Factors undermining motivation in place-based blended learning

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This paper reports on one aspect of a case study that explores the nature of motivation to learn in an online distance environment. The study adopts self-determination theory (SDT) as a theoretical framework and focuses particularly on the underlying concept of autonomy. This is used to explore ways in which certain social and contextual factors, that fail to accommodate the autonomy needs of learners in a blended learning environment, can undermine perceptions of personal agency. This, in turn, has a detrimental effect on self-determined types of motivation including intrinsic motivation. Results from one collaborative group of learners, situated in a co-located blended learning context, are presented here. They illustrate how differing circumstances of students need to be accommodated if we wish to support autonomous types of motivation among learners.

Keywords: online learning, motivation, self-determination theory, distance education

Introduction

Schunk, Pintrich, and Meece (2008) define motivation as "the process whereby goal-directed activity is instigated and sustained." (p.4) Contemporary views link motivation to individuals' cognitive and affective processes such as thoughts, beliefs, goals and emphasise the situated, interactive relationship between the learner and the learning environment (Brophy, 2004). Research into motivation in online environments is limited (Artino, 2008) and has tended to adopt one of two approaches. One approach adopts a trait-like model that views motivation as a relatively stable personal characteristic of the learner (Wighting, Liu, & Rovai, 2008), rather than something that constantly changes as a result of dynamic interactions between the learner, the context and the environment. The alternative view concentrates on the design of the learning environment and the factors considered necessary to provide optimum learner motivation (Keller & Suzuki, 2004). Neither approach acknowledges the increasing awareness of the complexity and dynamic interplay of factors underlying and influencing motivation to learn (Brophy, 2004). With the increasing reliance on online distance education there is a need to explore motivation that incorporates an analysis of students, the context, *and* the complex interactions between the two. This was the theoretical approach adopted for the investigation reported here.

Literature review

Studies of motivation in online learning environments have adopted various motivation frameworks to underpin their research (Artino, 2008; Bures, Amundsen, & Abrami, 2002; Xie, DeBacker, & Ferguson, 2006; Yukselturk & Bulut, 2007). Of these, intrinsic motivation theory has often been used to explore students' reasons for engagement in online environments (e.g. Shroff & Vogel, 2009; Xie et al., 2006). Comparative studies are common (Shroff & Vogel, 2009; Wighting et al., 2008), and findings indicate that online students are more intrinsically motivated than their on-campus counterparts. These studies suggest that learner autonomy might play an important role in fostering online students' intrinsic motivation. Learner autonomy has also been identified as one of the theoretical foundations of distance education (Moore, 1993).

Self-determination theory (SDT) (Deci & Ryan, 1985) is a contemporary theory of situated motivation that is built of the fundamental premise of learner autonomy. SDT argues that all humans have an intrinsic need to be self-determining or autonomous, as well as competent and connected, in relation to

their environment. Connell (1990) defines the need for autonomy as "the experience of choice in the initiation, maintenance and regulation of activity and the experience of connectedness between one's actions and personal goals and values" (p.62-63). When autonomous, students attribute their actions to an internal locus of causality; experience a sense of freedom, and choice over their actions. SDT states that if the environmental conditions are such that they support an individual's autonomy, then a learner's inherent intrinsic motivation will be promoted (Ryan & Deci, 2000). When intrinsically motivated, outside incentives are unnecessary as the reward lies in the doing of the activity.

In contrast, students who are extrinsically motivated undertake activities for reasons separate from the activity itself (Ryan & Deci, 2000). For example, gaining good grades, avoiding negative consequences or because the task has utility value such as passing a course in order to earn a degree. SDT explains extrinsic motivation processes in terms of external regulation, as the reasons for undertaking the task lie outside the individual. However, the degree to which an activity is perceived as externally controlled can vary and therefore different types of extrinsic motivation exist. The model conceptualises a continuum of regulation that incorporates amotivation (lack of motivation) at one end through to intrinsic motivation at the other, with different types of extrinsic motivation sitting between the extremes. The various forms of extrinsic motivation highlight a shift in the degree to which externally motivated behaviour is autonomously determined. They range from externally controlled with little or no self-determination, shifting to more internal control and self-regulation where a learner engages in an activity because of its significance to their sense of self. Research has shown that more self-determined students experience positive learning outcomes even when extrinsically motivated (Reeve, Deci, & Ryan, 2004). The extent to which social and environmental factors allow a learner to experience feelings of autonomy (as well as competence and relatedness), will influence the quality of motivation expressed by the learner (Vallerand, Pelletier, & Koestner, 2008).

