

Online Communication and Learning: The Path to Shaping Virtual Communities
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As an educator, I believe I can help students to achieve growth in a variety of domains. More specifically, as an *online educator*, I believe I have the unique opportunity to play a role in the development of students' lives, so students have the tools and abilities to learn from and contribute to the online world in innovative, creative, and socially responsible ways. My hope is that students will learn to be active participants and contributors to our networked world (not just consumers), ultimately understanding their roles and responsibilities when navigating within online communities. After all, as Swiss cognitive psychologist Jean Piaget stated, "the goal of education is to create individuals who are capable of doing new things, not simply of repeating what other generations have done" (Concordia University, 2008).

Theories of Learning

Theories of learning, whether informed by study or derived through practice, or more likely a mix of both, play a key role in determining the choices educators make regarding their teaching practice. By carefully considering philosophies and theories of learning, and through reflective practice and the re-evaluation of one's beliefs, parts of theorists' design models become consciously interwoven into one's design theory, thereby addressing cognition, motivation, and human development. The more insight one gains, the more one is able to make thoughtful, well-considered and effective choices regarding instruction, course design, and learning. Jonan Donaldson states, "After I came to understand this connection between my practices and the supporting theoretical framework, I was better able to focus and refine my practice" (2014). Therefore, in order to move forward in one's practice, it is helpful to learn about the theorists who have played such a key role in contributing to today's education.

In the study of online learning, and specifically with respect to communication in online communities, it would be remiss to not acknowledge Charles Wedemeyer (1911-1999), an enthusiastic teacher and scholar, who was an advocate for the freedom to learn, regardless of social circumstance, physical disability, or place of residence. Wedemeyer's ideal of learner freedom was the primary tenet of his Theory of Independent Study. He realized that learning anytime and anyplace could be facilitated by the ubiquitous nature of instructional telecommunication. Wedemeyer understood that telecommunication technology could offer non-formal education to students in a place and time of their choosing; the opportunities and processes of learning thereby coming to the student. This theory of learning, put forward in the early 1900s, still holds true today, and is the fundamental reason why online teachers, including myself, believe so completely in the affordances offered by online learning.

Throughout OLTD 503, I have come to recognize that my course design and online teaching practice reflect a variety of theorists' philosophies and design models. The following was stated in OLTD 503, Assignment 1 (Olynick, 2015):

The behaviourist perspective of Skinner (1954), which utilizes positive reinforcement and 'conditioning' by providing frequent feedback on activities, works well for the 'what' questions. However, the cognitive constructivism perspective, attributed to Piaget (1952), advocates for learning based on individual activity and fits new experiences with existing mental frameworks. These frameworks are then modified for new results and build on the learner's understandings to answer the 'how' and 'why' questions. In addition, my online teaching practice provides opportunities (albeit too few at this point) for students to learn socially, synchronously or asynchronously, via communication and collaboration with other students and the teacher (using Moodle forums, video-conferencing, chats, etc.). This social

constructivist approach largely attributed to Vygotsky (1962), as stated by Kear (2010), is “a major theoretical perspective for learning in online communities.” (p. 2)

The many readings and discussions in OLTD 503 have illustrated the benefits of cognitive constructivism and connectivism as a way to build networks and aid with communication and learning in online communities. As noted by Kear (2010), a constructivist perspective recognizes that activity and interaction with others is important for building understanding (p.11). As an online teacher, my challenge is to take this understanding and incorporate it into my practice. However, I am also realizing that Kear’s perspective can be taken one step further. An article by Donaldson (2014) states, “Papert (who developed the theory of constructionism) ... felt that Piaget’s constructivism placed too much emphasis on the internal mental processes of learners. He insisted that learning occurs ...through constructing real-world inventions which can be shared with others” (n.p.). Thus, by connecting these philosophies and theories of learning to my teaching practice in a purposeful manner, my learning design models should better reflect the needs of the 21st Century learner.

Learning Design Models

A few of the learning design models studied in OLTD 503 have resonated as being important to consider and include in course structure and design. These models are: Kolb’s Experiential Learning Cycle/Theory (ELT); the Community of Inquiry (CoI) framework; and Salmon’s Five Stage Model of learning. Notable in each of these models is the need for social interaction and authentic activities.

Kolb’s Experiential Learning Cycle builds on the learning of others such as Dewey, Lewin, and Piaget. Kolb’s cycle illustrates that learning and development arise from experiences. These experiences, immediate or concrete, lead to observations and reflections, which are then

absorbed and translated into abstract concepts. These concepts lead in turn to analysis, and concluding and learning, which then lead to active testing and experimentation. This testing and experimentation allows for the creation of new experiences. (Kolb, Boyatzis, & Mainemelis, 2001; Kolb & Kolb, 2005).

