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Designing for Open and Social Learning

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In January 2008, Alec Couros led an open-access, graduate level, educational technology course at the University of Regina titled “Education, Curriculum, and Instruction (EC&I) 831: Open, Connected, Social.” In the book *Emerging Technologies in Distance Education* we documented the initial run of the course (Couros, 2010). Since then, Couros has taught the course an additional six times. While the overall philosophy and structure have remained largely the same, the course has evolved in light of emerging technologies, student feedback, and societal trends in the use of social media. The revised version of this chapter includes an updated description of the technologies that are central to the course’s structure and a new how-to section that includes strategies and suggestions for developing an open course based on past student feedback.

EC&I 831 is a fully online course that was developed and facilitated using primarily free and open-source software (FOSS) or freely available services. Additionally, the course demonstrates emerging practice of open teaching: educational practice inspired by the open-source movement, complementary learning theory, and networked theories of knowledge. The course challenges typical boundaries common to more traditional distance education courses as students build personal learning networks (PLNs) to collaboratively explore, negotiate, and develop authentic and sustainable knowledge networks. This latter focus becomes a catalyst that, as one student described emphatically, “blew the doors of this course right off their hinges.” As a result, the context for

learning shifts from the potentially mundane to an open environment where the registered students freely interact with hundreds of other educators, theorists, and students from around the world.

EC&I 831 has received considerable attention from academic researchers and educational bloggers. Dave Cormier (2008) wrote that the course provides “an ideal example of the role social learning and negotiation can play in learning.” Young (2008) listed the course as one of three examples of a “growing movement” toward experimenting with open teaching in higher education. Siemens (2008) described the design of the course as “an important source of insight” that served to inspire the development of the “Connectivism and Connective Knowledge” (CCKo8) course, the inaugural Massive Open Online Course (MOOC) facilitated by Siemens and Downes. It is our hope in writing this chapter that we capture and document relevant reflections and activities to provide starting points for those considering open teaching as educational innovation.

This chapter is divided into four sections. In the first, we briefly outline key theoretical foundations that influenced the design and development of the course. This section combines philosophical, pedagogical, and practical considerations to inform a model for open teaching. In the second section, we describe the course experience in detail. This discussion includes an updated overview of emerging technologies used in the course and an outline of the various course activities and assessments. The third section summarizes discoveries related to the role of personal learning networks (PLNs), outlines techniques for developing and leveraging PLNs in distance education courses, and describes the role of emerging technologies in building and facilitating networked interactions. Finally, the fourth section provides suggestions for developing open courses.

THEORETICAL FOUNDATIONS

Several overlapping bodies of theory and practice informed the development and facilitation of EC&I 831. This section briefly identifies relevant points from the following areas: the open movement, complementary learning theories, and connectivism. The section ends with a description of how these areas informed a model of open teaching for the course.

The open movement

In 2003, Alec Couros initiated a two-year-long study that examined the perceptions, beliefs, and practices of educators who participated in free and

open-source software (FOSS) communities (Couros, 2006). Through data collection and analysis, it was revealed that the majority of participants were strongly influenced by the dominant philosophical views inherent within these FOSS communities. Participants identified strong tendencies toward collaboration, sharing, and openness in their classroom activities and through professional collaborations. Generally, these individuals identified themselves as part of a larger phenomenon, later defined as the “the open movement”:

The open movement is an informal, worldwide phenomenon characterized by the tendency of individuals and groups to work, collaborate and publish in ways that favour accessibility, sharing, transparency and interoperability. Advocates of openness value the democratization of knowledge construction and dissemination, and are critical of knowledge controlling structures. (Couros, 2006, p. 161)

In the early stages of this study, participants expressed frustration with perceived barriers that limited the adoption of openness in their practice. Several technical barriers were identified (software not available, suitable, or mature; sparsely available content), but soon, many of these issues improved or were resolved. One of the most advantageous developments was perceived to be the sudden popularization and availability of Web 2.0 tools. Study participants and their students alike had now gained the ability to *easily* create, share, and collaborate through emerging technologies such as blogs, wikis, podcasts, and social networks. Along with this greater access to publishing came the greater availability of educationally relevant content. Participants gained access to information resources such as Wikipedia, course content through initiatives such as MIT OpenCourseWare and the OER Commons, and multimedia and video content through services such as YouTube. The dilemma of the educator shifted quickly from a perceived lack of choice and accessibility to having to acquire the skills necessary to choose wisely from increased options.

