

## FROM A COMMUNITY OF PRACTICE PERSPECTIVE LEARNING IN A MOOC CAN BE A LONELY PROCESS

Christina Preston

MirandaNet Fellowship, University of Bedfordshire, United Kingdom  
christina@mirandanet.ac.uk

Sarah Younie

MirandaNet Fellowship, University of De Montford, United Kingdom  
younie@dmu.ac.uk

### **Abstract:**

The MirandaNet Fellowship, a community of practice founded in 1992, has been experimenting with online learning since the turn of the century. The Fellows, who know each other well, take different roles in an online conversation and weave their knowledge and experience together to create new collaborative knowledge that can be repurposed by members for the reports and articles they need to write in order to influence policy locally, nationally and even internationally; This could be called e-learning in a Community Online Open Course (COOC). This growing body of MirandaNet theory and practice, called Braided Learning, has been challenged by the advent of the Massive Open Online Course (MOOC) that can attract 45 - 50,000 participants who have no past history with each other. In this presentation we adjust our views about online learning because of our role as partners in developing and piloting the EU LLL HandsOn ICT MOOC that had 40 participants in the first pilot and more than 1,000 registrants for the second pilot. Using our experience of COOCs and MOOCs we discuss what kind of learning can take place in different kinds of web environment.

**Keywords:** *MOOCs, COOCs, professional development, elearning*

## 1. WHY CREATE A COMMUNITY OF PRACTICE FOR PROFESSIONALS?

A key issue in introducing digital technologies into learning has always been the lack of adequately trained teachers. One approach that cuts down costs is to encourage teachers at schools, HE and VET levels to join a community of practice (Thompson, 2013). This observation was made by the author, Christina Preston, when the 1980s computer networks were established in most UK schools and she became an IT adviser teaching teachers. She quickly found that the one-day computing courses offered at the Inner London Education Computing Centre (ILECC) were ineffective for many London teachers for three reasons: they had not studied computing in their first degree; they did not own their own computer; and, they were only offered one computing session a year. So in 1992 she founded one of the first free online communities of practice, the MirandaNet Fellowship<sup>1</sup>, (see Figure 1) where teachers, teacher educators, researchers, policy makers and developers could support each other in figuring out the best ways to use computers in schools to enhance learning.

MirandaNet now has over one thousand members in nearly eighty countries who share their professional experience and expertise in the search for what works in the classroom, and what does not. They debate online in a professional knowledge creation event that we call a MirandaMod<sup>2</sup> as well as publishing articles, papers, and case studies to inform educators globally (See Figure 1)

**Figure 1:** MirandaMods held in a variety of professional development contexts



This community approach to professional development for teachers has recently been endorsed by Professor of Computing, Tim Bell et al. [14] in reviewing how teachers in New Zealand might keep up with the move towards computing science in their new curriculum for schools; a curriculum and professional development programme that has been widely praised (Clear & Bidois, 2005).

## 2. CAN ONLINE LEARNING BE COLLABORATIVE?

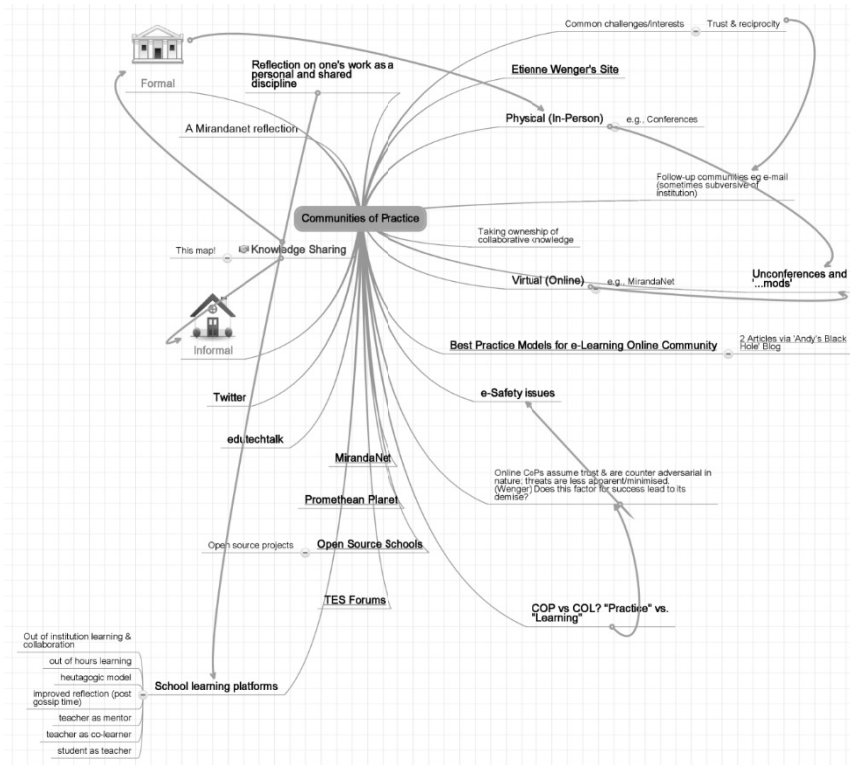
In universities online learning was often thought of as a means of storing resources and papers online so that students can access them and learn from them as they would notes from a lecture. The first Virtual Learning Environments (VLE) like Blackboard reinforced this information transmission pedagogy. From 1999-2002 MirandaNet were involved in the design of a social networking website for children called Think.com by Oracle which encouraged children to publish page about themselves like Face Book. But after the events of 9/11 the American Oracle branch grew concerned about children contacting each other across the world and this innovative learning application was dropped. In contrast over the years MirandaNet Fellowship has used their webspaces to research the innovative use of digital technologies in collaborative learning, knowledge creation and analysis of current professional knowledge; an approach that combines online learning and social connections. These

