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A Framework for Developing and Implementing an Online Learning Community

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Abstract

Developing online learning communities is a promising pedagogical approach in online learning contexts for adult tertiary learners, but it is no easy task. Understanding how learning communities are formed and evaluating their efficacy in supporting learning involves a complex set of issues that have a bearing on the design and facilitation of successful online learning experiences. This paper describes the development of a framework for understanding and developing an online learning community for adult tertiary learners in a New Zealand tertiary institution. In accord with sociocultural views of learning and practices, the framework depicts learning as a mediated, situated, distributed, goal-directed, and participatory activity within a socially and culturally determined learning community. Evidence for the value of the framework is grounded in the findings of a case study of a semester-long fully online asynchronous graduate course. The framework informs our understanding of appropriate conditions for the development and conduct of online learning communities. Implications are presented for the design and facilitation of learning in such contexts.

Keywords: adult learners; e-learning; evaluation; online learning communities; research methods; tertiary

Introduction

Current research and practice in effective online pedagogy indicate support for the development of online learning communities (OLCs) in facilitating teaching–learning in online learning environments (Aceto, Dondi, & Marzotto, 2010; Palloff & Pratt, 2007). A learning community is a cohesive group of people with a specific focus on learning as transformatory participation (Lave & Wenger, 1991). In this paper, the term 'OLC' refers to the desired characteristics of a learning community established through using the internet and web-based technologies. The challenge for educators in developing OLCs is that they cannot be coerced or constructed (Barab, Kling, & Gray, 2004). Their development relies on the lecturer facilitating the collaborative relationships and critical dialogue required for learning (Palloff & Pratt, 1999). In order to inform this process, the two purposes of this paper are to:

1. describe the development of a framework for developing an online learning community
2. provide evidence for the value of the framework, based on findings of a semester-long case study of a fully online asynchronous graduate-level course.

Specifically, this paper proposes a framework that conceptualises learning as a mediated, situated, distributed, goal-directed, and participatory activity within a learning community. These theoretical ideas are briefly described next, followed by a description of the research context where these ideas emerged and were explored, and the development and findings from the implementation of the framework. Implications are outlined for adopting the framework to facilitate teaching–learning experiences and engage students in deeper and more meaningful learning processes.

Learning as participation in a learning community

Members of a learning community participate in the community's valued activities by taking different roles and responsibilities which change over time as their expertise develops (Lave & Wenger, 1991). Seen this way, understanding how learning occurs requires a focus on how learners participate in particular activities and practices, how they appropriate the available tools, artefacts, and social networks, and how they use and value the different discourses in their local setting. An effective learning community depends fundamentally on developing the social and emotional ties between its members, and on fostering interactions that support and develop its members intellectually, socially, and emotionally. Adopting this stance for online learning directs attention to how people participate (or not) in online discussions, including the kinds of roles they adopt to accomplish collaborative activities (Hrastinski, 2008; Zhu, 1996). The nature of interactions occurring in these discussions is thus critical to understanding and supporting the participative learning process of OLCs (Daniel, Schwier, & Ross, 2007). In this case, reciprocal online interaction patterns and roles that support participants' intellectual, social, and emotional transformations are generally taken as evidence of the outcome of participation in an OLC (Thurston, 2005). In this paper it is proposed that the nature of transformatory participation is framed by and accomplished through four key aspects: participation as mediated action, participation as distributed cognition, participation as situated activity, and participation as goal-directed (Khoo, 2010).

Participation as mediated action

From a learning community perspective, human action uses cultural tools and artifacts as *mediational means* to accomplish a task or objective (Wenger, 1998). These cultural tools (physical, technical, psychological, or symbolic) are necessarily situated in the sociocultural context in which they are used. They embody the shared understanding and heritage of a community. The notion of mediated action highlights the role of web-based tools and activities in influencing a learner's developing understanding. The affordances of web-based technology are fundamental to interaction, and mediate the relationships and intimacy that develop within an online community.

Participation as situated activity

Learning and knowledge are situated in the contexts, activities, and culture in which they are used (Greeno, Collins, & Resnick, 1996). The notion of situated activity highlights the role of authentic and relevant activities. These provide a context for meaningful learning experiences whereby members of an OLC can work collaboratively with their peers. The affordances offered by authentic situated activity include those that encourage learners to participate and thus contribute to the distribution of cognition in that activity.