Other relevant discoveries from this study included differences in the practical and philosophical beliefs of participants. The positioning of each individual ranged from open-source zealot to hobbyist, from those who refused to use *any* proprietary software to others who voiced more practical beliefs regarding the adoption of tools. To a FOSS purist, the perceptions of the latter group would likely be considered unacceptable. For the professional educator, these more practical beliefs supported greater options for the adoption of emerging technologies. It is this latter, more general, view of openness that informs the emerging practice and framework of open teaching.

Complementary learning theories

Several learning theories have influenced this approach to distance education and online learning. These include social cognitive theory, social constructivism, and adult learning theory (andragogy). As much has been written regarding each of these theories, this section serves only to highlight key points of each theory as it relates to open teaching.

Social cognitive theory (SCT), also known as social learning theory, suggests that a combination of behavioural, cognitive, and environmental factors influences human behaviour. SCT posits that humans learn through their observations of other individuals. If one observes particular behaviours that become associated with favourable outcomes, such behaviours are more likely to be adopted by the observer (Albert & Bandura, 1963). Another relevant feature of SCT is Bandura's (1997) concept of self-efficacy, which he defines as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). Bandura considered self-efficacy beliefs to be the most influential arbiter of human activity and an important element in conceptualizing student-centred learning environments (Lorsbach, 1999).

The theory of social constructivism, attributed to Vygotsky, is related to social cognitive theory in that both theories emphasize the importance of the sociocultural context and the role of social interaction in the construction of knowledge (Woolfolk & Hoy, 2002; Derry, 1999). Instructional models influenced by social constructivist perspectives highlight the importance of collaboration among learners and practitioners in educational environments (Lave & Wenger, 1991). Another important feature of social constructivism is the concept of the zone of proximal development (ZPD). The ZPD is commonly expressed as the difference between what a learner can do independently and what the same learner can do when tutored (Vygotsky, 1978). Moving beyond tutoring, Tabak (2004) introduced the concept of distributed scaffolding, an emerging approach of learning design that incorporates multiple forms of support that respond to the diversity of learner needs and to the complexity of given learning environments. Through a greater understanding of how individuals construct knowledge and skills, the role of the social environment, and the design of flexible learner support, educators can increase student performance in both face-to-face and distance learning environments.

Adult learning theory, also known as andragogy, is based on the perception that adults learn differently from children and that these differences should be

acknowledged and accommodated. Knowles (1970), primary developer of this theory, argued that adults generally possess different motivations for learning and have acquired significant life experiences; both of these factors greatly influence the learning process. Knowles proposed the following principles for adult learning:

Adults need to be involved in the planning and evaluation of their instruction.

Experience (including mistakes) provides the basis for learning activities.

Adults are most interested in learning subjects that have immediate relevance to their job or personal life.

Adult learning is problem-centred rather than content-oriented. (p. 43)

These general principles proved to be beneficial in supporting the learning of the participants of EC&I 831.

Connectivism

Connectivism, originally developed by Siemens (2004), is a “net aware” theory of learning and knowledge (chapter 3) that is heavily influenced by theories of social constructivism (Vygotsky, 1978), network theory (Barabási, 2002; Watts, 2004), and chaos theory (Gleick, 1987). Connectivism emphasizes the importance of digital appliances, hardware, software, and network connections in human learning. The theory stresses the development of “metaskills” for evaluating and managing information and network connections, and notes the importance of pattern recognition as a learning strategy. Connectivists recognize the influences that emerging technologies have on human cognition and theorize that technology is reshaping the ways that humans create, store, and distribute knowledge.

The following principles of connectivism were most relevant to the development and facilitation of EC&I 831:

Learning and knowledge rests in diversity.

Dynamic learning is a process of connecting “specialized nodes” (people or groups), ideas, information, and digital interfaces.

Capacity to know more is more critical than what is currently known.

Fostering and maintaining connections is critical to knowledge generation.

