



Moving between workplace and online learning spaces: An activity theory perspective

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In recent years, blended learning has experienced significant growth in higher education; however, there is a need to gain a deeper and richer understanding of the interplay between face-to-face and online learning spaces in order to inform the design of blended learning settings. The intent of this paper is to offer new perspectives on blended learning within vocationally-oriented programmes by drawing on the concepts of activity theory (Engeström, 2001) and epistemic frames (Shaffer, 2004). The paper reports on a doctoral study which explored how English as an Additional Language (EAL) learners experienced the interplay between face-to-face learning experiences in workplace contexts and an online discussion activity within an undergraduate nursing course. The findings suggest that enabling the appropriation of resources across the boundaries of face-to-face and virtual spaces should be a key issue in the design of learning activities in blended learning settings.

Keywords: blended learning, activity theory, epistemic frames, EAL learners, nursing

Introduction

In recent years, the use of online technologies in higher education has experienced significant growth (Dziuban, Hartman, Juge, Moskal, & Sorg, 2006), and in particular, blended learning has become increasingly common (Bonk, Kim, & Zeng, 2006). Recent evidence indicating that improved student learning outcomes may exist for blended learning (Means, Toyama, Murphy, Bakia, & Jones, 2009) has served to consolidate its position as “a standard part of the education and training lexicon” (Bonk et al., 2006, p. 550). However, there is a sense that blended learning has not fully realised its potential to transform learning environments (Hofmann, 2006) and a greater understanding is needed to inform the process of curriculum design (Bonk et al., 2006). To address some of these issues, this paper will explore the relationship between workplace and online learning spaces in an undergraduate nursing course. Recognising that blended learning has come to encompass “a more diverse combining of a variety of approaches” (Jones, 2006, p. 185), an expansive view of blended learning will be adopted which considers how EAL learners experienced the interplay between face-to-face learning experiences in nursing workplaces (for example, clinics, hospitals, and rest homes) and an online discussion activity. Drawing upon activity theory (Engeström, 2001; Finlay, 2008) and the concept of epistemic frames (Shaffer, 2004), this paper intends to conceptualise blended learning as the appropriation of resources across two activity systems - the face-to face and the virtual learning spaces. After first outlining key concepts of the theoretical framework, this paper will describe the research study, and finally the findings will be discussed in relation to theory.

Theoretical framework: Linking activity theory with epistemic frames

Activity theory illustrates the role of society in shaping the mind of the individual and provides a unit of analysis for understanding human consciousness (Lantolf & Appel, 1994). Its central claims are that “the human mind emerges, exists, and can only be understood within the context of human interaction with the world” (Kaptelinin, Nardi, & Macaulay, 1999, p. 28). Therefore, emphasis is placed on “contextualized activity and ongoing participation as the core units of analysis” (Barab, Evans, & Baek, 2004, p. 199). Engeström (1987) has extended the concept of mediated activity (Vygotsky, 1978) by developing an organising structure called activity theory (Figure 1) to graphically illustrate the role of cultural mediation and the relationship between the individual and collective. An activity is described as a “form of doing

directed to an object” and it is motivated by a need to transform the object into an outcome (Issroff & Scanlon, 2002, p. 78). The subject refers to an individual or group and the relationship between subject and object is mediated by tools and signs which help to realise the outcomes of the activity. In addition, the relationship between community and subject is mediated by social rules and the relationship between community and object is mediated by the division of labour which determines how the work is organised amongst the community (Issroff & Scanlon, 2002). If activity theory is mapped onto a learning setting, a student (subject) creates a text to upload in order to participate in an online discussion (object) using a word processing programme (tool). The student relates to the online discussion group (community) through a rule that she should be respectful towards her peers, and the group relates to the discussion (object) through their roles as active co-constructors of knowledge.