<sup>1</sup> [www.mirandanet.ac.uk](http://www.mirandanet.ac.uk)

<sup>2</sup> [www.mirandanet.ac.uk/mirandamod](http://www.mirandanet.ac.uk/mirandamod)

ideas relates to: emerging practice in collaborative games players engaging remotely in virtual worlds; remotely authored concept maps; social networking; and. micro-blogging. These democratic, collaborative knowledge creation opportunities are causing ripples in social and cultural contexts although they not widely exploited for learning yet. Nevertheless MirandaNet, like many communities of practice, would find it difficult to operate without wikis, micro-blogging, social networking, video-conferencing tools and remotely authored digital concept maps (Figure 2).

Figure 2: A remotely authored concept map on Mobile learning developed by MirandaNet members<sup>3</sup>



As a long-standing community of practice MirandaNet members first researched these online collaborative learning processes by observing how teachers share ideas on email - a process we called Braided Learning (Preston, 1999; 2007a; 2007b). As technologies improve, more collaboration on new knowledge construction is possible as we demonstrate in our MirandaMods using Web 2.0 combining video conferencing, micro-blogging, and remotely authored concept mapping to explore the value of communities of practice. The url has been provided as well as an image of the map as already A4 paper reproduction of knowledge building is inadequate for this kind of collaborative work.

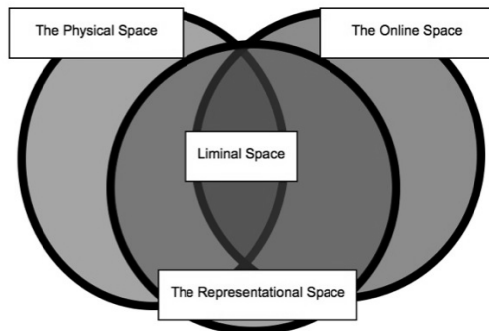
MirandaNet Fellows are now relating their practice to the emergent term, Community Online Open Course (COOC). In this context, a MirandaMod creates a shared liminal space (see Figure 3) that is important to building on professional knowledge: inchoate and chaotic as learners' misconceptions, misunderstandings or simply lack of knowledge clash and co-mingle. 'Liminal space' is a term used generally to describe the dissolution of order in the individual brain during liminality that creates a fluid, malleable situation that enables new institutions, new customs and new expressions of commonality to become established thus changing existing practice.

MirandaNet Fellows, Cuthell, Preston, Cych and Kuechel (Cuthell & Preston, 2005; Cuthell et al., 2009) argue that social liminal space can be conceptualised as anthropological and contains semiotic elements that can be visual as well as written. In the public sphere created at the interface of face-to-face and virtual communicative action, all learners, professional or otherwise, could act in the

<sup>3</sup> One can also view the map here: <http://www.mirandanet.ac.uk/mirandamods/archive/the-role-of-communities-of-practice-in-teaching-and-learning/>

Brunerian sense (Bruner, 1974) as scaffolds to support each other as they traverse liminal space together to reach shared and individual enlightenment and transformation.

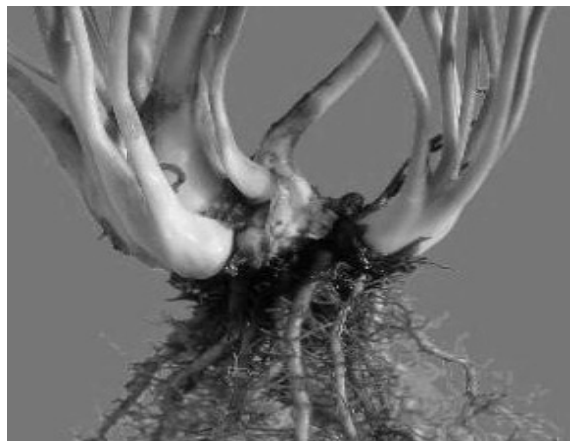
**Figure 3:** Liminal space theory adapted to include shared online spaces



Professor Mike Sharples, a MirandaNet Fellow, has also been working in the area of innovation in collaborative learning (Sharples, 2012). His Open University team offers two terms that help to describe the learning conditions demonstrated in a MirandaMod: seamless learning and rhizomatic learning. Seamless learning defines the experience of continuity of learning across a combination of locations, times, technologies or social settings. This can be seen as learning journeys that can be accessed on multiple devices, flow across boundaries between formal and informal settings, and continue over life transitions such as school to university and workplace.

