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Chapter 14

REFINING PEDAGOGY BY REVIEWING PROFESSIONAL LEARNING FOR ONLINE COURSE DELIVERY

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ABSTRACT

This chapter tracks the activities of two academics from two Australian regional universities wishing to make their online courses more interactive, extensive and wide-ranging through the infusion of Web 2.0 technologies that were unfamiliar to them. In particular, the research investigates how the academics went about improving students’ learning engagement and increasing ‘learning challenge’ through introducing ‘new’ online student experiences. Two case studies focus on the academics’ professional learning and the support they sought for their own development and engagement, with the view to improving student learning. This will become increasingly important in the Australian higher education context, since from 2012 federal funding for higher education will follow students’ course choices and will cease to be allocated to universities through quota systems. Teaching ‘quality’ is seen as a critical determinant of students’ preferences and decision making. The motivation behind this policy and funding shift is to intensify market pressure to drive up ‘quality’ and responsiveness to consumer choices. Given this particular feature of Australia’s higher education policy environment, government documentation on how ‘quality’ learning would be determined formed the basis for this research.

INTRODUCTION

The Australian federal government’s higher education statements on quality learning (DEEWR 2010) suggest a strong correlation between learning engagement and learning outcomes, with academic challenge, self-regulation and learning support being critical factors. These factors form the basis of the Australasian Survey of Student Engagement
(AUSSE) undertaken in all Australian universities and resultant AUSSE Institutional Reports (ACER 2009; Coates, 2008a 2008b). Understanding the critical role that teachers play, the AUSSE’s Engaging Students for Success document (ACER 2009) highlights the need for academic challenge and support to achieve desired student learning outcomes. Learning ‘engagement’ is described as the quality of student effort devoted to educationally purposeful activities and participation in the learning environment that contributes to learning outcome achievement beyond what is required for assessment tasks (Krause and Coates 2008). ‘Engagement’ is linked to ‘self-regulated learning’, or the personal initiative, perseverance, and adaptive skill students demonstrate through setting learning goals and strategies; and self-monitoring and making modifications to personal and social learning environments to improve learning outcomes. Learning ‘challenge’ refers to high learning expectations, the analysis, synthesis and organisation of ideas, and making and applying judgments, theories or concepts. Learning ‘support’ refers to the availability and extent of assistance, encouragement, resources, and relationships within the learning community.

To illustrate quality learning support and challenge the AUSSE refers to Little’s (1975) typology of learning climates. Little’s typology diagrammatically depicts levels of learning challenge and learning support via quadrants formed along axes representing low to high challenge and low to high support. The typology represents four predominant learning climates which differ on the basis of the learning challenge and support provided. A ‘cultivating’ learning climate describes the optimal learning situation, with learners experiencing both high support and high challenge, while the least beneficial situation is a ‘neglecting’ learning climate, with both low levels of support and challenge. In an ‘indulging’ climate rewards are not contingent on effort or responsibility (high support but low challenge), while a ‘training’ learning environment offers high challenge but low support. Using Little’s typology, the AUSSE argues that Australian universities should provide cultivating learning climates to produce quality student learning engagement and outcomes, and high learner satisfaction and retention (Coates 2008a, 2008b).

It is argued here that if a cultivating learning climate is considered to embody the optimal conditions for student learning success, the same conditions would apply to academic learning. The experiences of two academics undertaking professional learning are described below, in order to gauge the learning engagement and support they received. The academics chose to introduce Web 2.0 technologies they had not previously used into a semester length course of their choosing. The study observed their experiences and opinions intensively over the duration of the semester. Both academics were experienced in teaching through online and flexible learning delivery.

THE RESEARCH

While following a grounded theory building approach generally, a design-based research methodology was adopted. Design-based research is becoming increasingly popular in the field of technology-supported learning due to its premises about the functions and purposes of research in developmental areas. In particular the Design-Based Research Collective (2003) argues that good design based research closely matches research purposes. That is, the central goals of designing learning environments and developing theories of learning are intertwined.
Both the development and research take place through continuous cycles of design, enactment, reflection / analysis and redesign. Sharable theories are developed to communicate relevant implications to practitioners and other educational designers, and the research chronicles how designs function in authentic settings, to aid the discoveries of other researchers and practitioners. Successes, failures and interactions that refine understandings about learning issues are documented, with the overall aim being to increase capacity in ICT innovation and usage (see also Meier, 2007).