The Community of Inquiry (CoI) framework synthesizes pedagogical principles with the access and instructional benefits of computer conferencing (Rourke, Anderson, Garrison, & Archer (2001). Furthermore, Garrison, Cleveland-Innes, & Vaughan (n.d.) identify three ‘presences’ (social, cognitive, and teaching) within the CoI framework, which jointly contribute to an educational experience. This interaction between the three core components: social presence, cognitive presence, and teaching presence, facilitates meaningful learning. Rodgers and Raider-Roth (2006) explain that ‘presence’ is “the experience of bringing one’s whole self to full attention so as to perceive what is happening in the moment” (p.267). More specifically, “ ‘teaching presence,’ as defined by Anderson, Rourke, Garrison, and Archer (2001), is the design, facilitation, and direction of social and cognitive processes to achieve meaningful and worthwhile learning outcomes” (Olynick, 2015). Meanwhile, cognitive presence is the degree to which learners are able to construct meaning through communication, while social presence, “is the ability of learners to project their personal characteristics into the community of inquiry, thereby presenting themselves as ‘real people’ ” (Garrison, Cleveland-Innes, & Vaughan, n.d.). Social presence can ultimately determine the success or failure of an online community, and the CoI framework emphasizes that learners need to experience social presence for online communication to feel ‘real.’

Another learning design model worthy of careful consideration for course design is Salmon’s ‘five-stage model’ (Salmon, 2013). This model is a framework for enabling

participative online learning, and applies to learning by individuals and groups. It is particularly applicable to group communication via discussion forums. Salmon's framework identifies five stages that learners experience in the development of their online interactions. These stages are: access and motivation; online socialization; information exchange; knowledge construction; and development (Kear, 2010, p. 26). Salmon provides appropriate learning activities that teachers, or 'e-moderators', can use to guide and support students as they progress through the stages of development to ultimately reach an understanding of their learning. Salmon outlines that the first two stages are of particular importance to allow learners to reach stages three, four, and five. Salmon also notes that learners are able to interact more comfortably online once they become acquainted with the online environment (Salmon, 2013). In order for learners to interact socially, they need to feel they are a part of an online community. This latter point is important and consistent with discussion regarding social presence as it relates to the CoI framework.

Online Learning Communities

There are many aspects to consider when first setting up online learning communities and courses, including a careful look at the course topic itself. This will determine resources chosen for use within the course, while also influencing the learning models interwoven throughout the course design. For example, will the subject lean more towards discussion or debate, and will skills need to be developed at the beginning of the course to facilitate the learners' navigation and learning within the course or community? Furthermore, an evaluation of available tools and technologies will be necessary to ensure a good match of appropriate technologies for the subject and learners, taking into account their ages, skills, interests, and abilities. Whether Virtual Learning Environments (or Learning Management Systems) or web-based social software are used, it will be crucial to carefully consider the nature of platforms and tools, and how they can

enhance the communication within the community, thereby increasing the likelihood of success for the learners in their learning journey.

By enabling regular communication among online learners, and between learners and their teacher, students feel in touch and connected, as opposed to alone and isolated. This can make all the difference to student success within the online environment. However, communication alone is not enough to foster success. Communication needs to be perceived as 'real' to fulfill the needs of learners within online courses. Students need to feel a sense of belonging and that the communication is meaningful, and as previously discussed, students need to experience 'social presence'. Research indicates that an initial face-to-face meeting can help to develop a sense of community and social presence (Conrad, 2002); however, due to the geographical remoteness of many distance education students, this initial meeting can only occur via computer-mediated web conferencing. Learners in Conrad's study (2002) also note that feelings of isolation can be alleviated via synchronous communication (synchronous communication tools include chat features, instant messaging, internet telephony, audio and videoconferencing, and virtual worlds), and that a 'visual' can help to foster a sense of belonging to a community. Methods of communication, whether synchronous or asynchronous (asynchronous communication tools include discussion forums, blogging, microblogging, wikis, podcasting, e-portfolios, social bookmarking sites, media sharing sites, and social network sites), are felt to be most effective, as noted by Haythornthwaite, Kazmer, Robins, & Shoemaker (2000), when multiple means of communication are integrated into the online experience. Furthermore, as Kear quotes, from Gunawardena & Zittle (1997, p.23), "In spite of the characteristics of the medium, student perceptions of the social and human qualities of CMC will depend on the social presence created by the instructors/moderators and the online community (2010, p. 103). This reinforces the point

that regardless of the tools and medium instructors choose to use in online spaces, it is how we use these technologies that matters; it is the interaction and resultant feeling, or social presence, that is created within the community that matters. Alec Couros reiterates this in his YouTube video *The Connected Teacher* (2012). Thus, as an online distributed learning teacher, I will continue to explore ways to develop a strong online presence (teaching and social), with the goal of “optimally connecting the demands of the situations with one’s inner capabilities” (Meijer, Korthagen, & Vasalos, 2009, p. 299).

