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A blended learning ecosystem: What are the motivational issues for students?

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As technologies evolve, the places and spaces for learning are rapidly changing and learners are required to take increasing responsibility for directing their own learning. By doing so, students are presented with a range of opportunities and challenges within these complex learning environments. Research suggests that an important consideration is the effect on learner motivation. This paper reports on motivational issues for students working within an online post-graduate professional teacher education programme that blends lecturer-directed and student-directed learning. In 2014, students completed a survey about their experiences of setting their own learning goals and negotiating their own curriculum with an emphasis on motivation. This was followed by a series of interviews aimed at exploring these experiences in more depth. Preliminary findings highlight anxiety about choosing course content and setting learning goals were among key concerns identified by students. Results provide insight into motivational considerations for learners in complex learning eco-systems.

Keywords: blended learning; self-directed learning; motivation; inquiry learning and inter-professional learning, learning ecosystems

Background

The ubiquity of digital technologies is changing the way individuals interact with each other and the world around them. Connecting, collaborating, and learning with and from each other are now possible in ways that are no longer constrained by time and space (Bates, 2005). This flexibility has a number of potential benefits, not least of which is that it provides learners with the power to choose when, where and how to learn (Harasim, 2012). But with flexibility also comes responsibility as students are increasingly expected to take ownership and direct their own learning. However ownership of learning, particularly in complex, digitally-rich learning environments, does not necessarily come naturally to all learners (Leach, 2000). This, in turn, can influence perceptions about learning experiences, learner beliefs and motivation (Hartnett, 2015). Perceptions of anxiety, confidence and/or preparedness are some indicators that can provide insight into the underlying motivation of learners (Brophy, 2010). This paper reports on the issues for students working within an online post-graduate professional teacher education programme that blends lecturer-directed learning with student-directed learning as they relate to motivation.

e-Learning ecosystems

The Encyclopaedia Britannica defines an ecosystem as a “complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space” (2015, para 1). It has been argued that modern learning environments are complex systems that have many of the characteristics of living ecosystems (Gütl & Chang, 2008). Cowley et al. (2002) outline a range of components of an e-learning ecosystem. These include: the people – learners, teachers and support staff; the content to be learned; the structure of the learning; the environment in which the learning takes place; the technologies used that support learning; the skills required by learners (e.g., motivation, self-direction, subject matter, study and technical skills) and the support available to learners.

Research context and participants

The context for this study is a Post-graduate Diploma in Specialist Teaching (an innovative two year degree delivered jointly by two universities within New Zealand). The programme is designed for professional teachers working within special and inclusive education areas within the K-12 sector. Within the programme there are seven specialities. These are: Autism Spectrum Disorder, Blind and Low Vision, Complex Educational Needs, Deaf and Hearing Impaired, Early Intervention, Gifted and

Talented, and Learning and Behaviour. The programme is underpinned by a blended learning framework which integrates the three ecosystems of technology, pedagogy and context (Mentis, 2008).

Blended learning is generally considered to be a coherent design approach that integrates the strengths of face-to-face teaching with online learning to provide more engaging learning experiences for students (Garrison & Vaughan, 2008). However, in the post-graduate specialist teaching programme, blended learning is conceptualised more broadly, and is used to describe more than the integration of traditional modes of teaching with new forms of technology. Blended learning in this model includes blending: specialised courses with more inter-professional generic content; lecturer-directed learning with more self-directed learning; case-work scenarios with authentic real-life practicum experiences; synchronous with asynchronous learning; formal and informal learning opportunities; structured approaches with more open pedagogies; formal and non-formal learning; as well as individual and co-operative learning. The Specialist Teaching programme also blends week long face-to-face courses (one at the beginning and one mid-year) with online modes throughout the year. From this description it is clear, the authors argue, that this programme fits the characterisation of an e-learning ecosystem.

Using this blended learning approach allows for core courses to be taught inter-professionally across all specialities; a sharing of teaching time, expertise and resources and a robust inter-disciplinary approach to teaching and learning. This paper focuses on one aspect of the e-learning ecosystem, specifically how an inquiry-based learning approach (Spronken-Smith et al., 2011) impacts on the motivation of students. In this programme, lecturer-directed structured and guided inquiry is blended with more student-directed open inquiry where students set their own learning goals for their final portfolio assignment based on the stated learning competencies of the course, and make decisions regarding which aspects of the learning material or course content they will engage with.

As part of the establishment of the programme, and to ensure its ongoing effectiveness, an annual survey is administered at the end of the academic year asking students to provide feedback about the programme design and its delivery. Survey data from the first two years (2011-2012), across all specialties, indicated that some students were having difficulties setting their own learning goals and making decisions regarding learning content to engage with (i.e. their learning path).