A multidisciplinary, multiliteracy approach to knowledge generation is a core of human learning.

Decision-making is both action and learning: “Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality” (Adapted from Siemens, 2005).

A connectivist approach to course design acknowledges the complexities of learning in the digital age. The theory offers insight into how learning can be managed through the better understanding of emerging technologies and their relationship to knowledge networks.

Open teaching

Through an exploration of the above influences, Couros developed a definition for the concept of open teaching. This definition helped to inform the epistemological, philosophical, and pedagogical considerations for EC&I 831.

Couros defines open teaching as the facilitation of learning experiences that are open, transparent, collaborative, and social. Open teachers are advocates of a free and open knowledge society, and support their students in the critical consumption, production, connection, and synthesis of knowledge through the shared development of learning networks. Typical activities of open teachers may include some or all of the following:

- advocacy and use of free and/or open source tools and software wherever possible and beneficial to student learning;
- integration of free and open content and media in teaching and learning;
- promotion of copyleft content licences for student content production and publication;
- facilitation of student understanding regarding copyright law (e.g., fair use/fair dealing, copyleft/copyright);
- facilitation and scaffolding of student personal learning networks for collaborative and sustained learning;
- development of learning environments that are reflective, responsive, student-centred, and that incorporate a diverse array of instructional and learning strategies;

- modelling of openness, transparency, connectedness, and responsible copyright/copyleft use and licensing; and,
- advocacy for the participation and development of collaborative gift cultures in education and society.

Open teaching is an emerging practice, but the general framework described above was one that guided the design, development, and evolution of EC&I 831.

EC&I 831 IN DETAIL

This section provides thorough detail of the development and facilitation of EC&I 831. Covered areas include a general overview of the course, details of the project's initiation, a description of the course learning environment and facilitation model, an overview of the role of PLNs in distance education environments, and a final section on lessons learned that provides suggestions for developing open/networked courses.

Overview of the course

EC&I 831 is a graduate studies course in education that focuses on the appropriate and critical integration of technology and media in the K–12 classroom environment. The course is not new — it has been around since 2001 — but when originally submitted to the university calendar, it was written broadly enough to provide sufficient flexibility for future course development. This feature has allowed it to be tailored to changes in the field of educational technology, from the shifting focus (such as from eLearning to social learning) to the types of emerging technologies available to universities and colleges.

This section describes the foundations of the course and its present iteration. Typically the course has between twenty-five and forty registered students, most of whom are practicing teachers (K–12) or educational administrators. The graduate courses in our faculty have a typical maximum of eighteen students, but this course generally operates with a significant overload (25-40+ students) due to the peer-supported, networked pedagogical model.

Project initiation

In the past, the Government of Saskatchewan offered Technology Enhanced Learning grants for the development of online courses, and \$30,000 was awarded for the initial development of EC&I 831 in 2007. While such courses were typically assigned instructional design and multimedia support personnel,

the area of support most needed for EC&I 831 was in the development and support of the participants' personal learning networks. Thus, in lieu of support personnel, two teaching assistants were hired to act as social connectors, and their primary responsibilities were to support students in the development of PLNs. These connectors were not tied to a tool or to a learning environment, but directly to the participants — their technical experience, their unique needs for support, and their learning goals.

Course learning environment

While several different learning environments (such as WebCT, Moodle, and Ning) were considered as the primary learning environment for the initial run of the course, the first few iterations of the class utilized a Wikispaces education wiki (see Couros, 2010 for a discussion of this choice). However, since 2011, the course has moved even further away from a centralized learning environment; instead, EC&I 831 is based on the philosophy of “small tools, loosely joined” so that learning is distributed across various platforms and spaces. Below, we outline the key tools and spaces utilized most recently in the course.

Student blogs

Each participant is responsible for developing a digital space to document his or her learning through readings and activities, to provide a space for personal reflection, and to create a personal hub for networked connections. In most cases, these spaces quickly become showcases of student professional activity and act as distributed communication portals — alternatives to centralized, managed discussion forums. Students typically choose from a number of free services to host their spaces (e.g., WordPress.com, Edublogs.org, Blogger.com, self-hosted) and each blog is customized by the user, both functionally and aesthetically. In most cases, these blogs continue to be maintained and remain active well beyond the official end date of the course.

