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"The best part was the contact!": Understanding postgraduate students' experiences of wrapped MOOCs

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Abstract

Mandated to provide support to postgraduate students, the Office of Postgraduate Studies at the University of Cape Town operates in a context characterised by limited funding and resourcing, varied student preparedness for postgraduate study, and increasing student mobility. Extra-curricular academic and professional skills support is offered through a range of modes, including the wrapping of MOOCs. This research explored the contribution of face-to-face, facilitated sessions to the learning experiences of wrapped MOOC participants. Interviews, surveys and course evaluations were analysed using the Community of Inquiry (CoI) framework. Although the CoI framework surfaced complex relationships between the three presences and students' learning experiences, with students expressing strong appreciation for the face-to-face contact in addition to online learning, the framework does not surface the substantial impact of learner and structural factors as contributors to learning.

Keywords: MOOC; Community of Inquiry framework; Blended learning; Postgraduate

Introduction

The emergence of MOOCs (Massive Open Online Courses) in the virtual landscape has allowed individuals and collectives historically unique and unprecedented opportunities for learning. Offering opportunities for learning across a wide array of disciplines, at various levels of study, with increasing opportunities for self-paced learning, and at the relatively low costs, MOOCs as a site of learning are being taken up in various ways. While most learners engage with MOOCs almost exclusively through platform channels, others encounter MOOCs through or alongside face-to-face learning contexts. The integration of MOOCs and face-to-face learning, sometimes referred to as "wrapping", creates a range of blended learning contexts, which offer opportunities to support and understand learning.

This study is located in one such blended context where on-campus, postgraduate students at the University of Cape Town, engage in MOOC-based learning as part of voluntary, supplementary studies though the Office for Postgraduate Studies (OPS). This paper describes the wrapped MOOC model adopted by the OPS to address the twin challenges of underpreparedness for postgraduate study, and the poor development of graduate attributes during the course of study. Using the three presences of the Community of Inquiry (CoI) framework, we explored the learning experiences of postgraduate students in the particular blended learning space that emerges from the intersection of MOOCs and OPS-facilitated study groups. We found that the presence of an expert facilitator and a local cohort, while substantially enriching the learning experience, did not wholly overcome the challenges of autonomous, voluntary, online learning. We argue that the three presences of Garrison, Anderson and Archer's (2000) CoI framework, while offering a useful entry point to understanding student learning experiences, does not fully capture some significant factors affecting student learning which we discuss later in this paper.

MOOCs in blended learning contexts

MOOCs were initially touted a solution to some of the limitations of higher education (Yuan & Powell, 2013). A relative newcomer to the online learning landscape, MOOCs, designed for primarily distance and scale, are characterised by large course sign-ups (Mustafaraj, 2014), no prerequisites or admission requirements (Sandeen, 2013), increased access (Pappano, 2012), relatively low completion rates (Jordan, 2014; Khalil & Ebner, 2014), no institutional accreditation (Chauhan, 2014), no cost for enrolment and participation, (McAuley, Stewart, Siemens & Cormier, 2010) and, relatively low cost for certification (Dellarocas & Van Alstyne, 2013). Although these characteristics suggest the potential for MOOCs to impact on the educational landscape in positive ways, MOOCs have proven to be neither the solution to the challenge of universal higher education, nor the disruptive innovation that many advocates initially claimed. Various authors have, however, pointed to the positive impact of MOOCs on higher education through stimulating discussion about teaching and learning (Conole, 2013), and the use of technology (Hendrickx, 2016).

MOOC-taking is sharply differentiated by geographical region (Christensen et al., 2013), with participation in MOOCs being particularly variable in developing world contexts (Emanuel, 2013). This can be attributed in part to the cost of MOOC access and registration in developing world contexts (Dellarocas & Van Alstyne, 2013). Additionally, MOOC-takers from the global south may experience barriers to learning related to educational context, cultural backgrounds or linguistic fluencies (Moser-Mercer, 2015), as MOOCs tend to be created by global north universities, with limited numbers of MOOCs produced by developing world universities (Altbach, 2014; Czerniewicz, Deacon, Fife, Small & Walji, 2015).