Hoadley (2004, p.204) suggests that design-based research enhances both innovation and experimentation since:

- the research program often involves a close relationship between researchers and teachers or implementers blurring the ‘objective’ researcher-subject distinction
- it fosters tentative generalization i.e. results are shared without the expectation that universality will hold
- the researcher follows new revelations where they lead, tweaking both the intervention and the measurement as the research progresses; and
- the researcher documents what has been designed, the rationale for this design, and implementers’ and researchers’ changing understandings over time of how a particular enactment embodies the hypothesis that was tested or otherwise. In short, the treatment’s fidelity to theory is initially, and sometimes continually, suspect. This leads to a broad documentation of the intervention to catch all relevant, but unanticipated, consequences of the design on the enactment.

Two teachers from two regional universities, from two distinct faculties and teaching in different disciplines were voluntary participants in the research. (Others were also involved, and different aspects of the research have been recorded elsewhere [e.g. Starr, Stacey and Grace 2011], but this chapter focuses on the responses of the two teachers only.) The research took place during one academic semester. Surveys and semi-structured interviews were conducted, and the teachers were invited to participate in research-focused blogs as part of the project. To commence, the teachers met with a reference and support group to become familiar with information about learning engagement, self-regulation, academic challenge and learning support. Technical staff conducted Web 2.0 demonstrations while academic developers lead discussions about possibilities for course design inclusions. The teachers planned their online approach and were offered technical, pedagogical and collegial support. Each teacher recorded observations and experiences and participated in surveys and interviews. Armed with advice, support and much goodwill, the teachers developed and implemented their courses incorporating new online technologies.

**PROFESSIONAL LEARNING EXPERIENCES**

Below we present case descriptions of the experiences of our two teachers, Mary and Mike (pseudonyms), when introducing new technologies in their courses. Three identifiers used in these accounts refer to different phases of the research: the planning phase (the initial, pre-course stage), the performance control phase (the course implementation and monitoring
phase), and the reflection phase (the course evaluation phase). Mike focused on an online course with no face-to-face interaction, while Mary chose a blended learning course comprising online and face-to-face components.

Mary’s Experience

Mary has spent the last five years experimenting with online learning environments with the support of academic developers at her university. There were Web 2.0 programs she had not used and she wanted to try these. Mary’s course involved both face-to-face and online learning. Students’ learning experiences were supported by educational technologies including Moodle (a software package for producing internet-based courses and websites), blogs and e-portfolios. Based on her previous experiences with this course, Mary aimed to create a blended experience to promote student engagement by increasing the level of weekly active learning requirements. She was keen to increase the level of learner self-regulation to address increased workload stemming from growing cohort sizes. The course covered the curriculum while aiming to develop students’ ICT skills through assessment requiring demonstration of ICT usage.

Mary sought assistance by engaging academic development support staff from the start of her course. Being familiar with Web 2.0 possibilities she was eager to continue to learn while teaching and assisting students with their learning. Her analysis of the type of blend required for self-regulation and learning engagement among her students was a major imperative for her revised technological usage. She planned her course unit in phases while introducing a student forum to promote active learning via online discussions, as demonstrated by her survey responses below:

Phase 1 Inquiry: use a website evaluation plan to assess what students know by Week 3
Phase 2 Gathering: course material introduced during Weeks 1 to 5 – this is new information learners need to know (to be assessed through a Week 6 Test)
Phase 3 Processing: Weeks 7 -11, virtual presentations and material to critique virtual presentations (I am transferring responsibility to learners; I’ll guide from the side)
Phase 4 Applying: face-to-face de-briefing in Week 12 to celebrate and acknowledge the presentations.