As a result of these findings, further research was initiated to explore and understand what was occurring for students and how this related to their motivation in a comprehensive programme that requires them to direct aspects of their own learning. The over-arching research question that guided the research reported here is: “What are the issues for student motivation in a system where students are required to set their own learning path (goals and content)?”

Participants were recruited by means of an invitation that was placed in the annual end-of-year online student survey (2013) that could be accessed by all students in the programme. Sixty-three students (out of 155 responses) volunteered to participate in the follow-up research. Of these, 21 students were selected to be interviewed. Criteria for selection were 1) specialist area and 2) responses to the end of year survey questions. This was to ensure that within the interview group as a whole there were participants representing each of the specialities in addition to a cross-section of those who agreed that a) most aspects of setting their own learning path (goals and content) were easy and enjoyable; b) some aspects were easy and/or enjoyable; c) neither agreed nor disagreed that setting their own learning path were easy and enjoyable; d) some aspects were difficult and/or unenjoyable; and e) most aspects were difficult and unenjoyable. All 21 participants were working in their professional roles as specialist teachers while enrolled in the programme. Data were gathered in 2014 via a short pre-interview survey, designed to gain some initial understanding of students’ experiences of setting their own learning goals and choosing learning content from the course to meet these learning goals. The survey comprised ten likert-type questions with responses ranging from 1 = strongly disagree to 5 = strongly agree. Participants completed the survey just prior to an individual face-to-face semi-structured interview, which was conducted either in person, or via Skype. At the time of the current research, twelve participants were in their final year of the two-year programme, and nine had completed the programme the previous year (i.e. end of 2013). The focus at this early stage of analysis is on potential motivational issues that emerged from the data rather than a comprehensive discussion of the findings to-date.

Preliminary findings

Results from the pre-interview surveys are presented in Figure 1. Notably, from a motivational viewpoint, a sizeable percentage of participants reported feeling anxious about choosing content from the course (57% agreed or strongly agreed) and setting their own learning goals (43% agreed or strongly agreed). This compares with responses to questions about how prepared participants felt to choose content from the course (48% agreed); how prepared they felt to set their own learning goals (57% agreed); how confident they felt to choose content from the course (43% agreed or strongly agreed); and how confident they felt setting their own learning goals (57% agreed or strongly agreed). In other words, participants as a whole felt more confident and prepared to set their own learning goals than choosing their content from the course. Furthermore, the majority of participants reported feeling anxious about choosing content from the course.

Preliminary analysis of the follow-up interviews reflected similar findings to the survey results, in terms of anxiety when choosing course content and setting learning goals, as the following comments indicate:

> Coming away from that first block course I understood what they were saying but actually thought was I capable of doing [it]? That was quite different. As I said I have done goals but to actually get them right and I was very concerned or worried or anxious that I was completely off track or that they were too broad or too simple, surely they can't be that simple. So in that respect the more I prepared and the more I knew what to do of getting a good briefing, I suppose my belief in my own ability to get it right, there was doubt there. (Student 17)

> Because it was really hard to know what they wanted that was the biggest struggle well yes there is a competency, but really what do you want us to learn? Is it going to be enough, is it gutsy enough but still tight enough? I found that a real struggle. (Student 10)

> I think they had started saying to us at that point it [course content] is a smorgasbord you just pick what you want from it. But it is very difficult when you look at all that stuff and you think, as I said to you before here is stuff you would like to look at but you don't have time. So actually choosing what you want to engage with can be quite daunting. (Student 15)