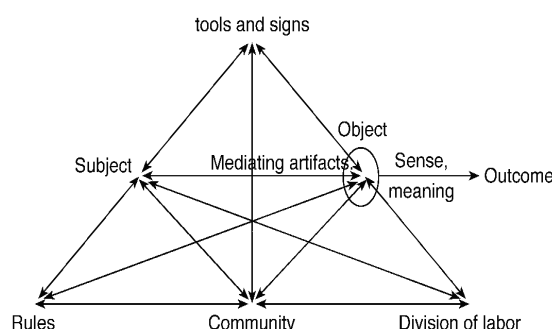


Figure 1: The structure of a human activity system (Engeström, 2001, p. 135)

More recently, new perspectives on activity theory have expanded the unit of analysis from one activity system to at least two interacting activity systems (Engeström, 2001, p. 133). Using this approach, the relationship between different spaces such as school and work settings can be re-conceptualised as the interaction between activity systems (Finlay, 2008). The concept of learning across boundaries of activity systems (Engeström, 2001) has been used in the field of further education to examine connections between work and university (Finlay, 2008). By following the experiences of students who are concurrently studying in a teacher education course and working as lecturers, Finlay (2008) has observed students appropriating a variety of tools such as ideas, teaching strategies, and theories from the learning setting to help them in the workplace. Finlay argues that moving from a workplace activity system to a university system can provide students with a number of tools which can be appropriated as resources in the workplace, and this can create opportunities for learning.

Useful connections can be forged with the concept of epistemic frames (Shaffer, 2004) to enrich understanding of the process of learning across activity system boundaries (Engeström, 2001) or between blended learning spaces. Building on the concept of communities of practice (Lave & Wenger, 1991), Shaffer (2004, p. 476) contends that “different communities of practice (for example, different professions) have different epistemic frames: different ways of knowing, of deciding what is worth knowing, and of adding to the collective body of knowledge and understanding of the community.” These epistemic frames encompass not only core knowledge and skills of a community of practice (for example, engineering or dentistry), they involve knowing where to seek information, what questions to ask, what evidence is relevant to consider, and how to obtain it (Shaffer, 2004). Based on findings from a doctoral study, this paper suggests that epistemic frames may function as a bridge to link face-to-face and online spaces (activity systems) in blended learning, and potentially offer students expanded opportunities for learning.

The research study

The learning activities under study were embedded in a second year nursing course at a large vocationally-oriented tertiary institution in New Zealand. The general aim of the course was to help student nurses develop theoretical understandings and practical skills in relation to decision-making processes in clinical practice. The semester-long course blended face-to-face and online components by combining lectures, tutorials, and clinical rotations in nursing homes, clinics, and hospitals with four asynchronous online discussions, each focused on a particular topic such as the use of research in clinical decision making. Every three weeks, prompted by a quote and drawing from work they had completed earlier, students were required to enter the online discussion forum (which they shared with ten other students) and post at least one text in response to their peers’ contributions.. This paper examines the connections which developed between the online discussions and the clinical rotations in nursing workplaces through the experiences of four EAL students as they moved between face-to-face and online

spaces. Positioned within a qualitative methodology, this inquiry followed the experiences of four Chinese students over a four month period in order to obtain a rich and in-depth understanding of the nature of their participation. During the data analysis, activity theory was mapped onto the educational setting to provide a socio-cultural interpretation.

Findings and discussion

The concept of learning across activity systems (Engeström, 2001; Finlay, 2008) can provide insights into blended learning as it highlights the interplay between face-to-face and virtual spaces (or activity systems), and considers how resources in one space can cross boundaries and be appropriated for use in another space to provide expanded learning opportunities. In the study reported in this paper, the nursing students were engaged in two activity systems as participants in an online discussion and as trainee nurses engaged in workplace learning. The nursing students went out into the community and through placements in various clinical sites such as nursing homes, clinics, and hospitals; they engaged in activity reminiscent of legitimate peripheral participation (Lave & Wenger, 1991). These experiences were then brought back to the online discussion to share with other students, to make the theoretical content meaningful in the context of their own lives, and to articulate new ways of thinking and doing. To illustrate this, two excerpts from discussion postings are provided below.

