

Jane Jacek and Jocelyn Finley Presentation Transcript

Perspectives of Learning in Online Environments Jane "Jurassic" Jacek and Jocelyn Finley:

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PowerPoint Presentation:

"Mohamed Ally of Athabasca University defines online learning as, "the use of the Internet to access learning materials, to interact with the content, instructor, and other learners, and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience. http://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf Does learning take place differently in online and blended learning environments?

Jane Thinks: We need to define learning and online and blended learning environments before we move forward. Learning : Learning is acquiring new, or modifying existing, knowledge, behaviours, skills, values or preferences and may involve synthesizing different types of information The ability to learn is possessed by humans, animals and some machines Progress over time tends to follow learning curves Learning is not compulsory; it is contextual. It does not happen all at once, but builds upon and is shaped by what we already know. To that end, learning may be viewed as a process, rather than a collection of factual and procedural knowledge. <http://en.wikipedia.org/wiki/Learning> Online Learning: E-learning is the computer and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, computer-based learning, virtual education opportunities and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio. <http://en.wikipedia.org/wiki/E-learning> Blended Learning: Blended learning is education that combines face-to-face classroom methods with computer-mediated activities. According to its proponents, the strategy creates a more integrated approach for both instructors and learners. http://en.wikipedia.org/wiki/Blended_learning Learning Environments: The physical or virtual setting in which learning takes place. www3.imperial.ac.uk/ict/services/teachingandresearchservices/el&hellip :

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Jocelyn Thinks: What is learning?:

Jocelyn Thinks: What is learning? content learner learning lesson design assessment student needs, interests, engagement multiple ways of representing Learning is a process and a product characterized by the ongoing synthesis (process) of experience into knowledge (product). Is learning that is technologically facilitated fundamentally and demonstrably different? Can online learning be defined differently, and are the processes and products qualitatively distinct? Facilitator

Jane Thinks::

Jane Thinks: How students see the world and interact and react to what is around them affects how they learn. This in turn is affected by students' unique learning styles. These both have an effect on students' success as a learner. Student interactions: student to teacher student to student (peers) student to content student to environment

Similarities:

Similarities Meet learning outcomes Draw on theorists, theories Use technology Knowledge centred Learner centred Assessment centred Community Centred Students engage with teacher and content Students work in groups and individually Process and product Assessment and evaluation (feedback, formative assessment, evaluative tools) Curriculum and associated learning activities can be personalized Relations between cohort members are important (social learning) to learning Relation between student and teacher are important for learning

Differences:

Differences Access learning materials Presentation of materials- (yes and no, depending on how a teacher runs their class) Can be individualized to each student-(each using different resources, draw different sources, change as needed, begin where student at ie math-different levels of understanding for different concepts.) More student choice (ie. PE -physical activities choose to participate in) Stop, start breaks as needed-(daily 10 minutes, 20 minutes. Extended breaks-medical, holiday) When do courses-(schedule, days and times) Allows for learning to occur anytime, anyplace, any pace Environment (anywhere) Support available to the learner Students learning community Asynchronous Interactions: student to student student to teacher student to content

From the Centre of Teaching Excellence (CTE) at University of Waterloo in Canada, "Blended Learning Best Practices The following are aspects of effective course design and instructor behaviour that can be applied to blended courses; however, they are applicable to all courses whether they are face-to-face, blended or completely online. Intended learning outcomes are measurable, achievable, relevant, concise, and clearly stated. The learning activities and assignments promote the achievement of the intended learning outcomes and are aligned with each other. The course effectively engages students in the learning process through a mix of student-content, student-instructor, and student-student interaction. Course activities respect diverse talents, backgrounds and different ways of learning. Authentic learning activities are used to help students recognize the relevancy of course content. Regular feedback about student performance is provided in a timely manner throughout the course. Course activities promote active learning. The instructor emphasizes the value of time on task and communicates high expectations to their students. The instructor creates and fosters a supportive learning environment for learners."

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Mohamed Ally in Theory and Practice of Online Learning (pg 18), refers to a research study by Clark (1983) ".... ..shows students gain significant learning benefits from audiovisual or computer media, as opposed to conventional instruction; however, the same studies also suggest the reason for those benefits is not the medium of instruction, but the instructional strategies built into the learning materials. Ally also refers to Schramm (1977), " Similarly, Schramm (1977) suggests that learning is influenced more by the content and instructional strategies in the learning materials than by the type of technology used to deliver the instruction." More recently in the link below "As Terry Anderson points out, "learning and teaching in an online environment are, in many ways, much like teaching and learning in any other formal educational context" (2004). The difference, he argues, is that the online environment creates a unique environment for teaching and learning: one that is flexible (time and place can vary), multimedia rich, and communications rich." http://wiki.ubc.ca/Documentation:Creating_the_Online_Learning_Environment/Learning_Modul :