As the use of MOOCs in the formal, higher education landscape is an emerging practice, there are a limited number of studies that address the integration of MOOCs and face-to-face contexts. Czerniewicz et al. located the use of MOOCs primarily outside the formal learning environment of higher education institutions, but noted "a number of interesting experiments" in integration in these spaces (2015, p. 3). Their representation maps levels of formality (formal, semiformal, informal) against local models of learning provision such as degrees, short courses and professional courses. Although various authors note the integration of MOOCs and face-to-face environments (Bruff, Fisher, McEwen & Smith, 2013; Waldrop, 2013; Li et al., 2014), Czerniewicz et al. (2015) make particular note of the wrapping of MOOCs.

The wide variety of contexts and ways in which "wrapping" occurs has resulted in some debate around the term "wrapped MOOCs". Fisher's notion of "wrapping", taken up by various authors (Bruff et al., 2013; Czerniewicz et al., 2015; Griffiths, 2013; Norberg, Händel & Ödling, 2015; Siemens, Irvine & Code, 2013), is understood to mean the incorporation of all or a substantial part of a MOOC into a face-to-face learning space, with additional support for students (Bruff et al., 2013; Czerniewicz et al., 2015). Caulfield (2013) challenges the use of "wrapping", highlighting a lack of clarity on what is being wrapped, and offers the alternative idea of "a distributed flip", defined as the use of "MOOCs to support traditional face-to-face experiences using a blended, flipped format" (Collier & Caulfield, 2013, p. 382). Downes (2013), privileging the online element, asserts that wrapped MOOCs are not MOOCs at all. Although, to date, researchers in the field have not reached consensus on a term for the incorporation of MOOCs into a face-to-face learning environment, we are electing to make use of the term "wrapped" to describe the OPS use of MOOCs.

The Case of the Twin Challenges: Preparedness and Graduate Attributes

Postgraduate students face twin challenges of readiness for postgraduate study, and the acquisition of graduate attributes during a degree. A number of studies express concerns that postgraduate

students lack necessary skills, including critical thinking, public speaking, academic writing, and statistics for research data interpretation, to complete their academic research or be well equipped for the workplace (for examples, see Green, Hammer, & Star, 2009; Nair, Patil & Mertova, 2009). While the challenges of the postgraduate experience receive some attention in the global literature, these are often experienced more sharply in developing world environments, where social and financial inequality produces postgraduate student cohorts that are diverse in their levels of preparedness for postgraduate study (Essa, 2011; Hanyane, 2015), and, regrettably, diverse in their attainment of graduate attributes by the end of a programme (Mouton, 2007; Le Grange & Newmark, 2002; Nchinda, 2002).

Faced with these challenges, the OPS at UCT runs a supplementary programme of academic and professional development opportunities for postgraduate students. While historically, these supplementary activities drew on local and visiting academics to run face-to-face workshops and seminars on critical topics, more recently, facing increasing needs and an austerity climate, the OPS has supplemented the face-to-face programme with the inclusion of selected MOOCs. Between 2013 and 2015, 43 groups have participated in 33 MOOCs from a range of platforms, including Coursera, and edX. The MOOCs selected for inclusion in the programme included MOOCs focused on language and writing development, such as "English Composition I", and "SciWrite: Writing in the Sciences", MOOCs focused statistical skills such as "Application of Statistics in Research", and MOOCs focused on critical skills development such as "Logical Thinking". In the programme, students meet with a facilitator on a weekly basis for the duration of the MOOC. Group size was capped at 15 to 20 students. These sessions were attended by 406 unique students and facilitated by 29 senior postgraduates or staff.