I plan to adopt a more structured approach to auditing a sample of the weekly blogs to check how students are progressing throughout the semester... I have employed a lurker [a person who monitors websites and forums] to monitor student engagement as well as identify the themes emerging in the public display of their thinking and comments. (Mary, Planning phase)

Outcomes of Mary’s planning phase included changes to the usual timing, weighting, and criteria applied to assessment tasks. The rationale for the changes reflected Mary’s desire to promote self-regulation, engagement and sense of a learning community amongst students. Blogs, e-portfolios and forums were built into the blend to monitor students’ levels of self-regulation and engagement. Assignment tasks required students to engage with Web 2.0 technologies: setting up a blog and e-portfolio, producing an action plan for a website review and contributing to online discussions. At this stage, Mary predicted one possible hassle:
"There may be a sustainability issue with forums, especially when there is (sic) expectations for immediate responses... to be available 24/7". (Mary, Planning phase)

While Mary’s implementation was consistent with plans and stated objectives, predicted problems arose alongside unforeseeable ones. University-wide problems with the Learning Management System (LMS) created angst and anxiety amongst students, and, as students demonstrated higher levels of active learning required for the assignment task, Mary’s workload issues intensified:

Currently [I’m experiencing] some issues... in particular increased workload linked to more active discussion forums lead by active learners and expectations regarding the immediacy of the response. (Mary, Performance Control phase)

Thus, while happy with course modifications, Mary felt its potential was constrained without additional staff and time. She did, however, continue to experiment with improving the course through her own growing familiarisation with new applications, and passed on what she learned (including difficulties) to students via the online discussion. What emerged was active support and suggestions from teachers and students to become a functional online learning community. Blending the outcomes of active learning and self-regulation provided part of the solution to lecturer workload, since there was evidence of students assisting each other in the forum and using their action plans to monitor and adjust their approaches to completing the set assessment tasks. Mary reported:

Students are using forums to answer each other’s questions... The assignment structure includes an action plan for completing and submitting assignments. This strategy is being complemented by discussion forums, which are being used to both provide support and generate new knowledge relevant to this final assignment. (Mary, Performance Control phase)

Mary also reported evidence of active learning occurring in non-assessed tasks. While this was a desirable outcome, she was somewhat challenged by the growing autonomy of her students:

Non-assessed weekly discussion topics have high levels of active participation. This has created some tension with the lecturer as she feels she should be participating / commenting to a similar level as the group. (Mary, Performance Control phase)

Mary was pleased to be able to document evidence of the success and impact of her mid-semester plan which aimed to foster peer support via the forum, as the following student-to-student posting demonstrates:

Hi Lucy... I understand that it’s overwhelming at first but DON’T STRESS! ... once you get the hang of it, you’ll be right. I have never done anything like this either but it just takes time to play around with the whole thing. Here are some tips... (Student forum entry)

To monitor her efforts and students’ responses, Mary requested personal feedback about student engagement, cooperation, learning challenge, support and satisfaction throughout the course. Through these interactions changes were introduced in response to student feedback.
In some cases however, Mary persisted with the planned blend despite resistance from the students:

There was some initial resistance to technology ... setting up a blog and e-portfolio. The e-portfolio required a higher learning curve, but it also resulted in higher quality learning. (Mary, Reflection phase)

At the end of the semester when asked: “Were you able to achieve a sense of community with your students through the use of ICT for this course?” Mary’s response indicated her own learning challenge, engagement and self-regulation as a learner, as well as that of some of her students:

Yes, probably more so this time than in the past – it was huge. I had to keep up with 50 students... very active forums and they answered a lot of the questions. I had a glitch in one of the forums – [persisted with] Moodle... without the familiarity – I put myself into a bit of discomfort... it took me a few weeks to sort it out. Also - half a dozen [students] failed the blogs because they didn’t do the work.