At this stage in my clinical practice, I am forming a habit to read my patients' notes before I start my shift to obtain a basic outline of my patients' health conditions. I am also learning how to write nursing notes, how to document well so that it is much easier for the nurse from next shift to read and make appropriate decisions. By reflecting on my clinical practice, I understand the real meaning of documentation. It is not only writing something down on the paper, it actually influences the continuing of delivery of quality care in the future. (Student Three/Online Observation Eighteen)

For instance, I am in the detox for clinical placement. There was a client who attempted to commit suicide few days before she admitted in the detox. I was curious about that, such as "Why excessive drinking people will deliberate harm themselves? Is there anything I need to pay attention when caring this person?" After reading some reports, I found that Alcohol dependence and misuse are strongly associated with suicidal behaviour (Bale, Casey, Haw, & Hawton, 2005). I need try to talk with the client and encourage patients to express their feelings in order to help her build up self-esteem (Sinclair & Green, 2005). The application of research evidence may clarify the rationale for clinical decisions (Thomas, Wearing & Bennett, 1990). (Student Four/Online Observation Sixteen)

These postings show experiences from the workplace being appropriated as resources to expand learning opportunities in the online discussion. These experiences enriched the students' contributions by making theoretical content meaningful through the lens of their own experiences and helped them to articulate transformations in their thought and practice. Furthermore, the relationship between the two activity systems – the clinical setting and the online discussion – could be bi-directional. The above quotes suggest that clinical experiences were brought into the online discussion as a resource, but also, as students reflected upon the meaning of these experiences in the light of theoretical content, they articulated transformations in their understandings and practices which could potentially flow back out to future practice. To illustrate this movement from online discussion to the workplace, the following quote suggests that new understandings of the importance of documentation in nursing practice which emerged through participation in the online discussion could flow into the clinical setting to transform practice.

I think before I started writing this posting, I would never think documentation will have an impact on decision making, but after we have the task to do [the online discussion], I just um, more um pay more attention on documentation when I was on clinical, and then I realized that um, it is an important um factor which will impact decision making. (Student Five/Account Five)

In accord with Finlay (2008), it is suggested that by moving between online and face-to-face activity systems, students appropriated resources (for example, clinical experiences and new understandings) from one activity system to use in another. In addition, by drawing on the concept of epistemic frames (Shaffer, 2004), it appears the students moved between the workplace and online settings by accessing and appropriating the epistemic frames of the nursing profession (ways of knowing-as-a-nurse such as the use of research to inform practice and the importance of documentation in patient care). As the face-to-face and online settings interpenetrated each other through these epistemic frames, new perspectives of

thinking-like-a-nurse enriched the students' understanding, fuelled the meaning-making process, and potentially transformed their practice.

Pedagogical implications and conclusion

The intent of this paper has been to draw upon the concepts of contemporary activity theory and epistemic frames to offer different perspectives on blended learning. Admittedly, only three student views are presented here; however, this paper's modest goal is simply to stimulate discussion around the interplay between face-to-face and online settings and aspects of curriculum design in blended settings - further investigation is clearly required. It is suggested that conceptualising blended learning as the appropriation of resources across the boundaries of face-to-face and virtual spaces may be useful to inform curriculum design. Additionally, the findings indicate that the epistemic frames of the target practice can be powerful boundary-crossing tools which may allow new understandings to be carried into different contexts. Enabling learners to identify, appropriate, and inhabit the epistemic frames of the target community of practice may also be key considerations in the pedagogical design of blending learning environments.

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Please cite as: Westberry, N. (2009). Moving between workplace and online learning spaces: An activity theory perspective. In *Same places, different spaces. Proceedings ascilite Auckland 2009*.
<https://doi.org/10.14742/apubs.2009.2243>

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