Adopting a qualitative, case study approach, a range of primary and secondary data was collected for the 2013 to 2015 period of the programme. The total sample was made up of 406 students and 27 facilitators. Data sources included three semi-structured student and five semi-structured facilitator interviews, generating seven hours of data; 35 online student surveys; and 62 open-ended student course evaluations. This data was analysed using content analysis (Stemler, 2001), with the CoI presences, discussed in the following section, providing predetermined codes.

The Community of Inquiry Framework

Garrison, Anderson and Archer's (2000) Community of Inquiry (CoI) framework (Figure 1), initially developed to investigate the use of text-based, online communication in an exclusively online learning environment, was adopted to understand the experiences of students in a wrapped MOOC. Although predominantly used for analysis of text-based, asynchronous online discussions, CoI has been used in other blended contexts (for examples see, Szeto, 2015; Tik, 2016 and, Vaughan & Garrison, 2005). The model establishes three key concepts: social presence, cognitive presence and facilitator presence, and how the interactions of these produce an educational experience (Garrison, Anderson & Archer, 2009). While it is the meaningful interaction of the three CoI presences that produces learning (Ferrera, Ostrander & Crabtree-Nelson, 2013), Rovai (2002) proposes that successful learning is related to a stronger sense of community. The three presences are not mutually exclusive, and continuously shift depending on the educational context (Swan, Garrison & Richardson, 2009). Garrison, Anderson and Archer (2009, p. 6) identify the goal of the model as "defin[ing], describ[ing] and measur[ing] the elements of a collaborative and worthwhile educational experience". Reflecting on the development of the model, the authors assert that it "would provide order, heuristic understanding and a methodology" for studying online communication (p. 6).

Drawing on the CoI framework, observational, survey and interview data were collected and analysed. The context and literature pointed to additional factors, outlined in the discussion section, which emerged during the analysis. The findings from this analysis and the limitations of the CoI framework for understanding a blended learning context are discussed in the following sections.
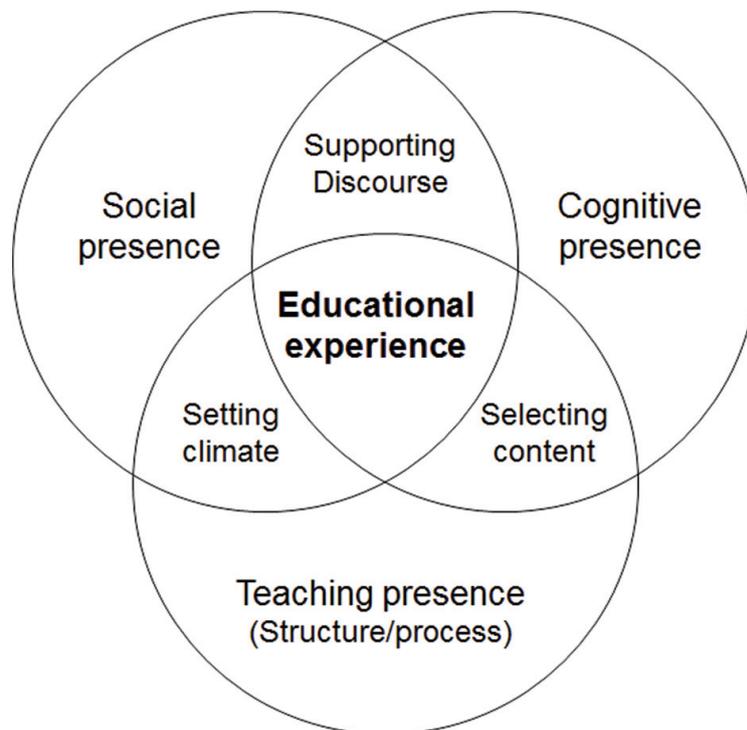

Figure 1: Community of Inquiry framework (Garrison, Anderson & Archer, 2000)

Findings

In line with other blended learning contexts in the literature, students' experiences of the wrapped sessions were largely positive with marked preferences for face-to-face contact in addition to online learning. The CoI framework highlighted a clear alignment between the three presences and students' learning experiences.