Mary noted benefits for international students who did not have English as a first language:

International students [appeared to have] much more positive experiences interacting online and put in an inordinate amount of time to show that quality, with language/cultural barriers being overcome. (Mary, Reflection phase)

Throughout the semester Mary monitored the levels of students’ and her own self-regulation and engagement, recording reflective notes and identifying changes to introduce in each phase of the course in the following year, for example:

Next year I will allow for student input into the creation of rubrics to enhance engagement. (Mary, Reflection phase)

**Mike’s Experience**

Mike is a Senior Lecturer with experience both as a student and lecturer in online environments. Mike used feedback from prior students to plan his course - they requested technology-based opportunities for synchronous interaction to allow engagement with their lecturer and/or peers. Mike’s learning environment therefore involved both synchronous and asynchronous online experiences:

The unit I am using for this project is formally structured as an entirely asynchronous online unit. I’ve selected it for this project (and indeed, volunteered to participate in the project) because: (1) I have long wanted to introduce more varied uses of technology into the range of units I teach; and, (2) My online students... have recently been indicating that they would like some technology-based opportunities for synchronous interaction or more personal face-to-face style materials such as podcast lectures.
Mike’s high level of interest was reflected in the time he spent analysing and designing online activities to promote such engagement amongst students while facilitating a sense of teacher ‘presence’ in his course:

I want to introduce [synchronous] tutorials where students and I can ‘meet’ in real time and communicate through talk... to supplement the text-based asynchronous communication that the unit is built around. I want to create some podcasts [vodcasts] to introduce myself as a ‘real’ person with a face and a voice... and create a sense of the [online] space being populated by real people. I also want to set up a student-only synchronous space... all students have moderator status, so those who may wish to practice using the moderator tools or meet with other students in the class group have a venue where they can do that... (Mike, Planning phase)

Mike had avoided using similar technologies in the past due to time constraints and a lack of technological know-how, but was happy to introduce them into his course with the technological assistance provided. He expressed reservations, however, about the amount of technological support available to implement the course back in his university, and clearly indicated his need for ongoing support:

A key reason I haven’t introduced these strategies in the past is the time it takes to set up and learn new technology, overcome technical glitches etc. Much will depend on whether the level of support ‘promised’ in this project is able to be achieved. (Mike, Planning phase)

From the outset Mike assumed that his learners were already self-regulating. Most were in the workforce, undertaking part-time post-graduate study, so he decided it was not necessary to include self-regulation outcomes into the course. These assumptions about the self-regulating capacity of his students were reinforced in Mike’s responses in the Planning phase survey regarding monitoring strategies for student self-regulation and engagement:

Please describe the type of learning activities your learners will undertake to promote self-regulation and active learning:

I started completing this survey, and then stopped when I first hit this question. My learners are experienced professionals who have chosen to undertake postgraduate study for their own professional development. They are typically busy people... who are employed... often working in relative isolation... These people are already self-regulated learners who engage in active learning. Encouraging the development of these skills is very much NOT my focus in participating in this project. I’m more interested in using online learning to... build a sense of being connected to a learning community through postgraduate study.

Hence on our five point Likert scale survey [0 (Disagree) – 5 (Agree)] during the Planning phase, Mike repeatedly crossed out the words ‘self-regulation’ and enlarged the word ‘engagement’, to reinforce the point. The question: I have identified a strategy for monitoring the levels of self-regulation and engagement among the students was accorded a ‘1’ in disagreement, with the explanation:

I would not presume to ‘monitor’ the levels of self-regulation in professionals who are voluntarily undertaking postgraduate study – that would require a special kind of arrogance. I am interested in obtaining feedback from students about whether the synchronous elements I
add support their sense of engagement and connectedness with a learning community. Within my current excessive workload I don’t have time to be formally ‘monitoring’ anything beyond what is required for student assessment. (Mike, Planning phase)

Mike’s comments about a lack of time during the planning phase presented an additional challenge that contributed to his decision to modifying the course and assessment tasks in minor ways only. Hence in the course guide we noted assessment tasks requiring traditional essay-style assignments. Students were to demonstrate they had read the material provided in the Study Guide and the ability to relate these to the argument they were mounting. Despite being a course on Distance and Flexible learning, students were not required to use ICTs to undertake and pass assignments. Mike was adamant that he was not interested in issues such as learning challenge, support, self-regulation and satisfaction.