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Jocelyn Thinks: In an online environment, how is learning similar to, or different from, face-to-face learning? :

Jocelyn Thinks: In an online environment, how is learning similar to, or different from, face-to-face learning? We need to consider how the online aspect affect learners, facilitators, content, and the synthesis of experience into knowledge

Implications for Content:

Implications for Content One of the key points arising from discussion with colleagues in this course is that the return and review function of online content is clearly one advantage that online content has over content presented in the face to face classroom. In the face-to-face classroom not all content is immediately re-accessible whereas technologically facilitated content is. Does this function actually change the nature of learning and give justification for the differentiation of "learning" online as opposed to "learning" face-to-face?

Plasticity of Content:

Plasticity of Content Online materials can be updated, and learners are able to see the changes at once. Ally http://cde.athabascau.ca/online_book/ch1.html Online materials have the advantage of being plastic rather than the static nature of older technologies such as books, posters. Simply by placing content in an online platform students can reconstruct, add, comment, question, and discuss as they access their courses from a distance. If a student indicates a specific interest in a line of inquiry, the facilitator can immediately differentiate or personalize the course materials. This is plastic nature exists in a face-to-face classroom, but it takes the facilitator longer to accommodate these needs.

Implications for Facilitators:

Implications for Facilitators Comparing an online learning environment to a classroom environment. A document created for students looking to attend BCIT, " ... this will help you decide if online learning is for you." <http://www.bcit.ca/files/distance/pdf/bcitonlinelearning.pdf> 1. Learning Theory 2. Instructional Design 3. Implemented Best Practices Face-to-Face Online 1. Behaviourist, constructivist, design based, humanist, social 1. Siemens contends that we need a new learning theory, connectivism, as the digital age has changed how we learn. 2. Instructional design takes into consideration what resources you have access to. 2. Has the potential to make resources more immediately accessible. 3. The teacher is the facilitator. 3. The teacher is one of the facilitators. Jane's example of joining a rowing club.

Implications for Learners:

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Implications for Learners Differences in the modality: where learning take place when learning takes place with whom learning takes place where in the learning they begin and end pace at which they move through the learning how the materials are presented

Theoretical Perspectives According to Siemens(2004), we now need a theory for the digital age to guide the development of learning materials for the networked world. Ally

pg18[http://www.aupress.ca/books/120146/ebook/99Z_Anderson_2008-](http://www.aupress.ca/books/120146/ebook/99Z_Anderson_2008-Theory_and_Practice_of_Online_Learning.pdf)

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Siemens contends that how we learn has changed and the quote above outlines one of the perceived needs arising from that change. While the question of the nature of learning remains open, the idea that we can develop a theory that guides the development of learning materials is sound. How can we take what we already know from face-to-face and distributed learning and use it to guide the development of learning materials, lessons, and courses online?

Mohamed Ally in Theory and Practice of Online Learning (pg 18), "The goal of any instructional system is to promote learning. Therefore, before any learning materials are developed, educators must tacitly or explicitly know the principles of learning and how students learn. This is especially true for online learning, where instructors and learners are separated. The development of effective online learning materials should be based on proven and sound learning theories. ...the delivery medium is not the determining factor in the quality of learning per se; rather, course design determines the effectiveness of the learning (Rovai, 2002) Ally pg18 http://www.aupress.ca/books/120146/ebook/99Z_Anderson_2008-Theory_and_Practice_of_Online_Learning.pdf :

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Theoretical Perspectives

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As stated in this University of BC Wiki,

http://wiki.ubc.ca/Documentation:Creating_the_Online_Learning_Environment/Learning_Modul "A very useful schema for thinking about the creation of an effective online educational community was developed by Garrison, Anderson and Archer (2000) based on extensive qualitative and quantitative research work undertaken at the University of Alberta (for more papers resulting from their research, see <http://www.atl.ualberta.ca/cmc>). This conceptual model is called the "community of inquiry" model

PowerPoint Presentation:

This model postulates that deep and meaningful learning results when there are sufficient levels of three inter-related "presences" in a virtual learning environment: Social presence: this relates to the creation of a supportive environment in which learners feel able to express their ideas and collaborate on construction of new knowledge. In the absence of social presence, learners feel unable to disagree, share viewpoints, explore differences or accept support and confirmation from peers or facilitators. Cognitive presence: this is the creation of an environment that promotes critical thinking in relation to the content area at hand. Teaching presence: describes the creation of an instructional relationship appropriate to the learning community and the topic at hand. It is defined as the "design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educational worthwhile learning outcomes" See model : <http://communitiesofinquiry.com>