Teaching presence

Teaching presence focuses on the design, facilitation and organisation of the course activities, content and schedule, and plays a pivotal role in fostering in social and cognitive presence (Garrison, Anderson & Archer, 2009). In this case study, the facilitator played a central role in wrapped MOOCs, focused on contextualising content, setting the climate in the classroom, and designing and adapting MOOC activities.

Contextualising content

Student satisfaction with the learning experience seemed linked to facilitators' ability and willingness to engage in regional and disciplinary contextualisation. In line with Bulger, Bright and Cobo's (2015)

claim that most MOOCs relate to developed regions and challenges may exist when MOOCs are adopted in a developing region context. One of the facilitators accounted for the changes she made by Explaining that many of the MOOCs are from "universities globally that have very western affiliations" (Facilitator A, Interview). Additionally, students expected that sessions would provide contextualisation that would suit their needs: "I hoped that maybe UCT might like, twist it a bit to kind of more suit our needs or like make it more specific to UCT students rather than anyone who wants to do this course" (Student B, Interview). Face-to-face sessions provided a place for the "practical application in [a] South African context" (NE37, Survey) and used the skills acquired in the course to "analyse African/South African problems" (NE38, Survey).

Faced with variation in students' disciplinary backgrounds, some facilitators opted to adapt the content along disciplinary lines. One student remarked the facilitated sessions were used "to relate the course to our own research and background" (NE40, Survey). Other facilitators encouraged students to focus on their own contexts and needs when completing MOOC activities. For example, in the public speaking MOOC, Facilitator C asked students to prepare presentations for class based on their own context.

Setting the climate for learning in the facilitated sessions

When asked to describe the climate in facilitated sessions, facilitators reported creating a less formal, hierarchical classroom climate than found in many UCT contexts. As many facilitators were themselves postgraduate students, they related to their students as peers. Facilitator C noted there "was no need to discipline or keep them [students] in line." Facilitator B reinforced this notion saying that since the students were postgraduates, it was easier to form collegial social and intellectual relationships, whereas with undergraduate students, she felt "motherly."

Designing and adapting MOOC activities

While facilitators' contractual obligation to the OPS was to support student learning, facilitators interpreted this differently. Some facilitators adopted an active role, adapting MOOC content by designing worksheets and activities that would work in the classroom environment to allow students to be "participatory and involved" (Facilitator A, Interview). In another case, the facilitator brought peer assessment activities from the MOOC Into the facilitated session for face-to-face peer feedback. By way of contrast, some facilitators used sessions as an opportunity to stimulate discussion about the MOOC content that students would have completed in their own time. One facilitator made use of the lab space to host working sessions when students engaged with MOOC content individually but could request assistance. A student in these sessions remarked, "I came here to talk about what we have been learning online and not to carry on with the online material (Student A, Interview)". While some facilitators made learning design choices without explicitly consulting students, Facilitator C solicited student input on learning design with students opting to use session time to engage in practical activities and discussions, rather than using the time online (Interview). Student preferences for active face-to-face engagement is highlighted in the literature. (Bruff et al., 2013; Chen & Chen, 2015).

In order to apply the term wrapped MOOC to a learning experience, we suggested earlier that the whole of MOOC needed to be used. However, various authors (Agarwal, 2014; Collier & Caulfield, 2013; Krause, 2014) note that MOOCs are being used as textbooks or OER, where local users or facilitators select the content they wish to engage with, shifting the primary site of learning from the MOOC to the face-to-face context. In this study, although the sessions were designed to wrap MOOCs, student behaviour sometimes pushed facilitators to treat MOOCs as OERs. Students

seemed to expect that facilitators would cover key MOOC content in the class (Facilitator L) - "... some of the other people only came to the facilitated sessions and did little -- if anything -- of the online work" (NE18, Course evaluation). Some facilitators used the MOOC themes and key content to structure their sessions, anticipating that not all students would come prepared to class. This enabled students who were unable to keep up online, to absorb key points of the MOOC and to continue to attend facilitated sessions. Sessions designed in this way seemed to be well received, especially when the MOOC in question focused on a generic skill such as writing or public speaking, or in cases where students had prior knowledge of the field and were using the MOOC for revision or supplementation purposes. This behaviour does, however, shift the primary space of learning from the MOOC to the face-to-face classroom.