Studies into online learning that adopt SDT as the theoretical framework are few but do exist (Martens, Gulikers, & Bastiaens, 2004; Shroff & Vogel, 2009; Xie et al., 2006). However, one notable limitation of these studies has been the tendency to focus only on intrinsic motivation. In doing so, the power of the model to explore a broader range of motivation, particularly more autonomous types of extrinsic motivation, was neglected.

This paper presents findings of one aspect of a larger study that explored the motivation of preservice teachers situated within a 'real-life' online distance learning context. SDT underpinned the investigation that explored how certain social and contextual factors can dynamically influence motivation to learn by either supporting or undermining student autonomy. Results presented here from one group of learners, situated within a co-located and blended learning context, address the question: *in what ways do social and contextual factors undermine learner autonomy when unique circumstances are not taken into account?*

Method

This investigation used case study methodology to explore the complex phenomenon of motivation in a manageable way with a view to advancing understanding (Yin, 2009). Reported here, is one aspect of a larger case study that focussed on a Problem Based Learning (PBL) assignment undertaken over a six-week period in which students were required to work collaboratively in small groups. PBL is an instructional approach built around authentic, ill-structured problems which are complex in nature (Sonmez & Lee, 2003).The assignment was situated within a compulsory course from a primary (years 1 to 8) preservice teacher education programme offered by a New Zealand university.

Data gathered from one student group (one male and two females), who form part of the larger research participant group (21 in total) is presented here. This group were different from other geographically dispersed research participants because of their co-location at a satellite campus of the university. The co-located campus students were required to complete all coursework via the WebCT Learning Management System in the same manner as the 'fully' distance students. Data collection procedures comprised questionnaires, interviews, archived online data (including online asynchronous discussion transcripts and usage statistics), achievement data and course resources.

Learner motivation was measured using the self-report Situational Motivational Scale (SIMS) developed by Guay et al. (2000) which operationalises the SDT continuum described earlier. It measures situational intrinsic motivation, extrinsic forms of motivation (identified regulation, external regulation) and amotivation. A Likert scale measures each motivation sub-type and ranges from 1 to 7. In the following section, pseudonyms are used when quoting students.

Findings and discussion

The group of satellite campus participants comprised mature aged students who described themselves as committed learners and viewed academic success as personally important, suggesting that they often experience autonomous motivation in learning contexts:

> …my group members … they're very diligent people. … all three of us are high achievers (Nadia – Interview)

However, analysis of SIMS data showed moderate to high external regulation and amotivation scores (less self-determined types of motivation) and moderate to low identified regulation and intrinsic motivation scores. These were among the highest amotivation and external regulation scores reported by research participants. In other words, they primarily experienced less autonomous forms of motivation suggesting that certain social and contextual factors contributed to the undermining of their autonomy needs. While a number of factors were identified as influential in undermining autonomy in the wider study, the results reported here focus on those highly salient to the co-located group because of their blended learning situation.

These students described the PBL assignment as a high stakes activity that involved a high workload resulting in perceptions of time constraints within the context which were exacerbated by the time-consuming nature of the WebCT asynchronous medium. Course expectations required students to interact with each other online within their collaborative groups, irrespective of their circumstances. Not having a genuine need to enter into online discussions with each other coupled with feedback from teaching staff that decreased over time (a feature of the PBL approach), contributed to their reported experiences of less self-determined forms of motivation. High stakes assessment, high workload and time constraints were also reported by 'fully' distance students as detrimental to autonomy. However, course expectations and the mismatch of technology did not have the same degree of salience. This suggests that fully distance students saw a clear need to engage with each other online, whereas co-located students did not (Jones & Issroff, 2007).