Feed aggregator

One of the convenient features of a learning management system (LMS) is the ability for the instructor to structure and organize content for student consumption. However, given the choice to decentralize the learning environment in EC&I 831, students are instead encouraged to utilize a content aggregator such as Feedly that allows them to subscribe to content related to their course and their personal interests. In addition, content aggregation is modelled through the use of FeedWordPress, a WordPress-based aggregator,

which allows for the subscription and republication of participant blogs to one central location. In both cases, emphasis is placed on the assumption that content creation happens outside of the LMS and that aggregation is a form of new literary practice.

Twitter

Students are strongly encouraged to develop and maintain a professional Twitter account. Twitter, a microblogging platform, has become increasingly popular as a tool for professional development and resource sharing amongst educators. For the course, students are asked to share content and connect with others via a specific course hashtag. In doing so, Twitter becomes a vehicle for establishing open conversations with a global audience, thus allowing for a high degree of pedagogical serendipity. The use of a shared hashtag allows for conversations to be targeted, followed, and discovered. Finally, weekly Twitter chats are organized to provide an opportunity for an open and concentrated discussion and interrogation of course content along with networking and relationship building.

Google+ community

While the majority of interactions in EC&I 831 occur on the open web, the course also utilizes a Google+ community to allow for more private conversations and the sharing of resources. The inclusion of both public and private spaces within the course provides an opportunity for students to interrogate the social differences between these spaces. Additionally, it allows course participants to gain a better understanding of how degrees of privacy relate to issues of digital citizenship and affect both their voices and the voices of their students.

Course model

The following section outlines and describes the course facilitation model through a description of the major assessments and related activities performed by course participants.

Major assessments

Three major student assessments guide the activities of participants for EC&I 831: the development of a personal blog/digital portfolio; the completion of a student-chosen, major digital project; and a final summary of learning. Activities related to each of these assessments have been designed to require and/or result in the development of a personal learning network. Thus, PLNs are both the prerequisite to and the outcome of successful completion.

Networked professional learning. As mentioned, one of the main goals of the course is to have students participate in networked learning environments and to critically, and continually, reflect upon those experiences. In practice, this means students utilize a number of social tools (e.g., blogs, aggregators, curation tools), read widely from a number of traditional (e.g., academic journals) and non-traditional sources (e.g., educational blogs, Twitter), and connect with other educators who are already “connected,” as a mechanism for developing their own personal learning networks.

Major digital project. The major digital project was designed so that students could develop a relevant resource for their specific professional context. Students have produced videos, instructional resources, and other multimedia. Others have engaged in social networking activities: participation in global collaborative projects, development of private social networks, and development of localized professional development workshops or courses. The completed activities represent a vast range of student technological competencies as well as professional and personal interests.

Summary of learning. As a final assignment, students produce an artifact (e.g., digital story, narrative, slide deck, audio, video, concept map) that summarizes the learning experience in EC&I 831. The artifacts produced reference significant course experiences (reflections, assessments, readings, presenters, networking, experimentation, etc.) that contributed to the greater understanding of educational technology and media. Students present these materials at the end of the course and are also encouraged to share them via their blogs or Twitter. This summary encourages and allows students to develop a high-level, concise, digital artifact that positioned itself as an alternative to the traditional written essay or final examination.

Course Interactions

There are a number of synchronous and asynchronous interactions designed throughout the course. This section outlines these interactions and describes the tools used.

Synchronous activities: Two synchronous events are planned weekly. The first session of the week, which runs approximately 1.5 hours, is focused on developing student content knowledge and in connecting students to leaders in the educational technology community. Each semester, various guest presenters are invited to speak to class participants. The sessions are offered using Blackboard Collaborate,

a video-conferencing tool that includes various options for student interaction such as a collaborative whiteboard, a chat function, and polling tools. Additionally, all sessions are recorded and then posted in various formats, including an audio-only podcast version. As we described above, the second session of the week is a Twitter chat, which allows both for additional discussion of course content and for the development of students' personal learning networks through interactions with people within and outside of the course.