Social Presence

Social presence focuses on students' ability to develop relationships and interact with their peers in an open, risk-free manner (Garrison & Vaughan, 2008). As many UCT postgraduates come from other institutions, and are, additionally, less likely to experience the cohort-based classroom practices that undergraduates are familiar with, feelings of isolation are a common experience. In addition to academic difficulties, postgraduate students may experience social isolation, a lack of emotional support, and may struggle to form meaningful relationships with their peers (Janta, Lugosi & Brown, 2014; Panda, 2016; Wisker, Robinson & Shacham, 2007). Thus, understanding the role of social presence in learning is particularly important for this type of student. Interviews with students surfaced the importance of interaction, social space, and a sense of belonging and community which they explicitly contrasted with the online experience.

Interactivity and discussion

Students were able to communicate comfortably and collaborated among their peers and facilitators. Students enjoyed sharing ideas: "It was useful to talk about the assignments and discuss some of the common challenges that we all face with regards to writing (Survey, NE15)". They expressed particular satisfaction in working through challenges communally: "...classmates came with their individual practical challenges and we went through them together" (M56, Survey). Facilitators shared students' experiences, similarly finding satisfaction in learning with their students: "The class was excellent at providing feedback to their fellow classmates and we were all able to learn from each other" (Facilitator G, Course evaluation). The flattened hierarchies in the classroom created opportunities for facilitator learning: "The weekly sessions were of extreme value to me, as it offered me to share ideas with others and learn from them" (Facilitator F, Course evaluation).

Social space for postgraduate students

Participants found solace in their peers, knowing that they too had similar interests and challenges. While the term 'loneliness' was only mentioned explicitly by one facilitator and one student, many comments suggested that attendance at the facilitated sessions of the MOOCs was in part driven by the isolation of being a postgraduate student. For example, one student remarked that "it may sound cheesy but I felt far less alone to know that colleagues in science or whatever were facing similar challenges" (NE20, Course evaluation). Facilitator H referred to the sessions as a form of "group therapy". These comments support the literature that state that postgraduate students suffer from social isolation and are seeking real-life peer interaction through MOOCs (Janta, Lugosi & Brown, 2014; Panda, 2016).

Face-to-face vs online

Differences emerged between a purely online course and a course with face-to-face support. Students highlighted the value of interaction: one student explained, "I was able to ask questions and interact with other students having the same queries, which is not possible with a purely online course (NE36, Course evaluation)". Similarly, another stated "The discussions were more real than that of online peers (MS19, Survey)". Students asserted the importance of a sense of shared challenge which they struggled to establish with online peers - "It was useful to talk about the assignments and discuss some of the common challenges that we all face with regards to writing" (NE15, Course evaluation). The preference for face-to-face discussion over online course discussion is supported by the literature (Bruff et al., 2013, Chen & Chen, 2015). Especially when students have both options available to them, Macdonald (2008) points out that most students would choose the face-to-face option as has occurred in this context.

Sense of belonging and community

The face-to-face group supported the development of a sense of belonging and community across departmental boundaries. One facilitator felt the group "definitely developed a bond with each other, they would high-five each other before they go up [to present], they would cheer for each other, they really got into it" (Facilitator C, Interview). In another group, if an individual was missing from class, someone else would "quickly message and see if they're coming" (Facilitator A, Interview). In Facilitator B's experience, students freely shared ideas and tips, aligning with Bulger, Bright and Cobo's (2015) assertion that students attended MOOC meet-ups to share common ideas and perspectives (Interview). The available evidence seems to suggest that a comfortable, supportive, non-judgemental environment supported community building among students. There were, however, some facilitators and students who did not feel a sense of belonging or community. As discussed later, group size was a factor: Facilitator E pointed out that in an undersubscribed wrapped MOOC with only two participants, "there wasn't much sense of a community or camaraderie" (Interview).