High stakes assessment

The pressure of assessment was highly salient during this activity because the assignment was worth 60% of the entire course mark. This not only had a detrimental effect on their enjoyment of the experience thereby undermining intrinsic motivation, it also promoted anxiety leading to high reported amotivation scores:

> … the fact that 60% of the mark came from … one assignment and if you missed the mark on that then you are you're lost, you failed … and to me that's really tough. ... and that worried me. (Ursala – Interview)

High workload, time constraints and the online environment

Pressure of assessment coupled with the size of the task had the added effect of these students feeling that it 'took a lot of time and effort to complete' (Nadia – Questionnaire) and 'became all consuming' (Tim – Interview). Perceptions of being time poor, in turn, resulted in the time-consuming nature of asynchronous communication medium becoming more salient and the need to use it being questioned. Communication via the WebCT discussion board was perceived as 'very time consuming' (Tim – Questionnaire) and 'slowed down the communication' (Ursala – Interview). The net result of multiple external pressures saw these learners meeting face to face in an attempt to autonomously regulate their own learning process. The group viewed being able to meet in person as effective alternative 'if it is possible to meet face to face, as it was for my group, a collaborative approach is possible and time is used more efficiently' (Tim – Questionnaire).

Course expectations

However, course expectations required students to communicate with each other online, assisted by the instructors. For the co-located group, the immediacy of face to face communication provided a good fit with the ongoing group decision-making processes characteristic of PBL. Consequently, the expectation that required them to be visible online discussing their ideas, without regard to their situation, engendered

a sense of compulsion that undermined their autonomy needs. This contributed further to the feelings of external regulation expressed by these learners:

> When you're doing an online paper and you're doing it with people that you talk to every day, WebCT is a handicap. Well not a handicap, it's a nuisance because you have to be seen to be using WebCT. There doesn't seem to be a … understanding of the fact that we were working, we had to be seen to be working … we were expected to be putting something on, on a regular basis which was a nuisance from our point of view. (Ursala – Interview)

The only useful purpose communicating online did serve was that it provided opportunities to interact with teaching staff. 'We started using it … as much in my opinion, part of my motivation, was that we were displaying our thinking and our ideas to the lecturers.' (Tim – Interview) But 'when we became aware of the limited involvement and feedback from lecturers, we migrated toward what we felt were more efficient forms of communication.' (Tim – Questionnaire)

Mismatch of technology and learning activity

The increasing lack guidance and feedback, inherent in the design of the PBL activity, further emphasised the perception that the chosen technology did not provide a suitable environment in which to undertake the PBL activity. Particularly within the context of a blended learning environment where face-to-face interaction was possible.

> WebCT does NOT compliment this course. I strongly believe that this type of 'hands on' practical course should be taught face to face. (Nadia – Questionnaire)

The preceding discussion has highlighted that salient contextual factors, beyond the control of learners to initiate and regulate, ultimately had an unfavourable influence on their motivation to learn. This is further supported by the finding that the co-located students reported some of the highest amotivation and external regulation scores among the whole research participant group. In particular, the course requirement to interact online was perceived as a nuisance that served little purpose because they were able to meet face to face This is consistent with other research studies that have shown that external events that don't fit the needs of learners can have a detrimental effect on perceived autonomy and therefore self-determined types of motivation (Reeve et al., 2004).

Conclusions

This paper has presented evidence from one aspect of a larger case study exploring the nature of motivation to learn of preservice teachers in an online distance environment. Using SDT, a contemporary theory of motivation, it was shown how certain social and contextual influences did not support the autonomy needs of one group of students because their unique situational circumstances were not considered. This contributed to expressions of moderate to high levels of less autonomous types of motivation because they perceived these factors as being externally imposed. The most salient of these was the requirement to collaborate online that ignored their ability to meet face to face. Online instructors need to consider providing alternatives to students in different situations, such as the ability to post weekly summaries in this case, in order to support the expression of self-determined types of motivation including intrinsic motivation.

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