Asynchronous activities: Participants also engage in a number of asynchronous activities in addition to weekly sessions. Some of the most common activities include:

- reading, reviewing, and critiquing course readings through participant blogs;
- sharing and reviewing articles, tools, and readings through participant blogs or through posting to the Google+ community or to Twitter using the course hashtag;
- creation of screencasts, tutorials, or other resources for self-referencing or to assist other participants' understanding;
- reading, reviewing, commenting, and subscribing to blogs from outside of the course community;
- participation in open, viral professional development opportunities (e.g., additional Twitter chats, Classroom 2.0, the Educator's PLN);
- posting created content to YouTube, Voicethread, Google Drive, or other collaborative, social media services;
- microblogging through Twitter; and
- collaborative design and development of lesson plans or instructional sets.

Many of the asynchronous activities are completely unplanned. Participants work with individuals in the course community, but strong bonds often form with individuals outside of the course due to common interests. Through both the synchronous and asynchronous activities, personal learning networks develop as individuals freely connect with those interested in the content and collaboration, and not solely because of the identification with a specific course. Social interactions become authentic, dynamic, and fluid.

PERSONAL LEARNING NETWORKS IN DISTANCE EDUCATION

The first synchronous session of EC&I 831 each semester is a private session with only the registered course participants. In this session, students are briefed about the open nature of the course and are informed that nonregistered participants will be brought in to give presentations, to comment on student blogs, and to interact in other unanticipated ways. In the first iteration of the course, it was initially unclear how these interactions with outsiders would be solicited and facilitated. Yet, only two to three weeks into the first run of the course, it became evident how important the development and utilization of the instructor's PLN would be in supporting the pedagogical model. To share these understandings, this section will provide a brief definition of personal learning networks and online strategies for leveraging PLNs in distance education courses.

Conceptualizing the PLN

In conceptualizing the PLN, it is important first to distinguish the idea of a personal learning network from that of a personal learning environment (PLE). Couros (2010) includes a more detailed discussion of the process of differentiating between these two concepts. For our purposes in this chapter, it is enough to outline the commonly understood definitions of each. PLEs are the tools, artifacts, processes, and physical connections that allow learners to control and manage their learning. This definition supports Martindale and Dowdy's (chapter 8) definition of the PLE as:

a collaborative ad hoc set of procedures learners use to interact and share resources that further the expertise and competence of the individual (and group, in some cases). Conversely, some define the PLE as a specific tool or set of tools (usually software) that a learner employs to interact with and manipulate online learning environments and resources. (p. 124)

Definitions of PLNs, however, seem to extend the PLE framework to more explicitly include the human connections that are mediated through the PLE. In this framework, PLEs become a subset of the substantially humanized PLN. For reference in the remainder of this section, our PLN definition is simple: personal learning networks are the sum of all social capital and connections that result in the development and facilitation of a personal learning environment.

In his doctoral work, Couros (2006) discovered a variation of the concept of the PLN as it emerged in the practice of the participants of the study; he noted a significant increase in the social connectivity related to the practice of study

participants. This phenomenon was a vast departure from what was understood as a “typical teacher network,” one often bound by local curriculum, school district, and geography. Based on this discovery, he developed two diagrams (Figure 9.1 and Figure 9.2) informed by the aggregate data, which describe the differences in the two networks.

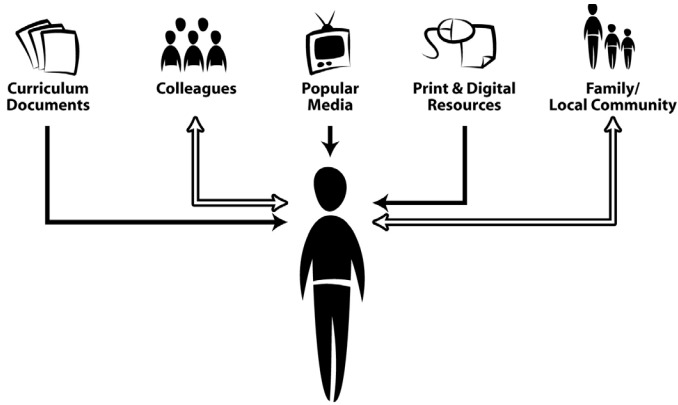


Figure 9.1 Typical teacher network (from Couros, 2006).