Cognitive Presence

Cognitive presence focuses on the process of inquiry, including developing higher order thinking and construction through personal meaning (Garrison & Vaughan, 2008). Cognitive presence is grounded in Dewey's practical inquiry model (1938, cited in Swan & Ice, 2010), incorporating four phases of the inquiry process. This process starts with 1) a triggering event, where a problem or issue is identified, or some form of cognitive dissonance, 2) exploration, where the problem is explored, 3) integration, where students develop understanding and 4) the last phase, where students are able to apply their newly acquired knowledge to real-life contexts (Garrison, Anderson & Archer, 2010).

Applying MOOC content to studies

Although Garrison, Anderson and Archer (2001) focus on resolution as a key phase in cognitive presence, they do so in the context of an accredited, formal, online course. In this study, where student participation is wholly voluntary and undertaken in a blended context, the four phases of inquiry are all represented.

For many students, access to MOOC material served a primarily triggering function, exposing them to new content or skills. For example, Facilitator F observed, "Many students came to the seminars, wanting to ask questions about the course material" (Interview). For a number of

students, the face-to-face sessions provided an opportunity to explore a problem more completely: "...classmates came with their individual practical challenges and we went through them together" (MS6, Survey) with various students affirming the importance of sharing challenges with peers.

However, the face-to-face sessions also created opportunities for integration with one student asserting: "[The] course was helpful to strengthen my presentation skills." Students reported using the wrapped writing MOOCs to support completing their master's thesis (MS28, Survey), and a PhD in the Sciences (MS13, Survey). Another PhD student used the R programming wrapped MOOC to successfully build skills for analysing data for their PhD (MS27, Survey), while a student who was completing masters coursework used wrapped MOOC participation to boost their grade in a biostatistics module (MS6, Survey). For many, the wrapped MOOCs had a positive effect on their master's or PhD dissertations. There were, however, some examples of the significant impact of the wrapped MOOCs on the students' professional and personal lives with students reporting increased confidence in their ability to interact with students and colleagues.

Discipline and relevance of the MOOC

A single wrapped session might include students from multiple faculties of disciplines. This disciplinary diversity presented a challenge for facilitator and students when the MOOC content focused on a specific discipline, rather than interdisciplinary skills such as public speaking or academic writing.

For the most part, students responded positively to courses that assumed an interdisciplinary audience: "The course wasn't discipline specific and everybody could benefit" (NE19, Course evaluation). Even in these cases though, where the online content was not relevant or pitched at the right level, facilitator intervention "made it relevant and stimulating" (NE21, Course evaluation). By contrast, in one case, a student found the course "was too broad", showing the downside of the interdisciplinary approach (NE20, Course evaluation).

Occasionally, students found courses to be too focused to permit non-specialist access. A genetic counselling student registered for a MOOC in Understanding Health Studies Research noted "overall the course was very skewed towards nursing" (NE39, Course evaluation). Similarly, a non-STEM student registered for a MOOC in "Creativity, Innovation and Change" asserted that the course seemed directed to a disciplinary audience: "...it [the course] seemed directed more at students with a science/engineering/entrepreneurship background" (OE19, Course evaluation). Another student highlighted a difficulty raised through the disciplinary context: "...examples were not related to me, which sometimes made it difficult to follow along" (NE10, Course evaluation).

Student experiences of relevance of the MOOC content to 'real-world' contexts appears to be a factor influencing their learning (Hood, Littlejohn & Milligan, 2015), and therefore impacted whether students had a meaningful learning experience. This is a factor in the outcome of cognitive presence, although the extent of the impact of this factor requires further research.

