Community-Embedded Learning and Experimentation: Fostering Spaces for Transformative Learning Online

Nanci Lee, Catherine Irving and Joan Francuz Coady International Institute, St. Francis Xavier University Antigonish, Nova Scotia, Canada

In: A. Nicolaides & D. Holt (Eds.), *Spaces of transformation and transformation of Space: Proceedings of XI International Transformative Learning Conference*, Teachers College, Columbia University, New York, October 24-26, 2014, (pp. 499-506).

This paper describes the authors' experience with community-embedded online learning to examine this model's potential for creating transformative learning spaces. Lessons have been drawn from the experience of delivering both face-to-face and online courses in community-based microfinance for mid-career community development workers from Africa and Asia. There are three unique spaces that contributed significantly and differently to the learning of the students and facilitators. Drawing on the relevant literature, this study examines the integrated roles of the student-led field research assignment within the online course modules and discussion groups. Action research is potentially one of the key opportunities for transformative learning in an online space because of how it draws on peer-supported learning as well as the time and space for private deliberation.

Theoretical Framework

Transformative Learning Online

Merriam and Bierema (2014) point to a continued gap in the literature regarding transformative online learning, though they see a growing interest in its potential. We share Cranton's (2010, p. 8) view that transformative learning online can be fostered as it is in other contexts, "through meaningful interactions among learners in which people feel free to express divergent points of view and feel supported and challenged by their peers and their teacher." She adds that materials that provide alternative points of view and student participation in planning and evaluating the course add transformative potential. Garrison and Kanuka (2004) argues that a source of transformation in learning "stems from the ability of online learners to be both together and apart- and to be connected to a community of learners anytime, anywhere, without being time, place or situation bound" (p.96). The multi-dimensionality of both time and space are key.

Unique Attributes of Online Learning

While not focused on transformative learning, there is a growing body of literature that describes the unique attributes of online learning. We focus on three key features of online learning that may help to identify opportunities for online transformative learning: embeddedness in various communities; experience-based practical inquiry; the presence of a more private world where learners are online and not in a physical shared space.

Community-embeddedness. Learners online are embedded in more than one community at the same time. Lipman (1991) began the conversation with the "community of inquiry" (CoI) conceptual frame emphasizing the importance of genuine and open dialogue that fosters innate curiosity and the ability for learners to question and think for themselves. Garrison, Anderson and Archer (2000) built on this framework and it has been used and adapted by many since. They highlighted the interdependence between personal reflection and shared discourse and find the social elements of the CoI critical for challenging one's assumptions. They emphasize the importance of the cognitive presence of learning and questioning, the social presence for creating a secure environment for critical discourse and the teaching presence that bridges these worlds effectively. Dirkx and Smith (2009) support the notion of social presence taking it even further. They explain how an increased interactivity that can exist online points to greater potential of creating transformative learning experiences particularly if it engages in the emotional realities of the students. Kazmer (2005) coined "community-embedded learning" and emphasized the learning transfers between the online social world and the various communities including the work and life world in which students are embedded.

Practical inquiry and experience. Practical experience-based inquiry, rather than practice or simulation exercise, is key. Building on Garrison, Anderson and Archer (2000)'s practical inquiry, Kazmer (2005) notes, "learning in the classroom is often measured by papers and examinations while embedded learning is measured by application" (Kazmer, 2005, p. 204-205). The feedback loop is shorter and tighter since learners have their experiences and reflect on them contemporaneously. The practical inquiry framework reminds us about the cycle of experiential learning and opportunities presented through both shared and private worlds online.

We are particularly interested in the opportunities presented by practical action research but there is very little research available especially focused on practitioners in their workplace. Most of the online learning literature is focused on formal university experiences and cooperative placements or service learning. Gordon and Edwards' (2012) study on virtual participation action research for graduate students in the United States, for example, demonstrated that the students gained meaningful research experience through a virtual participatory action research project. They were able to increase their research skills as well as use their skills in other courses.

Private world. While creating a community of inquiry is valuable, we find that it is not as unique to online learning as the extended private world. Cranton (2010) captures some of the distinctive elements of online learning: time to reflect; having access to discussions once they are over; and building on Smith (2008) a greater fear of fitting in or fusing with the group.

Vaughan's (2014) distinction between synchronous (real time) and asynchronous learning is helpful for instructional design. For private space, asynchronous learning is more reflective, permanent, less intimidating, reasoned, rigorous and usually written. Synchronous learning, on the other hand is more spontaneous, ephemeral, peer influenced, passionate, more often spoken or like spoken dialogue. If we take the differences to be distinct opportunities without judgment, we can think about what each space uniquely offers to leverage that for learning in our design. Vaughan, Cleveland-Innes & Garrison (2013) emphasize blended learning's potential to be more student-led and iterative—allowing more space for re-design and introduction of new material, more actual real-time interaction with students, and more just-in-time interventions.