During the semester Mike was able to introduce some of the technologies identified during the Planning phase:

I have scheduled a few synchronous tutorials, including one with a guest speaker. I have plans to use another podcast to chat about assignment feedback. (Mike, Performance Control phase)

Changes to initial plans were linked to Mike’s concern about a lack of technical support:

I initially planned to do at least one online lecture, but when I asked [my university] for assistance I was given assurances that ‘it’s easy, you can do it yourself’, and was emailed a URL. (Mike, Performance Control phase)

Being unsuitable to his learning needs and lack of experience with online lectures, Mike did not complete this aspect of his plan. His severe time constraints persisted:

I am currently drowning in work... Working in a Faculty that has abolished [technical] staff support... every time you ask for advice you’re told to find it on the website. I don’t have time for this. (Mike, Performance Control phase)

Besides personal frustrations, Mike’s comments indicated evidence of students engaging with the learning environment positively in ways other than what was linked to the assessment tasks. For example:

I have seen one online discussion exchange where two students were sharing email addresses for the purpose of meeting up in that [interactive] space. (Mike, Performance Control phase)

Mike indicated he had stuck with his original intentions and did not use any monitoring strategies to gauge student engagement. Once again, time may have been an issue for both Mike and his students:

I’ve had lots of requests for extensions because everyone is so busy. So I’m assuming that they are all just as busy as I am, and I’ll be very interested to see who turns up at the synchronous tutorial next week. (Mike, Performance Control phase)
Despite the absence of monitoring strategies, Mike was able to provide a snapshot of student engagement levels at the time he completed the questionnaire which indicated a lack of engaged online interaction:

My site has gone very quiet, even though I do go in and post messages. (Mike, Performance Control phase)

A disappointing number of students engaged in the synchronous group tutorial. At the end of the semester, Mike shared thoughts on his successes along with his efforts to adapt and defend aspects of the course components he had introduced. A key strategy was recording a podcast that outlined the various approaches used and his feelings about each approach, which were generally positive. Mike also reported that the use of video in his course was successful in creating a human presence in the online environment:

I used a video recording of my introduction and end-of-semester messages rather than using text-based discussion postings. This is a new practice and one I plan to continue and extend in all future online units. Students responded well. I feel it achieved the goal of creating a sense of ‘presence’. (Mike, Reflection phase)

However, Mike questioned the value of live e-tutorials as an engagement strategy. In future he will replace these with a recorded lecture to promote student engagement:

I ran some [synchronous] tutorials. This is a new practice and my experience has confirmed all my doubts about it... very few students ever participated in real time, leaving the rest either excluded or relying on viewing the recordings in their own time... In future, I will use online lectures instead – if students are engaging with the recording, I might as well just DO a recording...

Other plans revolved around time and returns on effort:

In future I’ll also [record] the intent and structure of each assignment, and [record] general feedback, at least about the first assignment. I had hoped to do this for the project, but my ... workload ... overwhelmed me...

I try to present my own practice as an example for critique and discussion. After the final [online] tutorial I recorded a reflective vodcast (I’m STILL not bloody sure which is a vodcast and which a podcast – this one had video and voice). In that I outlined the various approaches I used in this project, and recorded my feelings about each. I’m now looking to use the technologies that will support my work, not the ones that create more work for limited return, e.g. creating a series of online lectures on common topics that I can use across all my online units, NOT running individual unit-and time-bound online tutorials. I’m sure [online learning] gives enormous opportunities for the students but it’s a lot more work for me. (Mike, Reflection phase)

Mike did not feel any need to defend his course design:

I don’t … feel that I’ve had to ‘defend’ the design of my environment to my learners. It’s been ... a matter of trying to make the pedagogy explicit so we can have a conversation about
whether or not what I think I’m trying to achieve is what the students want, and / or is being achieved in fact...

DISCUSSION

The cases chronicled above serve to demonstrate how learning experiences can be divergently different, with ramifications for the types and extent of professional learning challenge and support required by different individuals in higher education and concomitant implications for the learning climate offered to students (Little 1975). Mike and Mary were presented with the same challenge to design a course promoting students’ self-regulation, learning challenge and engagement using Web 2.0 technologies, however, their own professional learning experiences, the changes made to their courses, and their students’ learning experiences were very different.