Practical Perspectives:

Practical Perspectives Jane thinks: Teaching in DL I teach in a distributed learning school. We are a hybrid program offering both face to face and distance learning. Some of our courses are a combination of online learning and paper based where was as others are all online. Selected courses are also offered through an on-site workshop model. Teachers maintain communication with students and their families by email, Skype, telephone and through face-to-face meetings and our LMS. We have students who are registered with us full time while others take most of their course work at their neighborhood school but choose to take one or two courses with us. I presently teach Math 8 and Physical Education 5-12. A majority of my students live in Greater Victoria but some are from other parts of BC and others are travelling the world. For math students who live locally there is an opportunity to attend onsite tutorials four days a week. I also offer a drop-in gym time daily but the majority of my PE students participate in physical activity in the community. Work in both courses can be submitted as paper based or online. Paper based can be submitted in the drop box in my classroom, scanned and emailed or faxed. Online course options are through learning management systems.

Practical Perspective :

Practical Perspective Jane thinks: Student Perspective : My own experience in online learning has been twofold. I took a university course a number of years ago that was offered as a blended model. OLTD is the first opportunity I have had to participate in a fully online course. **The difference I see between the online courses I teach and our two OLTD courses is that OLTD is taught synchronously whereas the courses I teach are asynchronous. Learning asynchronously affects the interactions that occur student to student, student to teacher and student to content.

Practical Perspectives:

Practical Perspectives Jocelyn thinks: The online environment keeps creeping into my classroom, and my education. As I have never facilitated an online course, my only experiences relevant to the question are OLTD 501 and OLTD 502. Other than not having to drive to class, my learning is not different in any way. I interact with my teacher. I interact with my classmates. I read and watch and make notes. I think, write, and create. Even though I propone that online "learning" is essentially learning and really nothing very novel, I absolutely love that I get to do it all from my house and garden where I am alone and happy, and surrounded by everything that I love.

Jane's Conclusion:

Jane's Conclusion In Theory and Practice of Online Learning, Terry Anderson (pg 46)"... online learning is but a subset of learning in general." What makes learning online and in blended environments different is the way the curriculum is delivered. In my experience it allows for more individualized learning and for learning to occur, in most instances, anytime, anyplace and anywhere. This then affects the type of interactions between students, teacher and content. Course design plays an important part in students' success. Each of the different theories/ theorists/ schools of learning: behaviourist, cognitivist, constructivists and more recently connectivism, state that students acquire knowledge in different ways. How resources were created from the start of distance learning was guided by what the theorists had to say about cognitive learning and from research in brain-based learning. The research has looked at both distance learning and more recently online learning, and how in relation to each theory learning can be designed to best meet students' needs. As teachers it is important to use theory to guide our teaching so we use best practices. Whether we draw from one theorist or a few, what is of importance is that our teaching philosophy/practices are grounded in sound research.

. Jocelyn's Conclusion Over the last twenty years, technology has reorganized how we live, how we communicate, and how we learn.

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. Jocelyn's Conclusion Over the last twenty years, technology has reorganized how we live, how we communicate, and how we learn. [http](http://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf)

[://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf](http://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf) I disagree with Siemens when he asserts that technology has fundamentally altered how we learn. I think he confuses cognitive function of learning, with the sources of content. Coming at the question from the perspective of hominid development, we are genetically identical to the first homo sapiens sapiens . Their brains functioned in the same manner as ours. How we learn, plastic as the neural network is, is not definitively different because the content source has changed. In fact, it could be argued that content sources have constantly evolved, therefore access to content online represents a continuity rather than a singularity.

Jocelyn's Conclusion:

Jocelyn's Conclusion In thinking about the question at hand I conclude that: the content can be brought to life in evolved forms and equitably accessible ways; the facilitator can more rapidly individualize course design providing for multiple ways of representing learning; and that the learner can engage in a course through multiple access points and times, but the end product and the process, learning, is not fundamentally distinct when technologically supported as it remains the synthesis of experience into knowledge. To put it in simpler terms let's use travel as a metaphor. Roads lead through different territories, and disparate experiences will be had on different roads, but these journeys lead to the same place, learning (the synthesis of experience into knowledge), therefore, it is not possible to assert that the outcome is qualitatively different when learning is technologically supported.

Prompts for Discussion:

Prompts for Discussion Are skills a subset of knowledge? Is learning a process or a product? Is technology a tool or a discipline? Which is more relevant, learning theory, or instructional design for teachers creating or teaching "online" courses? Is it possible to teach to [multiple intelligences](#) simultaneously in a cohort online course?