Our Learning Context and Community

The Coady Institute traces its inception to the long history of adult and popular education in this region, known as the Antigonish Movement. The Movement's program of adult education and economic cooperation centred on the learning in the community largely through locally-led study clubs. The potential power of personal and social transformation through education was recognized early on as a way to empower people to overcome injustice and collaboratively create alternatives. Over the decades, the Institute's education programs, intentionally designed for experienced development workers, have promoted critical consciousness raising, drawing on theories and methods from critical and feminist pedagogies (Foroughi, Irving &Savage, in press). We also draw on Gaventa's (2006) analysis of power, and Pettit's (2010) application in transformative learning, both in terms of understanding sources of oppression and for identifying spaces for participation.

The online course that is the focus of this paper evolved from an existing on-campus 3-week course on community-based microfinance that explored theory and practice, analyzed strategies, and considered opportunities and challenges in the sector. From the outset, we were interested in the ways of offering an online learning experience in keeping with Coady's approach. The fourmonth distance course was offered twice in two years. Students were mid-career community development workers from diverse cultural and geographical areas based largely in Africa and Asia with experience in savings groups, cooperatives and credit unions. Classes ranged from 15-20 students. The courses had 90-hours of facilitator-participant contact equivalent to 3-weeks in face to face and fifteen weeks in seven modules online. Participants developed an analysis of their current program with recommendations for changes. The main multi-stage assignment in the online course took place through an applied action-research exercise that participants did in their own work organizations and communities. Each stage was the foundation for the next.

Findings

Overall, online learning is multi-dimensional making it complex and varied from an instructional design perspective. We found three distinct features of online learning that present opportunities: *Experimentation*; *Emergence*; *Deliberation*.

Experimentation

There is greater opportunity for participants to directly apply their learning to their organization and their work in communities alongside of learning with the time to experiment and adapt.

The lengthened time frame (compared to the 3 week on-campus course) allowed for much more experimentation with complex problems, allowing students were to test ideas and rework assignments, and to test learning immediately. Because of the nature of the assignment as incremental, they often went back to previous steps to rework questions, revise methods. This assignment was identified by the facilitators and repeatedly by participants as one of the most significant learning experiences in the course:

I would love to have had many coffee breaks with all of you. We would have such interesting conversations! But what we lost in that, we gained in the time together to learn over a longer period. And also develop field assignments while you are there in the communities. That just isn't possible in face-to-face courses.

The actual assignments were very constructive. Definitely served important purpose in our day to day. I have used it already. The findings were presented within our organization and to our partners here in the country. Everyone was impressed. Also we have shared with other countries. Starting a new financial year and we are going to do more research to build on this.

Just to understand to follow the writing, the research, clear argumentation, where are you going. All of this to me was new – all very new. Makes me work with confidence to understand why we are doing all of this.

There was a conceptual shift in their thinking demonstrated from the questions and analysis at the start of the course through to final report. Questions were clearer with a more focused conceptual scope and operational rigour. Key elements led to the success of the assignment include: in-depth peer support, detailed facilitator feedback, relevance of course content to the assignment, and a real opportunity to succeed based on incremental steps backed by application.

The assignments flow and build up from one to another was well organized to facilitate learning and incorporate corrections for a better next.

The modules were designed, content-wise, to support learners in their self-directed action research paths. Interestingly, we did not do this type of assignment in the first distance learning course. There were several different assignments closer in nature to what was done in the face to face course: analysis, simulation, case studies. It was upon reflection from the first distance learning experience that we realized the opportunity of a field-based cumulative assignment and the benefits of what we called "muddling through" the application with support.

Emergence

There is greater potential for emergent learning and organizing around learning. There is time and space for content to "bubble up" as well as real time interventions and self-organized peer learning. We found that, with continual reflection, by both the facilitation team and participants, we were able to be much more emergent in the curriculum than in the face to face course.

In the face to face course, once the course has been designed based on the students, there is some room in terms of weighting and application exercises but not a lot of time for re-working entirely. In contrast, online we reflected at the end of each module and adapted every module as a result. The online nature of course links and third-party links to websites and publications also made it quite easy to provide resources as new areas of interest arose.