Participation as distributed cognition

The concept of distributed cognition acknowledges the social aspects of cognition (Salomon, 1993). In an online community, distribution occurs through the affordances and constraints offered by the available web-based technology and resources. As participants communicate, interact, and collaborate, they access the knowledge, understanding, and skills distributed across the group to achieve results that would otherwise be difficult for an individual. In this process,

some ways of participating are more useful than others in fostering goals that guide students towards becoming responsible active participants.

Participation as goal-directed

All action is goal-directed. Classroom learning as goal-directed connotes teaching as structuring goal-directed learning activities and assisting students to achieve those goals through meaningful and productive social interactions (Smith, Teemant, & Pinnegar, 2004). Lecturers' consideration of the goals different activities can support is important when designing activities that are intended to contribute to learner participation in the social process of knowledge construction.

Research context

The research project aimed to enhance online teaching–learning practice and student learning through collaboration between the researcher and an online teacher, Adrian.[1] The researcher, who is the first author, was interested in investigating quality online learning contexts. Adrian was a senior lecturer in the Faculty of Education at the University of Waikato, New Zealand. He was an experienced face-to-face lecturer who, at the time of the data collection, had taught the graduate Educational Research Methods course for almost 10 years. However, he was also a novice online lecturer, having taught the online version of the course just twice before. Adrian was frustrated that the asynchronous nature of online communication meant he was unable to engage in dialogue in the way he was accustomed to in face-to-face teaching. Challenging students' thinking was also problematic, because it was easier for students to *opt out* of participating online. Adrian was keen to participate in the research, perceiving it as an opportunity for systematic reflection on, and refinement to, his online teaching practice. He was particularly interested in implementing strategies to prompt more student interaction so that students could better grasp the *breadth of the area and obtain a broader notion of research literacy*. To assist Adrian, the researcher sought to identify a suitable framework to guide the development and implementation of a pedagogical intervention that would improve his online student learning experiences.

Journeying towards a framework

A baseline faculty-wide survey was conducted to ensure the framework was relevant to the study context. The survey ascertained lecturer and student perceptions of online learning and how learning could be successfully facilitated. Results were synthesised with the outcomes of a review of pertinent literature to develop a framework that was implemented and evaluated in Adrian's graduate research methods course. A qualitative interpretive methodology underpinned the study research design (Maykut & Morehouse, 1994).

A baseline survey

Ten online lecturers (four experienced online lecturers and six volunteers) were interviewed. They taught a range of undergraduate and graduate-level courses and had online teaching experience ranging from1 to 15 years. The lecturers assisted in providing access to their students. Of the 30 students who responded to the questionnaire, 12 voluntarily participated in a follow-up interview. Descriptive statistics was used to analyse trends in the questionnaire data. Analysis of the interviews involved careful reading, coding, and categorising of key ideas to identify significant emerging themes.

The key themes emerging from the survey were that, firstly, online learning is a social and interactive process best characterised by the notion of a learning community and, secondly, web-based technologies afford and constrain the learning process. Furthermore, successful online

[1] Pseudonyms are used in this study.

student learning could be facilitated through a range of lecturer responsibilities and teaching practices which were associated with four key roles—pedagogical, managerial, social, and technological (Khoo, Forret, & Cowie, 2010).

Social and interactional processes were highly valued by all participants (as exemplified by Jake, a lecturer):

> Online learning gives the opportunity for people to have dialogues with each other which are generative rather than to sit in their own isolated study space and think things through in relation just to a book.

Half of the lecturers specified that the social learning process inherent in forming a learning community was helpful to students' constructive and purposeful class interactions. Peter explains:

> I try to encourage them [students] to think about the fact that in any of our online courses we are a learning community and that means we need to be sharing our ideas with one another and agreeing and disagreeing with one another but doing so in a respectful sort of way.

In developing a learning community, the role of the web-based technology was thought to be crucial in affording teaching–learning interactions by giving lecturers the accessibility, flexibility, and convenience of teaching online. Ralph, a lecturer, exemplified this idea:

> The ability to teach online gives you the flexibility. You don't have to front up to a class at ten o'clock on a Monday morning, every Monday for five weeks but you do have a professional responsibility for ensuring what's actually happening then.

All participants highlighted that useful pedagogical practices for supporting student learning (in line with the four key online lecturer roles) included focusing on making the course goals and purposes explicit, having a clear course structure with clear links between different course components and regular updates for students, providing guidelines for student contributions, modelling productive online communication practices, and providing technical assistance on request.