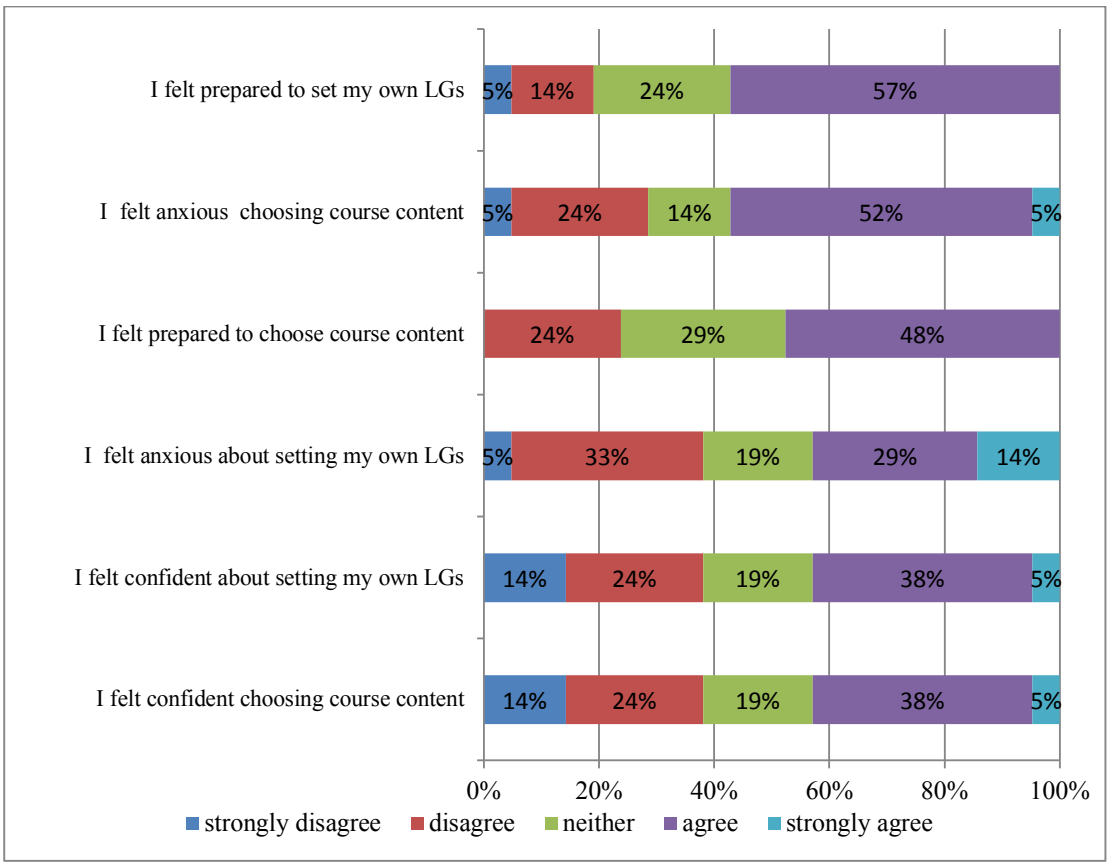

Figure 1: Pre-interview survey responses

The interview responses also revealed that students who reported that they felt prepared and confident to set their own learning goals had prior experience of doing so in other aspects of their lives. In a number of cases they also saw it as a purposeful activity because they were able to link their learning goals to their work:

I think I am quite lucky is that I have been teaching a thing at school for five years and a lot of that has been making action plans. So it wasn't anything new to me to make an action plan and actually work through the steps of the action plan because that's what I had been teaching to the kids. So I think that, perhaps, prepared me a lot more than say someone who hadn't had that experience. I have also done audits in my job, Ministry of Ed[ucation] audits where I have had to actually deconstruct to reconstruct as part of an action plan. I think all of that really helps me. (Student 3)

> I like to be able to set my own learning goals so therefore it was relevant to me, that was really good and then I felt that what I was doing would benefit my job, myself and my colleagues as well because I could share stuff with them. (Student 5)

Students who felt prepared and confident to choose their own content talked about the relevance of what they had chosen to their work as well as the need to be selective:

> For me in the end it just came down to selecting what was useful or what I thought might be useful to me at the time really. (Student 15)

> Yeah pretty confident I already knew that I needed to know specific things about my own practice, I needed to have a lot of the vision knowledge for example, a lot of the core stuff. I have been teaching for over thirty years so a lot of it was not rocket science you know, so I was quite selective in that thinking what really do I need to know to extend my practice. (Student 5)

When asked about the kind of learner they were, participants described themselves as “diligent and I’ve set myself high standards” (Student 1), “very enthusiastic, I absolutely love learning” (Student 7), “disciplined as a learner” (Student 15) and “I actually really enjoy the online study” (Student 5). Coupled with this, the average time since previous tertiary study was 12.6 years (SD = 9.2). Given the high expectations participants set for themselves together with the time elapsed since previous study, it is understandable why the many participants reported feeling anxious about choosing content and a considerable number felt anxious about setting their own learning goals (though to a lesser extent).

Conclusion

At this early stage these are only preliminary findings and further analysis of the data is necessary in order to unpack the complexity of learners’ experiences. What can be said at this point is that even though these students perceived themselves as able, diligent learners based on past learning success, the lack of familiarity and complexity of the blended learning environment in which they were situated caused them to question these judgements to some degree. Feelings of anxiety reported by participants were more salient when it came to choosing course content than the anxiety associated with setting their own learning goals. This has implications for the people, content and structure that makes up the rich, complex e-learning ecosystems such as the one described here as previous research has demonstrated that anxiety can undermine motivation to learn (Brophy, 2010). Primary among these is the need to offer differentiated guidance, particularly when it comes to choosing content to engage with, as even learners who perceive themselves as prepared and confident can feel anxious when learning in unfamiliar, complex environments which offer multiple learning options and pathways. Not to do so may detrimentally affect the motivation of learners.

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