Benefits and Problems of Online Communication

Online communication can offer an array of benefits for learners and teachers. It can improve a student’s learning through dialogue and collaborative activities (for example, threaded discussion forums, blogs, class wikis, etc.), while improving access and, as Wedemyer notes (1978), overcoming distance and time. Therefore, perhaps questions online teachers should be asking themselves are: what do the students need, and where does the balance lie? Online teachers have the difficult task of balancing the benefits of online learning, such as convenience and flexibility, learning with others, and engagement and belonging, with problems that can exist in online communities. These problems include information overload, low participation, and impersonality (Kear, 2010). In order to increase the benefits and reduce the problems within online learning communities, teachers can: clearly and carefully structure online environments; help students to navigate within the online environment; encourage social communication; have an early face-to-face meeting, if possible; link online activities and discussions to the course assessment; and avoid dominating online interactions. (Kear, 2010).

Group communication systems and the web, with the mire of connections, networks, and information now easily accessible and at our fingertips, can result in information overload. The

‘information floodgates’ have been opened, and students need to develop digital literacy skills in order to avoid being overwhelmed by too much information. Overload can occur as a result of a barrage of emails, busy discussion forums, wikis that are being updated daily, and activities where students are required to find resources on the web. To alleviate this problem, teachers can purposefully structure forums, use threaded discussions (although differing views appear to exist on the branch threading of discussions), help students to develop a range of digital literacy skills, and encourage the use of sharing, categorizing and curating tools that social bookmarking sites such as Diigo (<https://www.diigo.com>) and Delicious (<https://delicious.com/>) provide (Kear, 2010). Without these support systems in place, Kear points out that students are likely to retreat and disappear from the online environment (2010, p.79). In addition, it should be noted that individual needs and abilities should determine the structure of computer-mediated communication systems, as opposed to general software features. As Hiltz and Turoff state, “Any process that limits overload by structuring content will also destroy many potential benefits. Tools for limiting overload should be based on structuring processes and should allow individuals to control content” (1985, p.688). Thus, a learner-centric approach is becoming increasingly important to meet the needs of 21st Century learners. There is a pedagogical shift towards learners having greater control over the time, place and pace of their learning.

Twenty-First Century Learners

In order to support 21st Century learners, we need to provide them with the tools and skills to become self-directed ‘masters of learning’. Students need a whole new skill set of literacies, such as collaborating, connecting, sharing, curating, creating, critical thinking and sense making. Furthermore, digital literacy skills will enable students to work effectively

with information gathered in this digital age. Students should be able to use information and process it at all levels of the Digital Bloom's Taxonomy: remembering, understanding, applying, analyzing, evaluating, and creating (Churches, 2009). As Churches states, "It's not about the tools, it's using the tools to facilitate learning" (2009, p.1). Thus, by understanding how to evaluate information gathered from the web, some of which is reliable, but much of which is not (due to being prepared by amateurs), students can harness the power of 21st Century tools and technologies to learn. Students should be able to not only consume information, but they should be able to produce information and create (digital artefacts, etc.). In this digital age, students have an authentic audience, and real world applications and consequences exist. It is therefore extremely important for students to feel the support of a networked community.

A Networked Community: Feeling Connected

As Kear states, "There is a considerable body of literature to support the idea that learning is a social activity (for example, Brown et al., 1989; Lave and Wenger, 1991; Wenger, 1998)" (2010, p. 95). This is supported in the findings of a study by Wegerif, R. (1998), who outlines several factors that can influence the feeling of connectedness within an online course, including the role of moderators, the structure and features of the course design, the technological medium used for interaction and communication, and the interaction styles of course participants. These factors have been found to influence the degree of collaborative learning, and in turn the feelings of success or failure in a course. In the study, students who were able to move from feeling like 'outsiders to 'insiders' (feeling connected within the community) gained the most from their course. Those who were unable to make the shift to 'insider' status lacked the feeling of social connection, and consequently did not experience the same levels of success (1998).