Peer self-organizing was another aspect of emergence. As the self-directed learning paths emerged, we supported peer-to-peer clustering around common elements for each assignment i.e.

those asking similar questions, using similar methods etc. Again, participants found the peer learning extremely valuable in their evaluations:

We could ask questions. You could hear from other people from other countries. Right there. Supervising the field officers. I could see all of that coming clearly. Rather than those short courses. The readings that you selected in fact -they were all relevant.

Good amount of challenging. Sharing different experience. Comparing knowledge from others. There are some challenges. You can find how other people are doing in their countries.

Yes, and also to get to ask the things that relate to a particular area because it is in the work that you are already doing. You are able to get that forum where you would share with others and also get their opinion.

We found that one of the most important elements of the "community of inquiry" was the ability of that community to support learners in their own quite individual paths of learning.

The research was very well worked because you taught us the models and then we did it practically.

As Garrison et al (2000) noted, there are conceptual and social elements. In part, conceptual ideas and methods in were shared such as tools for measuring women's empowerment. In part, it was the social elements knowledge that as learners they were not alone in their struggles, their questions, even their mistakes. For example, two participants shared their difficulty in understanding the difference between the rationale for the action research and the conceptual scope.

Deliberation

While deliberation is always a part of effective adult learning, it takes on a distinctive role in online learning due to the overlapping nature of shared and private spaces. Students could tailor their learning to their own work issues, learning styles and schedules. The following are some examples expressed by students:

The way the course was organized. Flexibility. I could do it during my free time mostly in the evenings.

Sometimes I would come in and begin reading the discussions and start formulating one in my mind but as I read on my question had already been answered. I was impressed by the level of discussion really. I wished that I could have participated more.

What was different that the facilitator was not standing in front. It was the way, the difference you need to keep your eyes on the computer, different topics, different participants. Maybe the only issue that it was a bit slower even though a lot of ideas were posted. Not as fast as if someone is standing up front.

I only went in on weekends. Because of the political situation that we had, I had other commitments such as press releases and meetings with other NGOs. It was quite intensive. I would have liked even more time.

There is flexibility to come in when it is convenient for the student, also to change the order of learning to suit your learning style or preference. Some, for example began with readings while others began directly in discussion with the larger group. As the last testimony illustrates, the flexibility and embeddedness in their own context can also be a challenge. The demands of work and life can eclipse this time and space and the fluidity between these worlds means that unexpected things can arise.

Cain in her work on introversion (2012) talks about the threat of the private world being eclipsed by an increasing emphasis on what she calls "group think" and group work that has become the norm in business schools, board rooms, and many educational settings including primary school. She provides research that supports the importance of individual deliberation for creativity and innovation, not only for introverts.

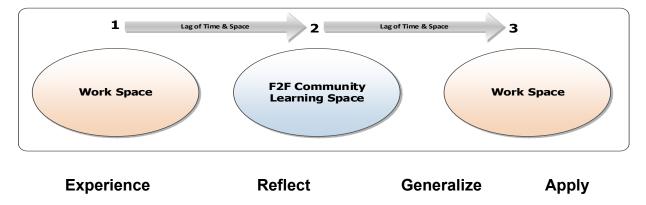
We link analysis of this private space back to elements of power from transformative learning and feminist theory to understand the socio-cultural and gendered elements of these spaces as well. We noted socio-cultural differences in the way that some participants communicated online with some, due to their educational backgrounds. Many preferred to take time to draft their responses more formally before posting. We have also found in face-to-face environments that women, depending on the socio-cultural mix of participants, can be less willing to share openly and wondered if online environments allow more freedom. Machado (2011) found that while literature suggests that females prefer the asynchronous nature of web-based technology and the slightly different social dynamics of online learning she found no significant differences in the postings of male and female students. These area clearly require more supported research.

One of the most interesting opportunities of online learning is the ability to trace and monitor individual learning paths in a way that is not possible in face-to-face interactions. Their deliberations are rendered quite visible. You can see the order of their preferences, the time they have taken and what they choose to do and not to do. The key is to use this knowledge responsibly and creatively to adapt to the learners' interests.

Re-conceptualizing Learning Spaces

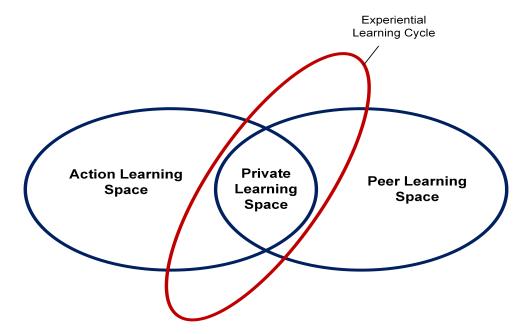
As Kazmer (2005) describes, there is a feedback loop between action and learning not found in face-to-face arrangements and outcomes are measured by application rather than by tests or other means. It is helpful to illustrate the differences. In the face-to-face course, there was a lag of time and space between work space, community learning and return to the work to apply the learning.