Insights from the literature

Recommendations from the literature generally supported the baseline findings (Anderson, 2008; Bonk, Wisher, & Nigrelli, 2004; Salmon, 2000). Additionally, the literature that relates to the teaching and learning of research-methods courses and adult learners was examined. Key insights from this literature were:

- the value of using situated, meaningful, and relevant real-world tasks and activities to support students' learning, including their participation in a community of practice (Conceição, 2002; Pallas, 2001). Such task-based learning activities support learning through collaboration, allow sharing of multiple perspectives, and demonstrate learning in a more tangible and meaningful manner
- an emphasis on clarifying and aligning learning goals to pedagogical strategies and assessment activities; using formative assessment strategies, and lecturer modelling of their understanding of research methods to help students see the relevance and allay their misconceptions from the first day of the course (Altinay & Paraskevas, 2007; Benson & Blackman, 2003).

Synthesising key findings

The key findings from the baseline survey and literature were distilled and integrated into five guiding principles. Guiding Principle 1 allows that the key affordances of web-based technologies lie in their communicative and interactive potential to pave the way for more egalitarian approaches to teaching and learning. The transparency of the technology adopted is fundamental to this principle. Guiding Principle 2 espouses that interaction and collaboration on team products within an environment that is safe, inviting, and promotes member trust and respect allows students and lecturers to take full advantage of web-based technology affordances. Guiding Principle 3 highlights using authentic activities that are situated in real-world contexts and meaningful to learner needs and interests as important for learning. Carefully selecting such tasks or activities can afford social and intellectual interactions that support collective or shared learning goals. Guiding Principle 4 refers to the goals inherent in a learning activity. These goals can foster different kinds of learning interactions and pedagogical strategies within the context of a collaborative learning enterprise. Finally, Guiding Principle 5 specifies the importance of developing a learning community as being essential for fostering more meaningful learning processes.

Each of the five principles recognises and supports each of the five ideas associated with a sociocultural view of learning espoused earlier in this paper. Guiding Principle 1 maps the idea of mediated action, Guiding Principle 2 connects with the idea of distributed cognition, Guiding Principle 3 recognises the nature of activity as situated, Guiding Principle 4 relates to the idea of goal directedness, and Guiding Principle 5 advocates participation in authentic community practices. Consequently, these ideas of mediated, situated, distributed, goal-directed, and participatory activity within a socially and culturally determined learning community were adopted as elements of the pedagogical framework used to assist Adrian to redesign his course. The framework was then implemented to test its usefulness in supporting student learning.

The framework in action

Educational Research Methods is a compulsory course in the graduate Education programme in the Faculty of Education. It is usually conducted three times a year—the summer-school semester, semester A and semester B. Both the summer school and semester A versions of the course are face-to-face courses, while the semester B version is conducted online. Typically 20 students, mostly mid-career professional educators seeking additional postgraduate qualifications, enrol in the course. The course focuses on discussions of mostly qualitative research methodologies and research methods of obtaining data, and includes research quality and ethical issues. It consists of four modules (Conceptual Issues, Data Collection Methods, Multiple Research Approaches, and Design and Summary Overview) completed over 12 weeks. The modules are built upon one another in a coherent manner to provide students with a holistic view of educational research. Each module involved student participation in weekly online activities and discussions which began on a Monday morning and ended the following Sunday night.

Using the framework to plan for participation

To work with Adrian, a collaborative approach was adopted. This approach, the *negotiated intervention strategy* (Jones & Simon, 1991), framed and translated the pedagogical framework into teaching strategies (Khoo & Cowie, accepted for publication). This required the researcher to work collaboratively with Adrian to negotiate the design of teaching activities through an iterative process that also responded to issues that emerged in the teaching–learning process. A summary of the intervention teaching activities, as well as the mediating web-based tools adopted in the masters Research Methods course, is shown in Table 1.