In addition, Wegerif's study reports some interesting findings relating to differential access and overcoming conflict. It is noted that students should have as close to equal access to the shared conversation as possible, and that work hours can hinder this access. It is also reported that ideally students should start the course at the same time to build a strong sense of community, and that language barriers and a lack of comfort with technology can lead to feeling like an outsider (1998). Given these findings, is it then reasonable to extrapolate that continuous enrolment DL schools, particularly those that serve a wide range of geographic areas and demographic populations, will not be able to build the same sense of community and belonging as other schools with less diverse student populations and more definitive enrolment times? Or, would cohort groups and other course structuring help to minimize some of these barriers?

From design features, to the role of the teacher, to the learner his/herself, a vast number of factors influence the degree of connectivity within an online learning community. Several factors should be considered regarding the learner, such as the learner's context, the learner's age and experience, and the learner's attitude to studying and why they are studying the course. Furthermore, the teacher's skills and experience, and the teacher's available time can also influence the success of a community. As mentioned earlier in this paper, teachers can contribute to social presence by: conducting a face-to-face meeting at the beginning of the course; carefully considering the tone and content of forum postings and messages; including ice-breaker activities to allow learners to get to know each other; encouraging the updating of profiles and photos; and using a variety of communication methods. Nicol, Minty & Sinclair comment that online learning is leading to new 'hybrid' and 'converging' communication styles, which intermix personal and academic discourses (2003).

Conclusions

Through a critical examination of philosophies, beliefs, and current teaching practice, I am able to identify strengths, weaknesses and areas of focus for personal growth. Yet, without literary research and opportunity for discourse (in OLTD 503 this has been provided through wonderfully active asynchronous forum discussions and synchronous Collaborate sessions), we are unable to attain a broader perspective and the depth of knowledge required to bring about meaningful and progressive change; change based on a theoretical framework. The study of philosophies and theorists' models, learning design models, and interactions within online communities - including a look at the learner, teacher, technologies, benefits and problems - provides a springboard from which one's teaching practice and course development can be improved to facilitate learning. Within my teaching practice, I am now further exploring the many ways in which social presence can be developed. It is hoped that this will improve student success and thereby provide students with the tools and abilities to learn from and contribute to the online world. My hope is that I will be able to contribute towards the development of happy, healthy, productive and responsible citizens who will be innovative and creative, and will be able to contribute positively to the workforce and society. Ultimately, this development will align more closely with the goals of BC's Education Plan to prepare students for the future (2011; 2015); a future in which we do not know what lies ahead for our students, but a future in which the skills and tools to navigate will be critically important.

Optimism is the faith that leads to achievement; nothing can be done without hope and confidence.

~ Helen Keller

References

- Anderson, T., Rourke, L., Garrison, D. R., Archer, W. (2001). Assessing teaching presence in a computer conference environment. *Journal of Asynchronous Learning Networks*, 5(2), 1-17. Retrieved from http://cde.athabasca.ca/coi_site/documents/Anderson_Rourke_Garrison_Archer_Teaching_Presence.pdf
- BC Ministry of Education. (2011). *The BC education plan*. Retrieved from <http://www.bcedplan.ca/theplan.php>
- BC Ministry of Education. (2015). *BC's education plan*. Retrieved from http://www.bcedplan.ca/assets/pdf/bcs_education_plan_2015.pdf
- Churches, A. (2009). Bloom's digital taxonomy. Retrieved from <http://edorigami.wikispaces.com/file/view/bloom%27s%20Digital%20taxonomy%20v3.01.pdf/65720266/bloom%27s%20Digital%20taxonomy%20v3.01.pdf>
- Concordia University: Master's of Curriculum and Instruction Program. (2008). *Human Learning Wiki: Chapter 6 Social Context Theories*. Retrieved February 13, 2015, from <http://human-learning.wikispaces.com/Chapter+6+Social+Context+Theories>
- Conrad, D. (2002). Deep in the hearts of learners: Insights into the nature of online community. *International Journal of E-Learning & Distance Education*, 17(1), 1-19. Retrieved February 7, 2014, from <http://www.ijede.ca/index.php/jde/article/view/133/114>
- Couros, A. (2012, July 30). *"The connected teacher"* [Video]. Retrieved February 2, 2015, from <https://www.youtube.com/watch?v=ru6LoU2-kC0>

Donaldson, J. (2014, January 23). The maker movement and the rebirth of constructionism.

Hybrid Pedagogy. Retrieved February 14, 2015, from

<http://www.hybridpedagogy.com/journal/constructionism-reborn/>

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2), 87-105.

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*.