Figure 1: Traditional Model of Face-to-Face (F2F) Learning



We asked learners to share challenges and experiences that they had had related to the content. In face-to-face, we relied on recall, reflection and simulation of what could be done later. In contrast, online these spaces happened simultaneously. We configured the spaces a bit differently to highlight three important learning spaces that present unique opportunities for learning.

Figure 2: Model of Online Learning: Peer-Supported Action Learning



There are three potentially mutually-reinforcing spaces: work/practice or the action learning space, the online community or peer learning space, and the private learning space. The key to facilitation and instructional design is to effectively bridge these spaces to reinforce one another.

The action learning space provides opportunities for practical community-embedded action research and learning. As discussed, there are unique opportunities for real time experimentation and adaptation, muddling through. This experimentation is even stronger if directly supported by the peer learning space and online modules where, as discussed, both social and cognitive elements are key. The private space is the place where individuals can, in a self-directed manner,

pull the various pieces or spaces together to reflect, synthesize and adapt what is relevant to themselves and their context.

Concluding Remarks

In combination, well-designed, all three spaces can directly support learners in their self-directed paths. Contrary to the emphasis that Garrison et al have placed on the important role that social and collective inquiry have on individual critical reflection we find the reverse. While we agree that creating a community of inquiry online is both possible and important, doing so is not unique to online learning.

What is unique is the capacity to support learners in a much more self-directed path through their own action learning and private deliberation. Where collective inquiry and peer learning can support these processes, there is interesting potential for transformative learning online.

Critical reflection and experience happen in each of the spaces, just differently. To contribute to the dialogue and practice we offer these early experiences and insights from our own facilitator journal reflections:

There are possibilities with an online forum that there wouldn't be with face to face. I think the main lesson is that it is not a reworking of a face-to-face course but a different way of learning/pedagogy altogether.

Have we had to adapt the learning cycle? I think we have.

We welcome continued dialogue and experimentation as we all muddle through these fascinating evolving spaces for learning.

References

- Cain, S. (2012). *Quiet: The power of introverts in a world that can't stop talking*. New York, NY: Crown Publishers.
- Cranton, P. (2010). Transformative learning in an online environment. *International Journal of Adult Vocational Education and Technology, 1*(2), 1-9.
- Dirkx, J.M., & Smith, R.O. (2009). Facilitating transformative learning: Engaging emotions in an online context (pp. 57-66). In J. Mezirow & E. Taylor (Eds). *Transformative learning in practice*. San Francisco, CA: Jossey-Bass.
- Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education 2*(2-3), 87-105.
- Garrison, D.R. & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Gaventa, J. (2006). Finding the spaces for change: A power analysis. IDS Bulletin, 37(6), 23-33.
- Foroughi, B., Irving, C., & Savage, S. (in press). Learning leadership for community action: A transformative learning model. In G.I.E. Strohschen (Ed.), *Metagogy*. Marietta, GA: American Scholars Press.

- Gordon, S. & Edwards, J. (2012). Enhancing student research through a virtual participatory action research project: Student benefits and administrative challenges. *Action Research* 10 (2), 205-220.
- Kazmer, M.M. (2005). Community-embedded learning. *The Library Quarterly*, 75(2), 190-212. Lipman, M. (1991). *Thinking in education*. New York: Cambridge University Press.
- Machado, C. (2011). Gender differences in student discourse on discussion board and blogs: An instructor's quest to create a level playing field in a hybrid classroom. *Journal of Interactive Learning*, 10(1).
- Merriam, S.B., & Bierema, L.L. (2014). *Adult learning: Linking theory and practice*. San Francisco, CA: Jossey-Bass.
- Pettit, J. (2010) Multiple faces of power and learning, IDS Bulletin, 41(3), 25-35.
- Swann, J. (2010). A dialogic approach to online facilitation. *Australasian Journal of Educational Technology*, 26(1), 50-62.
- Vaughan, N., Cleveland-Innes, M., & Garrison, D.R. (2013). *Teaching in blended learning environments: Creating and sustaining communities of inquiry*. Edmonton, AB: Athabasca University Press.
- Vaughan, N. (2014). Designing blended learning courses for the needs of diverse learners. Mount Royal College. Retrieved from: http://blogs.cofc.edu/onlinelearning/files/2010/02/NormVaughn_questionnaire.pdf