Table 1 Translating the framework into practice

Framework elements	Mediating web-based tools	Examples of intervention teaching strategies
Participation in a learning community Entry and enculturation into the class responsibilities, beliefs and practices	Online class announcements, online public discussion area, online photos, online class resources	• Course introductions, ice-breakers, lecturer and student introductions/biography • Reminders for students to introduce themselves online and post their photos (especially late enrolments) • Prompt feedback to student queries • Use of the *Research Overview Diagram*[a] for students to link their background experiences and connect to the course work • Use of *Online Participation Tips*[b] and *Advice from Previous Students*[c] to set expectations for new and experienced online students in the class, and to establish norms of conduct • Clear course expectations and deadlines • Weekly updates/prompts to remind students about the week's topics and how they are to participate • Reminders and models of good online communication, and use of conflict-resolution mechanisms • Links to technical and library assistance
Mediated action Selection of tools and activities that afford and mediate interaction and participation	Online photos, online public and private (portfolios) discussion areas, web links, online portfolios, FAQ[f] folder	• Use of *Scenarios*[d] and *Our Group Response*[e] to generate discussions, foster group accountability, and prompt group positioning of ideas • Prompted use of peer feedback in the group discussions • Use of the *Practice and Play*[g] area • Use of the *Break Time*,[h] *Can Anyone Help?*[i] and *Farewell/Moving On*[j] discussion forums • Links to technical and library assistance
Situated activity Selection of authentic and relevant tasks that situate activity	Online announcements, online public discussion area, FAQ folder, web links	• Use of *Scenarios* as authentic contexts to depict real-life research issues and foster purposeful collaboration and discussions • Just-in-time resources • Prompt feedback to student queries • Links to technical and library assistance
Distributed cognition Shared spaces for interaction, generating ideas, collaboration and team products	Online photos, students' contacts, online announcements, online public discussion area, web links, FAQ folder	• Use of *Scenarios* to support authoritative sharing of background experience and ideas for discussion • Peer feedback positioned as valid in the group discussions • Students present their group's position with regard to the *Scenarios* in *Our Group Response* • Lecturer mentoring, monitoring, referring, and linking to students' ideas to affirm their contributions • Prompt feedback to student queries • Reminders and models of good online communication, and use of conflict-resolution mechanisms • Use of the *Break Time*, *Can Anyone Help?* and *Farewell/Moving On* discussion forums • Links to technical and library assistance
Goal-directed Selection of activities that accomplishes particular goals	Online public and private (portfolios) discussion areas, online class announcements, online class resources, FAQ folder, web links	• Use of different *Scenarios* to generate discussion on various course-related ideas • Use of a variety of group and individual tasks in the course discussions and assignments to serve different pedagogical purposes • Weekly reminders of the purpose of discussion topics

Note: [a]The *Research Overview Diagram* illustrates the key features of educational research as mapped in the course components, and how the different components are relevant to real-life research conduct.
[b]*Online Participation Tips* contains guidelines for online conduct and communicating.
[c]*Advice from Previous Students* contains advice from previous students.
[d]*Scenarios* are problem-based cases designed to encourage student participation and engagement with ideas (in their groups), to foster a sense of belonging to a community, create shared knowledge, and achieve course goals.
[e]*Our Group Response* discussion forum is for student groups to share their final (consensus) position regarding issues raised in the *Scenarios*.
[f]FAQ is frequently asked questions.
[g]*Practice and Play* is an area for students to practice and develop their technical skills in using the web-based tools available in the course.
[h]*Break Time* is a student-only discussion forum for students to have informal chats/conversations with their peers.
[i]*Can Anyone Help?* is a forum for students to ask their peers for help.
[j]*Farewell/Moving On* is a forum for students to share highlights of their course experiences, to bring closure at the end of the course.

Students were sent a course introductory pack 2 weeks before the course started. The online class was made available 1 week before the course start date. Students were asked to log on to familiarise themselves with the features of the online class environment and the course structure. They were asked to post a brief introduction and their photograph online, to help class members get to know them before the course started. Students were randomly allocated to one of three discussion groups for online course work. No marks were allocated for students' online contributions but they had to participate online to pass the course. Online participation guidelines were provided because the 14 students were from very diverse backgrounds, ages, experiences, and geographical locations, and not all had previously studied online.

Online class postings were collected as data. Student questionnaires and interviews conducted at the end of the semester were used to assess the extent to which the intervention was successful in facilitating meaningful learning experiences. The questionnaires and interviews focused on students' experience with the course content, structure, and teaching–learning interactions. Additionally, daily observations of the teaching–learning processes were conducted throughout the course, and weekly interviews were held with Adrian. Eleven of the 14 students in the course consented to participate in the research.