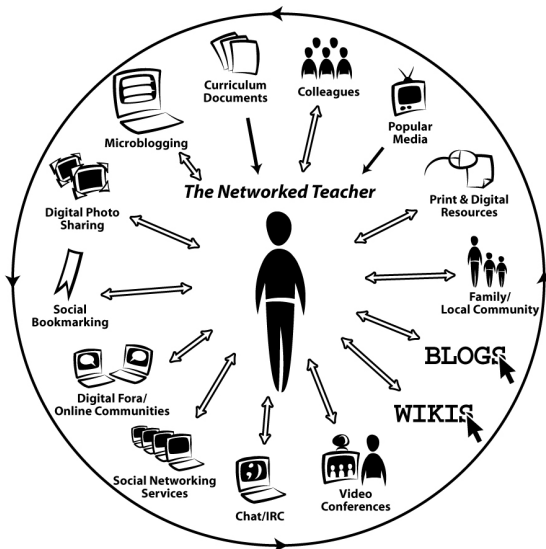


Figure 9.2 The networked teacher (from Couros, 2006).

The “networked teacher” representation is a personal learning environment (PLE) diagram. It describes an individual’s connectivity through participation in social media activities (e.g., blogging, wikis, social networking), and the arrows represent both the consumption and production of content.

PLNs for teaching and learning

The following is a short list of strategies for developing a personal learning network and for leveraging the PLN in distance education courses. These points have been effective in the facilitation of EC&I 831, as evidenced by personal reflection and student feedback.

Immerse yourself

The entire PLN strategy depends on the use and understanding of social media in the formation of human networks. The essential tools in our experience are blogging platforms (self-hosted WordPress), social bookmarking (Delicious, Diigo), photo sharing (Flickr, Instagram), video sharing (YouTube), microblogging (Twitter), and other social networking platforms (Google+). Understanding how these tools work, how they can be used together, and how your students can utilize them is essential. Moreover, human connections in PLNs are strengthened through various degrees and forms of interaction. In addition to the creation of content, feedback on the contribution of others is also equally important for social bonding and bridging. Providing feedback and comments, participating in digital conferences, or contributing to community resources strengthens your PLN.

Learn to read social media

Social media is read much differently than traditional media. Although the situation is improving, traditional search engines are not ideal for reading social media; instead, there are a number of social media search engines and tools available that are important to understand. Tools such as TweetDeck, Hootsuite, Feedly, Paper.li, Flipboard, and Zite have been developed for those who primarily view, produce, and interact with social media; these tools allow for content curation, aggregation, and sharing.

Know and leverage your connections

Through interaction and research, one is able to get a sense of the backgrounds and skills of the individuals within one’s PLN. This is of great benefit to an instructor of an open course, as it allows him or her to refer students

to educators who may be willing to assist and provide expertise in particular areas of study or interest. Over time, and through sustained interactions with others in networked spaces, students will develop their own authentic PLN connections.

PLNs are central to learning

PLNs can be critical for sustained, long-term learning, for students and facilitators alike. The ability to build a vehicle for continued learning is one of the major advantages of an open pedagogical model. With the use of a traditional closed LMS, a tremendous amount of time and effort is put into the development of local, time-based, course-centric communities, but the resultant communities die, usually only days after the official end-of-course date, because they are communities based around courses, not communities based around communal learning. For students who develop PLNs in EC&I 831, the learning communities still exist. The individuals are active and interactive and continue to form and negotiate the connections they need to sustain long-term learning for themselves and for their students.

LESSONS LEARNED

A few suggestions based on student feedback and personal experience for instructors who currently teach open courses or who hope to develop them are listed below.

Importance of student feedback

In the early stages of network development, students often report feeling isolated; until they have developed a PLN, what they tweet, blog, or otherwise share online will likely receive little or no feedback. Thus, it is important for instructors to ensure that students receive feedback on the content that they create and share, particularly early on in the course. However in a large class, it is often not feasible for the instructor to provide substantial feedback to every student; it is important, then, to engage both the other students in the course (by encouraging them to comment on each other's' work) and those outside the course (for instance, by sharing student blog posts with members of the instructor's PLN via social media) in order to increase the amount of feedback received. When blogging, students should also be encouraged to use strategies that will increase readership and promote commenting, such as tagging posts, including questions that incite discussion, and sharing their work with their own growing networks.

