities (UTS)
- a global university grounded in Melbourne and connected to communities, enterprises and industry across the world (RMIT)

The use of metaphors of connection and community was associated with descriptions of a global, competitive, dispersed and internationalised field. The response of the institutions was to embrace this dynamic world:

- shaping the educational foundations of existing and emerging fields of practice (UTS)
- reflect our global engagement with industries and communities. (RMIT)
- research and teaching will be conducted in many countries through innovative use of e-learning and e-business (UniSA)

Institutions were positioned as locations of access to a complex global field, with access offered through technologies and international networks. Potential dislocation of the times and spaces of learning was resolved with a virtuous rhetoric associated with technology:

- Technological advances open up opportunities for adding newer and more innovative methods to the spoken lecture and the face-to-face seminar. (QUT)
- The University will be a leader in global access to learning that is enabled by emerging technologies. (UniSA)

The uncertainty of the “complex workplace and community of the 21st century” (UTS) is made palatable by the keywords “community”, “engage”, “response”, “innovative”. Technologies, then, are a key to a dual network, technical and social: one offers the reader (presumably a student) a network which provides “technologically-mediated forms of delivery”, the other offers social access and connection to this high-tech, utopian community.

The policy documents used the metaphor of access or the “bridging” repertoire to orient the reader to an imagined high-tech world beyond the institution, and was not deployed at all in the interview transcripts. While the interviews did, in fact, reflect institution concerns, in the codes policy and practice, and institutional requirements, these concerns were oriented towards adapting teaching and learning practice to the institutional context; that is, they were inward looking. The contrasting outward looking orientation of the policy documents constitutes one disjunction between discourses of technology that impacts on practice.

Technologies as delivery of learning

In Bretag’s account of her teaching practice (Interview August 2005), she expressed a dilemma concerning her position in the middle between institutional strategies of teaching and learning and her teaching practice as an academic. Bretag described two contrasting learning settings in her practice: one involved small groups where face-to-face communication and email dialogue were combined and resulted in successful deep learning outcomes; the other involved coordinating large international student cohorts and resulted in a heavy workload:

We’ve got, over the year, about 700 in our course now, you know, because we teach in Malaysia and Hong Kong and here, and just maintaining the standard service to those students is as tough as it gets. (Bretag)
This dilemma was expressed in terms of the difficulty of negotiating with an online strategy that “frames what we do”, that is, determines the context of teaching practice:

It seems to me we’ve gone too much that way, economic, economic, economic, and I’m worried about the online strategy being that way. I’m not saying there aren’t elements of it that would actually make a lot of sense, but if we’re constantly thinking about hey, we’ll be more efficient... (Bretag)

Bretag located her practice at two points, with the “we” that thinks about efficiency, as well as the “I” that attempts to adapt “elements” of the economically driven strategy. In her discussion of this issue, the two points are too far apart for Bretag to find a balance or negotiate her practice satisfactorily with either.

The rhetoric invoking the economic determinants of the contexts of teaching was associated with the institutional application of online learning technologies. Hannon (Interview, April 2007) described an encounter with an academic manager for whom he was conducting staff development in using online discussion, who equated learning technologies with a future institutional shift to wholly online courses, stating that, “this is the model we’re going towards, where the university has no option.” In Hannon’s account he was concerned that the online strategy of the institution was interpreted unproblematically with a technology-led shift to online courses.

Hannon then identified an institutional effect in which learning technology became first separated from teaching practice, then implemented by organisational units removed from teaching and learning priorities:

In the organisational sense you’ve got IT departments and they have their own interests and they put up technologies to use, and in the sense the technologies become the end themselves. (Hannon)

A consequence of the separate interests of those who implement learning technologies (“IT departments”) from those who teach with them, then, created the conditions for a technology-led approach to emerge to a teaching setting, which functions “like a default pedagogy”. Hannon acknowledged Goodyear and Jones (2003, p. 40) for this term:

I think it’s wrong to promote people to use a particular technology, it’s got to be the use to which it’s put, and almost always in an academic issue there’s no simple one solution. ... so the technology always tries to take centre stage. I’ve realised, and if you leave it alone it will do that, and if it does that it starts corroding or corrupting pedagogy. (Hannon)

In expressing this strong view, Hannon indicates a conflict in his practice of academic development in online learning, between “opening people’s eyes” to the possibilities of learning technologies and institutional constraints on teaching practice.

Bretag identified a value conflict in her practice, where online strategy was “largely based on an economic rationale”, and doesn’t fit “with an educational rationale”. Bretag identified efficiency as a value in the underpinning of the online strategy, with implied time saving. In fact, the use of learning technologies came at a cost to her and her colleagues:

It’s very time intensive to really use it to its full capacity, so then that takes me back to that question about our online strategy. I don’t believe it saves you time; this didn’t save me time, this just changed my life. I’m sorry, I’ve got two different priorities going there, this changed my student’s life, it didn’t save anybody time, it took a lot of time. (Bretag)

Bretag was concerned that her style of teaching practice, which had produced profound effects on student learning, had no place in the institutional online strategy exemplified in the “delivery” repertoire.