Discussion

While the CoI framework is very useful for focusing our attention on the three presences, the context in which we are looking at learning is substantially different from the context in which the framework was developed. Critically, the framework was developed in the context of a formal, accredited course where instrumental motivation and various structural systems manage issues around student participation, while the OPS supplemental programme is entirely voluntary. Recently, the use of the model has expanded in two key ways that make it suitable for this context. Firstly, researchers have proposed the addition of a learner presence, arguing that the CoI framework fails

to adequately consider the student in constructing the learning experience (Jezegou, 2010; Shea et al., 2012). Secondly, the application of the framework has been extended beyond online, text-based communication to blended learning contexts (Akyol, Garrison & Ozden; 2009).

Learner Presence

Garrison, Anderson & Archer's (2000) version of the framework, which includes the three presences (facilitator, social and cognitive presence) addressed above, emerged in the context of formal, online, text-based communications in a graduate programme as a tool to "define, describe and measure the elements of a collaborative and worthwhile educational experience" (Garrison, Anderson & Archer, 2009, p. 6). When applied to blended learning contexts and, particularly, to informal learning contexts, arguments, such as those made by Jezegou (2010), and Shea and Bidjerano (2010), for the inclusion of a "learner presence" category begin to carry increasing weight. Given the conventions in online, informal learning, learner presence caters to the self-regulated characteristics embodied by many students.

In this study, student participation, both in the MOOC and in the facilitated face-to-face sessions is entirely voluntary, and poor participation or even withdrawing from the programme entirely carries few social or financial costs. Thus, in an attempt to describe student experiences of the facilitated sessions, we inspected the data for material relating to learner presence. Two clear categories of response pertaining to the presence of the learner emerged from the data. The first of these, motivation, relates to learners' capacities to stay present and committed through a voluntary learning experience, while the second, workload and time commitment, relates to competing demands for students' attention.

Students mentioned the need for intrinsic motivation in order to stay engaged throughout the course. Some students cited the "personal desire to advance one's knowledge" as the primary form of motivation to completing the course (Student C, Interview). A student noted that the wrapped MOOC experience requires more "self-motivation than normal undergraduate lectures" but concluded that "the rewards are probably greater" (MS11, Survey). Another student distinguished between general or extrinsic and intrinsic motivations for engaging in the course: "I have this desire to be able to write well and...that probably motivated me a bit extra [than] just wanting to be able to write a thesis" (Student B, Interview). Here motivation came from two related directions, namely to enable the student to write her thesis (extrinsic), and a personal desire to write well (intrinsic). Facilitators were asked how they motivated students and how they got students to participate. Facilitator C said when "people are self-motivated, that's the big part of it, they have to want to be there" (Interview). Facilitator B proclaimed"…it was intrinsic because it was goal driven, they wanted to achieve something at the end of the 8 weeks. So I didn't have to do any external motivating, it came from within" (Interview).

Some students, despite a strong interest and enthusiasm, found it difficult to successfully retain the online learning and face-to-face sessions in their schedules. One student explained, "It was all helpful, it was just difficult to get to the classes sometimes because of other time constraints" (NE36, Course evaluation). Other students attributed imperfect attendance or dropout to the demands of their accredited degree courses: for example, "the coursework started to get longer and longer each week, which had not been outlined from the start. This, coupled with a heavy workload, forced my withdrawal from the course" (OE8, Course evaluation).