Rhizomatic learning is derived from the metaphor of a plant stem that sends out roots and shoots that allow the plant to propagate itself through organic growth into the surrounding habitat. (See Figure 4) Seen as a model for the construction of knowledge, rhizomatic processes suggest the interconnectedness of ideas as well as boundless exploration across many fronts from different starting points. An educator reproduced this effect by creating a context within which the curriculum and knowledge are constructed by members of a learning community and which can be reshaped in a dynamic manner in response to environmental conditions.

**Figure 4:** A rhizome providing a visual image for the way in which knowledge is constructed by self-aware expert communities adapting to environmental conditions



These social, conversational processes, as well as personal knowledge creation, can be linked into unbounded personal learning networks, that merge formal and informal media. Working with communities of teachers Leask, Preston and Younie, three more MirandaNet Fellows, have shown that teachers in communities can develop new theories and practice that are valuable for influencing policy at many levels (Leask & Preston, 2009; Leask & Younie, 2001).

### 3. HOW DO MOOCS CHANGE THE LEARNING LANDSCAPE?

This growing body of MirandaNet theory and practice, called Braided Learning, has been challenged by the advent of the Massive Open Online Course (MOOC) that can attract 45 - 50,000 participants who have no past history with each other. MOOCs seem to transform the ways in which adult learning is delivered, particularly informal and self-directed learning for those who cannot learn hope to learn in august institutions like Stanford University for reasons of access. In these circumstances the role of the e-mentor become problematic because of the number of mentors needed to cover the numbers of students and the cost of that model (Laurillard, 2014).

The questions of e-mentoring has come up in the first pilot of the EU LLL programme funded Hands-On ICT<sup>4</sup>. MirandaNet is one of the partners charged with explore the value of Massive Online Open Courses (MOOCs) and Community Online Open Courses (COOCs) in professional learning. In essence, Hands-On is a holistic environment that provides teachers from higher education, vocational education and schools with everything they need to learn about making the right choice of ICT tools for a given pedagogical activity. The Hands-On ICT team from England, Greece, Slovenia, Spain and the Netherlands based the design of the MOOC on the contexts and practices that were identified in a report about existing e-learning projects already underway in Europe (Riviou et al., 2014). The participants questioned the underpinning e-mentoring principle of the course as well as perceiving a lack of clarity about the role of an e-mentor because each student had different views. Also the mentoring role implies responsibility for other students and a generosity with time that cannot always be relied on. Questions were raised about whether there should be tangible rewards for mentoring effort other than personal satisfaction like accreditation. Since no payment would be involved qualifications in e-mentoring were mooted. But how would success in mentoring be judged: test scores; ICT competence; the quality of responses in a forum or whether the teachers have implemented these ideas in the classroom? Tests can validate knowledge as evidence: however, there should also be a way to validate performative evidence. One way is for the participant to upload an ICT artefact used to support learning and teaching, together with a commentary and evaluation. In this context the Hands-On team is exploring partnerships with Learning Designer<sup>5</sup> and Ingots<sup>6</sup>. Global publication could be another route that would motivates the teachers to develop artefacts to share more widely with others like the Mapping Educational Specialist knowhow (MESH)<sup>7</sup> initiative.

The major conclusion from the participants was that the designers of the second pilot need to engage in some significant rethinking because the underlying theory of Hands-On ICT, that all students are the drivers in their education and will self-organise and network, is not necessarily the case. Some will only want an academic course. Should the Hands-On ICT team cater for both kinds of professional learner? (Preston & Younie, in press).

In this presentation we will report on our observations about the roles of e-mentors in MOOCs in the second pilot HandsOn ICT that started in May 2014 with more than 1,000 participants. We will aim to show how this MOOC model accords with the principles of a COOCs, how they differ and what are the advantages of each.

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<sup>4</sup> Hands-On ICT Project [handsonict.eu](http://handsonict.eu)

<sup>5</sup> Learning Designer <https://sites.google.com/a/lkl.ac.uk/ldse/>.

<sup>6</sup> INGOTS <http://theingots.org/community/about>

<sup>7</sup> MESH <http://www.meshguides.org/>.

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