Evaluating participation within the frame

The overall findings from implementing the sociocultural framework and associated teaching strategies revealed a transformation in participation as well as a shift in aspects of participants' intellectual, social, and emotional development as the course progressed. A brief overview of the findings as they relate to the framework is described next, accompanied with supporting participant quotes from the data. Detailed aspects of the analysis and findings have been reported elsewhere (see Khoo & Cowie, 2010).

Analysis of online posting rates indicated an overall increase in participation over the period of the course. All students participated in the course discussions, with a total of 325 online student contributions. The lecturer made 83 online contributions. The lecturer's general participation in the course was initially quite high but gradually declined as students took on more active roles and forms of interactions.

The findings showed evidence of the value of mediated, situated, and distributed participation and shifts in participant goals.

The value of technology tools in mediating participation

The web-based course tools afforded students access across time and space to a wide range of learning opportunities in the course. Melody, a student, highlighted how the flexibility of online learning encouraged her participation:

> I do it [sign online] around the rest of my life like after school at night. I went online most days and I was at least checking what was happening if not putting something on.

Shania, another student, found the asynchronous nature of online learning allowed helpful access to peer-sharing and idea generation:

> Being able to read other peoples' contributions was good ... and interesting looking at the other contributions and reading those and thinking 'No, they are wrong' or 'No, you've missed the point there'.

The value of situated participation

A survey on the value of the intervention teaching activities revealed all students thought the scenarios were 'somewhat useful' or 'very useful' in depicting real-life educational research issues that contributed an authentic context for discussing the course readings. Sapphire thought the *Scenario* helped her group to bond more closely and develop a sense of responsibility for one another's learning:

> I would say the weekly group Scenarios in class [were the most useful] because you felt—not the pressure—but you felt like you had to perform—like you couldn't have just let the group do it all—you all had to.

Adrian considered the *Scenarios* effective in encouraging student participation because they were required to negotiate and come to a group consensus about a task for which they might all be expected to be able bring some background knowledge. For example, the topic of scenario two, which was to consider how to determine the extent that internet-based teaching–learning practices are adopted in school, was a controversial topic at the time. Another course activity, the collaborative sharing and constructive critique of ideas in preparation of assignments (A1), provided an authentic context (albeit in a different way) of how educational researchers share and communicate their ideas. A student response in the survey regarding A1 was:

> I felt that this gave an opportunity for ALL to contribute and to voice what we did not know, as opposed to what we did know. I found that helped a lot.

The distribution of authority and responsibility to support participation

The course design included a number of strategies to distribute authority and responsibility. One example was the collaborative group activity (A1) that distributed responsibility for task completion and, at the same time, ensured multiplicity of contributions. Adrian made special mention of this as fostering both student interaction and accountability:

> It gave them [students] a better sense of group accountability, a better sense of interacting with others ... and it made them look at each other's ideas. That was crucial. It made them acknowledge each other as well. So I think there are some powerful lessons to be learnt here.

Distributed expertise was also revealed in student online postings that indicated their supportive sharing of experiences and course ideas to the discussions:

> Tanya (Posting #16, Week 4): Vance, I felt that your question sequence has a clear flow. Very concise. According to Cohen (2001) … you can stem each question to questionnaire responses. I like it.

The evolution of participation goals

Changing participation as a result of an OLC was illustrated through student reports of the evolution of their learning goals, from competitive individualistic ones at the onset of the course, to a more collaborative view by the end of it:

> … but that's a change of outlook on it—from a collaborative instead of a competitive view. As undergrads we did talk about a lot of stuff but always at the end was the exam, which was totally your own, you were responsible for your own results. This is kind of the other way round. It's like you are responsible for your own beginning but the group is responsible for your end. I think the attitude to have is that this is an ongoing conversation. It's a conversation and a discussion where people can contribute and every contribution is valuable to adding to the knowledge. (Shania)

Such transformation from individual to shared purposes at the end of the course is an important characterisation of a learning community.

The transformation in participation

A transformation in student participation was evidenced through changes in participants' intellectual, social, and emotional aspects (Khoo & Forret, in press). Melody exemplified this change. Her intellectual development was demonstrated through the development of her knowledge of the vocabulary of research methods:

> I have just never had a huge vocabulary and so it grows as you study, you learn new words ... it got better.

Melody's social development was seen from her appreciation for the social and interactional aspects of learning with and through her peers:

> Most of the time, I find it [other contributions] really valuable because they would often bring up points that I didn't think of. It's affirming ... Sometimes I disagreed with their thinking but it was okay because there was no right or wrong about what we were saying. It's just that we were thinking of it differently. I just incorporated what everyone said. It's good to disagree.