Structures to lessen the messiness of networks

The non-traditional structure (or lack of structure) of the learning environment can frustrate students and create anxiety. Students should be oriented to the complexity of the learning environment, and be provided with structures and supports for sense-making and discovery (chapter 2). The instructor-developed course blog aggregator, for instance, provides a tool for the selection and subscription of selected content while modelling the importance of aggregation methods for networked knowledge. A course calendar with detailed event descriptions can help students keep track of synchronous events by time and place. Tools such as TweetDeck can help students make sense of the course and communicate through the course hashtag or within other related communities. Instructors should also be mindful of the possibilities of linking and building connections among the various course spaces whenever possible (for instance, by installing a Twitter widget that displays tweets with the course hashtag on the course blog aggregator).

Providing options that account for varying student comfort zones

When planning an open course, instructors should take into account differences in comfort with of privacy and sharing. For many students, the idea of sharing created content in networked publics can initially be overwhelming and intimidating; additionally, the pedagogical model of peer-centred, networked learning is often unfamiliar to students. By providing a variety of options for both public and private interactions (for instance, Twitter vs. the closed Google+ community in EC&I 831), instructors can vary the degree of openness to allow students to develop a level of comfort while allowing them to practice self-directed, networked learning in safe spaces (for example, with only the members of the Google+ community) before venturing onto the open web.

Use of exemplars

Given the non-traditional nature of assignments and activities in these types of courses, it is helpful to provide exemplars of past student work or of content created by individuals outside the course. This can aid students in imagining the possibilities of what might be created using various forms of media. Exemplars can also provide starting points or some level of structure to what can feel like nebulous expectations to students who are often more familiar with assignments such as written essays or tests.

FINAL THOUGHTS

Two commonly perceived barriers to the development of open courses are the issue of finding support for non-traditional models of teaching and concerns over time commitment. In regard to the first concern, the importance of institutional support for open teaching cannot be overemphasized. Fortunately EC&I 831 was developed in an environment where faculty members are constructively critical of technology but strongly supportive of innovation in teaching and learning. Additionally, social justice is an integral theme in our faculty programming, and open teaching supports similar philosophies and the need for more accessible learning in our communities and in our greater society. With respect to the second concern, we posit that *good* teaching always requires more time. This viewpoint is often not well received, considering the “publish or perish” mantra evident in contemporary universities. If we truly embrace the ideals of open teaching and learning, however, the activities of teaching, learning, and research become increasingly interlaced and are supported in myriad ways by our personal learning networks, which are richly comprised of members of the greater academic community. While developing a PLN requires a significant time commitment initially, these losses can be regained quickly through networked efficiencies, enhanced learning experiences, and new opportunities.

Many developments around open courses have occurred in academia since the initial offering of EC&I 831. Hundreds of MOOCs have been offered by universities around the world, collectively engaging millions of students. The proven successful model utilized in EC&I 831 may offer an intriguing approach that blends traditional aspects of a graduate level course with the pedagogical affordances and scale of massive human networks. To add a disclaimer, this model is most suited to instructors who are willing to or have already begun to develop and shape their personal learning networks and have become savvy with social networking tools.

This chapter highlighted some of the key processes involved in the development and facilitation of EC&I 831. Careful attention to the course’s theoretical foundations, use of emerging technologies, and personal network building assure the success of this course for its students. However it is important to note, that given the constantly evolving nature of technology, this chapter provides a snapshot of this course at a particular time; just as previous iterations of the course have shifted to reflect changes in the field, future versions will have to be adapted to ensure that the course remains relevant and up-to-date. Indeed, one of the most simultaneously exciting and challenging aspects of teaching

an open course is that the course structure does not operate based on a static formula but instead shifts in response to societal and technological change. Nevertheless, regardless of structure, the principles of peer-centred, networked, and self-directed learning are what underpin these courses and make them successful and unique. Perhaps the most telling quote regarding the success of the course comes from a student who wrote, “The best part of this course is that it’s not ending. With the connections we’ve built, it never has to end.”

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