Retrieved from

http://cde.athabascau.ca/coi_site/documents/Garrison_Anderson_Archer_CogPres_Final.pdf

Garrison, R., Cleveland-Innes, M., & Vaughan, N., (n.d.). CoI. The Community of Inquiry.

CIDER Community of Inquiry Webinars. Retrieved February 6, 2015, from

<http://coi.athabascau.ca/>

Haythornthwaite, C., Kazmer, M. M., Robins, J., & Shoemaker, S. (2000). Community development among distance learners: Temporal and technological dimensions. *Journal of Computer-Mediated Communication*, 6(1), 0-0. Retrieved from

<http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2000.tb00114.x/full>

Hiltz, S. R., & Turoff, M. (1985). Structuring computer-mediated communication systems to avoid information overload. *Communications of the ACM*, 28(7), 680-689. Retrieved from <http://cpe.njit.edu/dlnotes/CIS/CIS735/StructuringComputerMediated.pdf>

Kear, K. (2010). *Online and social networking communities: A best practice guide for educators*. New York: Routledge.

- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. *Perspectives on Thinking, Learning, and Cognitive Styles, 1*, 227-247. Retrieved from https://d2l.viu.ca/content/enforced/62282-EDUC_OLTD503_W70_S2015/Readings/experiential-learning-theory.pdf?_&d2lSessionVal=fxnjK17iT0et4MG6EiYgxnpXx&ou=62282
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4*(2), 193-212. Retrieved from https://d2l.viu.ca/content/enforced/62282-EDUC_OLTD503_W70_S2015/Readings/178_Learning_styles_and_learning_spaces_Kolb_himself.pdf?_&d2lSessionVal=fxnjK17iT0et4MG6EiYgxnpXx&ou=62282
- Korthagen, F. A. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education, 20*(1), 77-97.
Retrieved from
<http://www.sciencedirect.com.ezproxy.viu.ca/science/article/pii/S0742051X03001185>
- Nicol, D., Minty, I., & Sinclair, C. (2003). The social dimensions of online learning. *Innovations in Education and Teaching International, 40*(3), 270-280.
Available from
<http://www.tandfonline.com/doi/abs/10.1080/1470329032000103807#.VNIFxWR4pn4>

- Olynick, F. (2015). *Online learning: belief, philosophy and identity in shaping virtual communities*. Retrieved February 7, 2015, from <https://drive.google.com/file/d/0B8xPCru4hXVmaHJhY05JdFIYLVU/view?usp=sharing>
- Piaget, J. (1952). *The origins of intelligence in children*, London: Routledge and Kegan Paul.
- Rourke, L., Anderson, T. Garrison, D. R., & Archer, W. (2001). Assessing social presence in asynchronous, text-based computer conferencing. *Journal of Distance Education*, 14(3), 51-70. Retrieved from <http://auspace.athabascau.ca:8080/bitstream/2149/732/1/Assessing%20Social%20Presence%20In%20Asynchronous%20Text-based%20Computer%20Conferencing.pdf>
- Rodgers, C. R., & Raider-Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching: Theory and Practice*, 12(3), 265-287.
- Salmon, G. (2013). *E-tivities: The key to active online learning*. Routledge. Retrieved February 6, 2014, from <http://www.atimod.com/book/26/e-tivities-second-edition>
- Siemens, G. (2004, December 12). *Connectivism: A learning theory for the digital age*. Retrieved October 9, 2014, from <http://www.elearnspace.org/Articles/connectivism.htm>
- Skinner, R. F. (1954). 'The science of learning and the art of teaching'. *Harvard Educational Review* 24 (1), pp. 86-97.
- University of Wisconsin-Madison, (2014). *About Charles Wedemeyer*. Retrieved from <http://www.uwex.edu/disted/conference/wedemeyer/aboutcw.cfm>
- Vygotsky, L.S. (1962). *Thought and language*. Cambridge, MA: MIT Press.

Wedemeyer, C. A. (1978). *Learning through technology*. ZIFF Papiere 26. Retrieved from <http://files.eric.ed.gov/fulltext/ED317155.pdf>

Wegerif, R. (1998). The social dimension of asynchronous learning networks. *Journal of Asynchronous Learning Networks*, 2(1), 34-49. Retrieved from [http://guns2.gre.ac.uk/ET/ELD/KNTI/etutres.NSF/76cf225430685dbc8025651a00759c95/488fccf932adb510802570000031ae79/\\$FILE/v2n1_wegerif.pdf](http://guns2.gre.ac.uk/ET/ELD/KNTI/etutres.NSF/76cf225430685dbc8025651a00759c95/488fccf932adb510802570000031ae79/$FILE/v2n1_wegerif.pdf)