Melody's experience of an emotional development was evident in her feeling more confident about being involved in discussion on research:

> The first sort of week or so online, one of the very early contributions [from another student] about 'What is education?' was very technical. I couldn't even understand what he was saying and I was thinking 'Oh God, how am I going to do this course?' Then luckily somebody online said basically that she couldn't even understand what he was saying … that really helped me.

Discussion

A concern raised in the literature is that of how to assist online practitioners to enhance their practice and to design learning environments that respond to students' ongoing learning needs as espoused through the notion of learning communities. In this paper, we have described an emergent approach to developing a framework for OLC facilitation that is relevant and appropriate to the online teaching–learning context. Findings from the implementation of the framework in a masters Research Methods course evidenced the notion of learning as a mediated, situated, distributed, goal-directed, and participatory activity within a socially and culturally determined learning community. Student interactions and development with intellectual, social, and emotional foci further support the existence of a learning community within the class (Sewell & George, 2008). Such an emergent approach in designing and developing online learning environments essentially recognises the sociocultural complexities of

teaching and learning relationships in order to facilitate quality learning experiences (Schwen & Hara, 2003). Although potential pedagogical frameworks could be identified from the general literature to guide the development and implementation of online learning experiences in the study, both the researcher and case-study lecturer were keen to adopt a framework that would be relevant and suited to the teaching-and-learning context of the course. Such considerations support the call to regard New Zealand's unique qualities when developing online learning environments and recognise the undue application of educational findings from international forums into local contexts (Alton-Lee, 2004). The approach undertaken in this study provides some leverage for addressing these concerns.

In spite of the value and benefits of adopting the framework and approach described in this study, there were some challenges. The lecturer considered that, at times, the approach was time consuming. Working this way has the potential for conflict between the different sub-cultures of students within the community, and for tensions between the shaping of individual member interests and community interests (Khoo, 2010). Bearing the benefits and potential challenges in mind, adopting the sociocultural framework proposed in this study has a number of implications.

First, lecturers need to be clear about their reasons for establishing an OLC, and use these reasons to guide their planning so they incorporate pedagogical strategies for community-building. Guidelines and rules that specify norms for participation as well as mechanisms for conflict resolution can help all community members to feel included and accepted.

Second, consideration needs to be given to not only intellectual but also social and emotional processes of student development when designing course teaching and assessment activities and when monitoring how students are participating in a course. This can be challenging, given that course requirements and regulations in tertiary institutions tend to focus on the individual and on the end products of learning. Nevertheless, adopting an OLC as a pedagogical strategy importantly entails broadening course assessment practices. These need to recognise the intellectual, social, and emotional aspects of learning and the value of the processes involved in shaping individual and group knowledge.

Third, online lecturers need to create learning environments that foster interaction and collaborative teamwork so that students can capitalise on the diverse expertise of the community. Lecturers need to feel comfortable in relinquishing some control of their teaching to students in the learning process. Students, on the other hand, need to take on more responsibility for planning their own learning, for negotiating learning goals within a group, and for contributing to and drawing from group resources.

Fourth, teaching–learning activities and web-based tools need to afford opportunities for interaction, collaboration, and participation. Activities that are situated in authentic and meaningful contexts that require students to interact, and allow them to see real-world relevance and application of ideas, are likely to provide these opportunities. Designed activities should contribute to the development of a collaborative community and the pursuit of learning outcomes congruent with the goals of the particular course.

Finally, simply making the technology with all its affordances available to online lecturers and students does not necessarily result in quality learning experiences. Promoting successful online learning requires support and initiative at the institutional level to ensure that sufficient time, structures, and incentives are in place for lecturers to develop and maintain OLCs.

Conclusion

While the generalisability of findings from a single case study is somewhat limited, the proposed framework contributes to understanding how to develop OLCs from a sociocultural perspective. The framework reconceptualises successful online learning practice as that of active transformatory participation where this is framed and shaped by the use of authentic and relevant tasks to situate activity, the use of interaction and collaborative teamwork to tap into cognition that is distributed, the use of activities to direct the accomplishment of particular goals, and the use of tools and activities to mediate action. Although bringing adult students together in an online course can result in their achieving the course goals, online lecturers can only provide an impoverished technicist environment for their students' learning if they ignore the rich potential offered by online learning communities.

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