Mike’s decision to pay no attention to developing self-regulation and active learning during the design phase was a major influence on the type of learning climate he created. Mike’s conservative approach had a single purpose - to create a learning community, and this was successful. However, unlike Mary, Mike saw little value in spending time preparing ‘successful’ post-graduate learners to negotiate specific learning challenges in his course. He equated voluntary student participation with self-regulation and engagement, which explained the absence of explicit engagement strategies. While time pressures contributed to this position, there was a genuine belief that the design was sufficient to promote learner engagement and self-regulation. Mike complained he was ‘drowning in work’; his website went ‘quiet’, students made many requests for assignment extensions. Mike’s end of semester reflection indicated a return to the use of pre-recorded lectures, portending little likelihood of experimentation in the future. The experience confirmed many of Mike’s original assumptions – it was “too hard”.

Mike challenged his professional learning through this project and had clear ideas about how he could infuse a sense of ‘community’ and ‘presence’ in his course, but found limitations through insufficient technical back-up creating too high a learning challenge for him. Mike’s calls for technological support from his university were not forthcoming in a manner that actually assisted his development. Through his experiences he felt that those with technological expertise at the helpdesk level were keen to rid themselves of help-seekers as soon as possible by offering directions to self-help URLs. The “DIY learning process via URLs” did not meet his learning needs. His faculty’s decision to abolish technical support staff made the situation worse. Mike became ‘stuck’ and despondent, resorting to methods that were familiar and comfortable. For someone like Mike, this not only compromised his professional learning engagement, it left him with no alternative but to do what he knew he could do. Unfortunately, this sort of experience can lead to feelings of failure and frustration, rather than feelings of satisfaction and fulfillment. Mike’s discouragement, disenchantment and disappointment were evidenced throughout the program. The professional learning climate at Mike’s university was neglectful (Little, 1975), providing low challenge and low support, which is hardly conducive to a producing a culture of ‘quality’ teaching and learning.

Mike encountered problems using new technologies without one-on-one technical assistance, advice and support. These needs were met somewhat through the project, but not
at his university. Mike sought one-on-one, step-by-step instruction and over-the-shoulder support, wanting to learn one thing at a time:

I don’t want to be shown everything at once or I’ll learn nothing. Let me try and practice and get used to that one thing, then I can learn another. I want to learn at my own pace. I want to be familiar and comfortable with new technologies before using them with students – I don’t want to learn as I go.

Mike was interested in gaining support to implement a few minor additions into an existing online course with traditional foundations – learning extensions that he knew would be manageable within a neglecting learning climate.

Mary’s course, on the other hand, entailed inherent learning challenges and students experienced more active learning requirements and explicit expectations about what they should do. Mary revised her course assessment tasks during the design phase to highlight to learners her explicit focus on self-regulation and active learning (Coates 2008a and b). She assumed a major purpose was to prepare active self-regulating learners in order to meet the specific challenges of her course. These included creating and reflecting on an action plan (self-regulation), as well as contributing to online discussions outside of class time (active learning). The active forum also enabled learners to support each others’ learning.

Mary was concerned about students feeling guilty about asking for more direction or advice. She was willing to accommodate students’ requests and initial resistance was transformed into learning engagement through student-teacher / student-student interactions and support for achieving the tasks. Mary’s course challenged students and the few who did not engage failed as a consequence. Most, however, learned more than they expected. A mid-semester student evaluation provided evidence that Mary’s design intentions were being realised.

Mary indicated willingness to try new strategies in future as well as persevering with redesigning some of the existing strategies to promote higher quality learning. She sought and received ongoing technical support for her own learning through her university: access to an academic developer and an ‘administrative’ / monitoring lurker to gauge student engagement. But, despite her eagerness and seeming fearlessness, Mary admitted:

It took a while to understand the technology... [but the experience] changed the way I think about this course and my teaching.

Mary was confident enough to ask for external monitoring of her teaching and students’ learning engagement and to learn to use new technologies with her students as the course progressed. New techniques were a source of excitement and she built such usage into course requirements for students, to increase their learning engagement. ICT capability and self-regulation. Mary’s challenge was to establish realistic limits with students regarding her teaching availability, by building self-help links into her site to relieve student reliance on her.