Structural factors impacting on Teaching, Cognitive, Social, and Learner Presence

Akyol, Garrison and Ozden (2009) identify a number of "external factors" outside of the CoI framework that impact on the development of the CoI presences, and consequently a student's educational

experience. A few publications in the CoI literature mention the issue of external factors, including the impact of time (Akyol & Garrison, 2008), course duration (Akyol, Vaughan & Garrison, 2011), subject matter (Arbaugh, Bangert & Cleveland-Innes, 2010) and the use of asynchronous audio feedback in comparison to text-based feedback (Ice, Curtis, Phillips & Wells, 2007). A review of the literature offers an alternative term - structural factors, drawing on Giddens's notions of structure (1984). As classifying a factor as "external" requires the defining and maintaining of shared boundaries by researchers and readers, an exercise that can lead to misunderstandings, we prefer the term "structural factors". Additionally, the use of "structural factors" points to structure-agency tension, a useful dichotomy to keep in mind when examining learning experiences.

In summary, the structural factors that impacted on the way in which students and facilitators engaged with the MOOC included, duration of the facilitated sessions, scheduling of the facilitated session, group size, and physical space. Data highlighted facilitators' and students' perceptions of these factors as affecting the creating of the CoI and by extension the students' learning experiences, but typically, the CoI framework does not offer a way to explicitly surface the impact of these factors. The CoI framework, developed as it was for a formal accredited online course in a technologically flat context, does not offer opportunities for researchers to consider the ways in which the scheduling of face-to-face times, venues, or group size might significantly impact on students' ability to attend class, and therefore advance their learning.

Participants commented on time in relation to duration and scheduling of sessions. The duration of sessions was constrained by institutional contracts with tutors, with participants experiencing this as constraining their learning experience. Limited contact time may have constrained students' ability to move through practical inquiry phases and successfully resolve their triggering event. Both students and facilitators remarked on the impact of the scheduling of the session in relation to the release of MOOC material online, on learning design choices and student behaviour. When there was insufficient time to prepare between online release dates and facilitated sessions, facilitators opted for content-heavy sessions to accommodate the likelihood of unprepared students.

Another structural constraint that emerged from the data was group size. As sign-ups only allowed for 15 to 20 students, loss of students over time led to groups as small as two or three students. Students remarked on group attrition (MS6, Survey; MS7, Survey) and indicated a preference for group sizes that allowed for interesting and varied discussions. A review of the literature suggests that optimal group size to encourage a sense of community is dependent on a number of factors such as course topic, teacher and the students (Akyol, Garrison & Ozden, 2009; Rovai, 2002).

Students' learning experience was also related to the nature of the physical space. Facilitated sessions were hosted either in classrooms or computer labs. In the case of one facilitated group, the lab context was viewed as conducive to working on the MOOC, while in another it was seen as "not conducive for discussion" (Facilitator E, Interview) and "a bit of a barrier to facilitating conversation among people" (Student B, Interview). The suitability of venue depended on the type of MOOC, students' learning preferences, and on the learning design choices of the facilitator.

Conclusion

The OPS's supplemental instruction programme seeks to address two key challenges: underpreparedness for postgraduate study, and limited opportunities to develop postgraduate attributes during postgraduate study. The adoption of wrapped MOOCs as one way of doing this had the additional benefit of addressing social needs arising from the mobility and isolation of the postgraduate experience. The use of the CoI framework focused our attention on social presence, cognitive presence and facilitator presence. The alignment between cognitive presence, inquiry, and

specific learning outcomes; and social presence, community and students' social needs allowed the use of the framework to highlight the extent to which wrapped MOOCs, as a learning design, met the OPS's challenge. The analysis of the data highlighted participants' valuing of the face-to-face context, both for contact with a local peer group and for access to facilitators with experience of local and disciplinary contexts. The CoI framework, through teasing apart cognitive, social and teaching presences, provides valuable insight into understanding wrapped MOOC participants' learning experiences. In the hands of institutional administrators and facilitators, this understanding can help to create learning communities that respond effectively and sensitively to emerging student needs. While the CoI framework allows us to look more closely at factors within the learning space (teaching presence, cognitive presence and social presence), a more comprehensive framework for learning design would include both a more carefully constructed learner presence and a way of understanding structural factors that impact on the wrapped MOOC learning experience.

Acknowledgement

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