Technologies as communication and building relationships for learning

Hannon contrasted the open nature of the Internet with learning management systems, which he described as emphasising “managing content”, despite some interactive software:

there’s an assumption that doing a course is accessing content... As well they have a discussion facility but in a sense it’s an add on, it’s really about accessing content and behind that there’s this vision of distance education which is the postal one. (Hannon)
Hannon equates the learning management systems with the “default pedagogy” of the model of content access, and draws a contrast to the “new social software” which places communication as the centre of its model. This clash of models – learning as communication versus learning as access – has limited the extent to which innovative and interactive software can be brought into institutional teaching and learning practice.

Bretag described as central to her teaching approach the process of building a relationship with a student in an intercultural context, and she had developed a research informed practice which was founded on achieving successful intercultural or “third space” communication. This approach is closely tied to a perception of student needs in the learning environment:

They’re actually here for a much broader and deeper cultural experience, and you only get that cultural experience with interacting with people, and sharing culture and sharing of yourself. (Bretag)

However, Hannon frames this as a need for contact, rather than a need for being in a particular physical location:

When it comes down to contact, ways of contacting people, whether you do this in a group form or by email I think, well, it comes down to that contact, that’s what students tend to like. (Hannon)

Bretag attempted to accommodate her practice to the institutional online strategy, and despite professing scepticism and ambivalence, suggested that online materials and online learning, “can complement the face-to-face, but I just don’t think it should replace it.” Moreover, “something about the medium”, in her pedagogical use of email, afforded greater sharing and disclosure than the face-to-face class setting. For Bretag, modelling “complementarity” was part of her role of a teaching academic, and in the intercultural context, this involved sharing experiences mutually. Such modelling gave students new to Australia an “insider view”, which she described as part of the reason they are studying in Australia. The student need for contact, particularly contact of an intercultural nature, underpinned her discourse of relationship building as central to her teaching approach, and student-teacher relationships was the code that attracted the highest level of coding in both Bretag’s and Hannon’s interview transcripts at 39 units (see Table 2).

The keywords most frequently used in the Bretag and Hannon interview transcripts were “flexible/flexibility”, and “technology/technological/technical” (Table 1). These tended to be used in a descriptive manner, reflecting the pervasiveness of these words in descriptions of teaching and learning contexts and practice. By contrast, the ATN policy documents reflected a strategic, goal-oriented purpose, and technology related words were softened by positive associations, and closely positioned with terms such as, “opportunities”, “resource-rich”, “excellence”, “enable access”, “effective use”.

Bretag invoked two distinct but opposing ways in which online technologies impacted and shaped her practice. In the first, online modes were described as offering greater opportunity for blended learning: they were able to liberate students’ expression when informal language was used online, and enable the formation of deeper relationships via one-to one online communication, particularly in the intercultural context. The second way her practice was shaped was by the pressures of teaching large cohorts afforded by online learning systems, with the result that teaching became “maintaining the standard service”, and the economic rationale underpinning the online teaching and learning strategy which marginalised the “educational rationale”.

For Hannon, central to his academic development practice was innovative online learning approaches that were situated and contextualised in their use, enabled reflective and deep learning, and were responsive to workload issues for teaching academics. A dilemma arose for Hannon when online teaching approaches were derived from an ideal of all online, off-campus, mass learning contexts, the technology use overshadowed the pedagogy, and technology became a platform rather than a learning space.
Summary of the three repertoires

The first repertoire, deployed exclusively by the ATN policy documents, was technology as a bridge to globalised opportunity. We have shown that these documents metaphorically connect the reader, via the institution, to the global community, with learning technologies taking the role as that bridge. In contrast to this strategist’s perspective, the second repertoire, technology as delivery of learning was drawn from Hannon and Bretag’s perspective on using learning technology systems scaled to large, distributed teaching contexts, in a similar globalised higher education scenario. Both repertoires related to technology enabled education with the capacity for global reach, but with a crucial distinction: the former reflected a strategic and visionary perspective which was unifying and community oriented, whereas the latter used a rhetoric which was economically oriented, institutionally focussed and deployed the vocabulary of the IT help-desk.

The third repertoire described the deployment of technologies as communication and building relationships for learning, where technology augmented the learning context, extended pedagogical scope by offering more modes of interaction and means of “sharing culture”. This repertoire was not used in the ATN policy documents. The perspectives and goals of each repertoire are schematised in Table 4: Contrasting repertoires of learning technologies.