Mary’s reflections indicated her learning engagement and learning outcomes had benefited from academic challenge, self-regulation and strong learning support. Mary’s experiences appear consistent with someone learning in a cultivating learning climate (Little 1975). Mary was interested in stretching her own learning along with that of her students, knowing she had the support required when she needed it in a cultivating learning climate.
Mike showed less enthusiasm than Mary for learning through ‘playing around with the technology’. Rogers’ (2003) dispositions towards technological innovation and take-up indicate Mike’s actions were consistent with his identification as someone from the “mainstream majority”, categorized as “pragmatic or conservative, risk averse … [seeking] proven applications of the use of technology in teaching” (cited in Wilson and Stacey 2004, p 34). Mary categorized herself as an “early adopter”, reflecting her interest and enthusiasm in trying new technologies to determine their potential, even if they are difficult or unfamiliar at first.

Despite their divergent individual backgrounds, propensity for experimentation and teaching aims, the work circumstances and the learning climate provided by Mike and Mary’s respective universities had significant bearing on their outcomes. The universities made assumptions about teachers being able to use technologies to create stimulating online learning environments, but whereas one teacher had access to high levels of technical and professional learning support, the other was referred to ‘do-it-yourself’ ‘help’ websites which proved unhelpful and off-putting. One teacher had the benefit of being keen to learn and adopt technological capabilities in an environment of high support and high challenge, the other was more reluctant to try new technologies that were not tried and proven in an environment that provided low support and low challenge (Coates 2008a). Hence the learning climate provided to, and experienced by the teachers affected the learning experiences they could provide for their students (Wiesenberg and Stacey 2009). Mike and Mary’s cases demonstrate how both learning challenge and learning support need to be tailored to individual learning needs, taking into account the starting points at which learners begin. Hence the types of support needed to develop and enable staff to design active, challenging and self-regulating learning experiences would differ in both cases. Mike’s final survey responses included this very salient reflection:

When I reflect on my earlier comments about the professional learning and support I received, there is a way of framing my feelings that I don’t believe I have put in writing before. I think that it has long been accepted that simply providing URLs and links to online text-based content is not an effective tool for engaging online learners. So why do institutions forget this when providing online professional support / development to teachers? My students were asking me for more personal presence and engagement, but when I turned to the standard support available to help me learn to use the relevant tools, one of the key things missing was that very personal presence and engagement. I’ve been lucky that the framework of this project has provided access to the personal support over and above the university standard provision … my point is that when we move to planning and providing professional learning, we need to remember the principles of good teaching and learning – they apply to staff as much as they do to students. (Mike, Reflection phase)

The differences in Mike and Mary’s professional learning outcomes were explained largely by several key factors:

- the extent of their previous online teaching experience
- individual readiness to experiment with new technologies
- levels of personal challenge in using new applications
- the extent and availability of university level professional learning support
• their motivations for involvement in the study and,
• their teaching intentions.

CONCLUSION

This chapter has demonstrated how ‘learning engagement’ and ‘learning challenge’ by which student learning experiences are evaluated, are also vital determinants of the quality of teachers’ professional learning outcomes. It is also critical to consider learner readiness alongside learner engagement and support when designing learning experiences that involve the diffusion of technology (Little, 1975; Rogers 2003). Of more importance, the effectiveness of teachers’ learning proved to have concomitant implications for student learning, since students’ online learning experiences are highly influenced by teachers’ engagement with, and capabilities and confidence in, using new technologies. Given this recursive link, it is critical for universities to consider the quality of professional learning experienced by academics, if they wish to enhance ‘quality’ student learning.

Technology will become increasingly sophisticated and teachers will be expected to become more adept at infusing technological capabilities and capacities through every aspect of teaching and learning. As heightened demand for university places rests to a large extent on students’ assessments of teaching, there will be increasing need for academic developers to provide personalised cultivating professional learning experiences for those responsible for developing and delivering quality online courses.

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