<table>
<thead>
<tr>
<th>Interpretative repertoire</th>
<th>bridge to global opportunity</th>
<th>delivery of learning</th>
<th>building learning relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>ATN policy documents</td>
<td>Author interview transcripts</td>
<td>Author interview transcripts</td>
</tr>
<tr>
<td>Perspective</td>
<td>Strategic: visionary, a global, technologised world.</td>
<td>Implementation: access to learning, reach, scalable.</td>
<td>Practice: situated contexts, interactive, communicative style</td>
</tr>
<tr>
<td>Goal or accomplishment of repertoire</td>
<td>positions institution as global player</td>
<td>provides access to large-scale, distributed cost-effective education</td>
<td>augments face-to-face settings and enables deep and effective learning</td>
</tr>
<tr>
<td>Rhetoric</td>
<td>improve, engage, response, flexible, community, global, appropriate, innovate</td>
<td>economic inevitability, normative positioning of large-scale online learning</td>
<td>relationships, interaction, sharing cultural experiences, learning as change</td>
</tr>
</tbody>
</table>

Both the bridging and delivery metaphors of the first two repertoires have the effect of diverting attention from the actual conditions of teaching and learning practice, from the concrete considerations of organising and coordinating time, place, people, interactions and technologies, and especially maintaining quality of teaching and learning in mass or spatially dislocated settings. In the second repertoire, of technology as delivery, learning technologies are presented as neutral, a platform or system which is inherently separate from pedagogy. This repertoire deflected attention from the work involved with learning technology systems, in making a delivery platform work in the peopled settings of teacher-learner engagement. The work of organising the teaching and learning environment and engagement with colleagues and students is left to the third repertoire of communication and building relationships. The two repertoires of technology as “bridging” and as “delivery” are institutionally oriented, and project an idealised world where the work of building relationships is invisible.

Conclusion

This research aimed to explore the intersections and disjunctures between our own situated practice and the rhetoric expressed in policy documents relating to the use of learning technologies. An autoethnographic approach provided the starting point from which to reflexively engage in this process, as it allowed us as both practitioners and researchers to draw on our personal experience. Using autoethnography in combination with discourse analysis, interviews by and of the authors were contrasted with the institutional policies from the five Australian Technology Network (ATN) Universities to identify “interpretative repertoires” or recognisable themes, commonplaces and tropes.
It was apparent from the findings that there was a separation of discourses around teaching and learning with online technologies that was not easily reconcilable. The author interview transcripts revealed teaching practice that embodied a strong commitment to using online technologies to develop relationships for deep learning. This repertoire, which emerged from the context of practice, stood in stark contrast to the strategic discourse exemplified in the university strategy documents, and the functional discourse of implementation. The question raised was whether any shared ground exists between the “social worlds” (Wetherell & Potter, 1988, p. 171) depicted by these discourses.

Our findings confirmed research that found contested discourses around learning technologies in institutions, where technologies intensified the tension between technological management functions and teaching practice (Lewis et al., 2005; Siemens, 2006). Our analysis also explored the resources which we personally drew upon to respond to the resulting dilemmas in our own practice. While we clearly recognised that learning technologies provide access to large-scale, distributed cost-effective education, the autoethnographic interview data also demonstrated that our commitment to learning technologies went well beyond this functional stance, despite the challenges in our day to day practice. As noted previously (Pollock & Cornford, 2002; Roberts, 2004; Hannon, 2008), the actual work of organising people, technology, and resources, is complex and does not match the abstracted model of the delivery platform and the futuristic e-learning promise. The dilemmas of practice experienced in online learning settings were glossed over by the repertoire of technology as bridging, and occluded by the repertoire of technology as delivery. However, the repertoire of technology as building relationships for learning, identified in the autoethnographic element of this research, offers an alternative discourse to academics who wish to define, maintain and restore the centrality of their practice, while simultaneously working within a mandated policy framework.

References


APPENDIX 1: Interview Questions

1. Your role as educator:
   Can you describe your role – it may be multiple - your area of expertise, your teaching and research areas
2. First use:
   Describe your first use(s) of e-learning technologies. What was it, when, was it successful and so on. How did you discover it?
3. Changes in use:
   Have you discarded or shifted away from any uses of e-learning approaches or technologies? Why?
4. A specific current use:
   Can you describe a current use of e-learning technologies or computer mediated communication that is significant for you? Briefly, how did this project arise, and what do you hope to achieve?
5. How does this project fit in with the organisation framework and IT system.
6. What has worked well in this project or related areas? What has been opened up by this engagement for you or others?
7. What hasn't or doesn't work well in this project or related areas? Has anything or anyone been constrained, excluded or foreclosed?
8. Can you describe any unexpected consequences of in your use of networked communication technologies in this project?
9. Can you describe any innovative uses, adaptations, or workarounds involving technologies for this project that you have discovered or used with some success?
   - Innovative uses include “official” uses, which are supported and presented by your organisation, and “unofficial” uses, which are those discovered through your own research and contacts.
10. What concerns you about where e-learning is heading? Can you comment on the direction of your work with e-learning.