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**OMDE 610 Section 9040**

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**A4\_** Participatory learning or interactive learning, how does technology change the culture of e-learning

Research question: Participatory learning, and interactive learning; although, used synonymous in the online learning environment, each have distinct functions. What is the role of participatory learning, and its functions in online learning, how are students learning through active participation?

### **Introduction**

This research explores the diverse function of participatory or peer-to-peer learning in e-learning and blended learning environments, and its influence on student perceptions of e-learning, the course content, and project-based activities integrated in the learning process to reinforce knowledge. The terms interactive and participatory learning usually refer to how students learn through interaction or discourse in the e-learning environment. The literature shows that interaction and participatory modes of learning requires some type of action by the learner, which results in the development of cognitive learning skills. The literature uses these terms interchangeably, thereby new modes of communication in the virtual environment focused on emulating face-to-face teaching and learning instead of methodology to assist students with knowledge transfer. Through the years, new modes of communications technology have successfully provided learner connectivity in the virtual learning environment. Today, the new web provision learners, as active participants in the learning process, sharing, creating and producing knowledge.

### **Purpose Statement**

The purpose of this research is to show the distinct differences and functions in the affordances of communications technology to construct practice-based interactions in the e-learning environment. This poses several questions, explored in this research, does one enhance

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learner skills and understanding of course context more than the other does, what are students' perceptions of participatory learning, how or is advance networking technology changing the culture of participatory learning, what constitutes interactive learning –what are student perceptions? How does the curriculum and course design affect learner satisfaction, how is learning achieved, is text-based discourse the only effective means to develop cognitive skills? Why inject practice-based activities?

### **The beginning of interactive learning**

Interactive learning began with correspondence teaching and learning, and required students to complete and mail assignments to the instructor via postal service, to await instructor feedback. The long response time was not conducive to effective interactive learning, and the process quickly became an outmoded method for distance learning, as better methods to interact more expediently evolved. Today, the use of innovative technologies such as electronic mail, Twitter, Google, voice thread, and wikis, bring immediacy, and a sense of belonging and community to the distance learning environment. This created a context for sharing and creating. In support of this new mode of delivery and learning, Vygotsky (1978) introduced the social constructivist theory of learning that “suggests knowledge is first constructed in a social context,” as proven theoretically in the literature. Social networking is also important for developing cognitive skills, enabling learners to create, edit and remix learning content, both socially and collaboratively (Tu, Sujo-Montes, Yen, Chan, & Blocher, 2012, p. 15). This is the practice today, with the advent of the new web.

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### **A literature review**

A review of current and past practices used to engage students in the online learning environment, shows participatory or activity-based learning, and interactive learning, function synonymously in the e-learning environment. The research literature does not report the effectiveness of student learning based on current practices, but presented exemplary practices and reviews on the successes from mixing advance social networking innovations in the learning environment. One example presented by Sbihi and El Kaeiri (2010), shows students successfully achieve learning through the sharing and exploring of collaborative intelligence, found in advance networking tools. These engage learners in experimental, computer mediated learning, maximizing the advantages of face-to-face discussion when combined with other modes of teaching (Sbihi and El Kadiri, 2010).

These learning experiences, present models for change in curriculum design as it transforms learners, and the nature of the online classroom. To understand the pedagogy of participatory learning; a working definition of participatory learning presented from Wikipedia, identifies participatory or “active learning as a method of learning where active student participation is encouraged through project-based exercises” (2012, para. 2), not just contextual sharing and discourse. This learner deems participatory learning as the most appropriate method to promote cognitive thinking skills and as the mechanism to project realism and real life experience in the distance learning environment.

### **Learner perceptions**

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The student's perception of participatory learning presented in this research comes from exemplary studies and shows that online learning meets academic needs of learners in the areas of accessibility and communication. The research also states that students prefer this mode of learning to face-to-face, which is evident in the significant growth of students engaging in online classes over the past 10 – 20 years (Armstrong, 2011). However, most research reviewed, presented limitations in its findings by focusing on two to three areas of student perceptions of elearning, for example, the convenience and flexibility of elearning, and the learners' ability to control the learning content, participation, and interaction or the perceived independence experienced in the online learning environment (Roper, 2007). The literature base students' perceptions and satisfaction of collaborative interactions between peers and instructors, on engaging in discourse in discussion forums. This mode of learning is supportive of the social constructivist view of learning, but is not exhaustive of the constructivist view to learning. Students stated that applying concepts learned in real world situations, are more effective (Roper, 2007). The survey findings provide holistic platforms for interaction, with peers, but presented ways to achieve learning outside of the contextual confines. This was possible with the integration of advanced social networking software, engaging students in experimental learning, through peer-to-peer activities outside of the learning context. For example, Swan & Shih (2005) explored the nature of social presence in a study at Victoria University. The results show that integrating experimental tasks through media, transmits non-

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verbal and vocal cues in the participatory e-learning environment to affect learning, and mimic face-to-face learning.

In another study conducted by Kirkwood (2012), students designed academic learning platforms in the SNAP platform, bringing web 2.0 to life. In addition, McLoughlin and Lee (2007), and Mabrito (2004) not only established guidelines for integrating interactivity in the course design, but introduced technological affordances of web 2.0, possibilities for “phenomenal growth” of online learning. The examples above, constitute a culture for participatory learning, and show that learning is possible with advance networking software. Swan and Shih (2005) state that text is only a mechanism injected in the elearning environment to make up for non-verbal and vocal communications, not to be the overarching form for developing knowledge.

Technology fueled the growth of online learning, acting as the catalyst to revoke feelings of isolation in the project-based, distance learning environment. Learners foster social presence and community, which attribute to learner satisfaction and acceptance of activity-based learning. Technology induces change to the culture of participatory learning, transforming the role of the student from absorbers of knowledge to creators and producers of knowledge as active participants in the learning process.

How does curriculum design affect learner satisfaction, both have positive effects on students’ perceptions and experiences in the online learning environment, building on social presence to engage learners in discussions, as the main forum of learning. Although this is

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supportive of the social constructivist form of learning, it is a platform for interaction with peers, and is only one mode of participatory learning. The literature also present other exemplary practices in participatory learning that involves peer-to-peer, activity-based tasks. These enhance learner experiences outside of the elearning environment, through the integration of media. Media is the mechanism that transmits nonverbal and vocal cues, realizing the participatory nature of elearning, it also projects realism to the learning presence (Swan & Shih, 2005). Is discourse the only effective means to develop cognitive thinking, not according to the literature? Why inject practice-based learning and skills, how does the literature support participatory learning for developing cognitive skills.

According to the literature, interaction or participatory learning is a collaborative process where students and instructors engage in meaningful discourse in discussion forums and chat rooms (Dolan, 2011). However, today the function of participatory learning in the online learning environment, encourage learning through project-based exercises as a way to promote cognitive thinking skills, and project real life experiences to the learning context. These may include written exercises or collaborative learning assignments or tasks to present learner positions on a concept or scenario from the course, and approached using advance networking technology.

### **Technology**

The use of social networking software allows the learner to construct his/her own learning, choosing the tools appropriate to his/her learning needs and preferences. The

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curriculum design becomes the stimuli for such transformation to the learning context, and allows learners to connect course design and communications technology to effectively interpret and transfer knowledge in a participatory and interactive learning environment. Dolan's (2011) research further shows, integrating various types of technology along with good curriculum design, students can actively participate in the learning process, by becoming creators of learning content, and engaging in activity-based learning to enrich the learning experience.

**Common practices for successful online learning**

The McLoughlin and Lee (2007) research study presented positive views of social networking software in the learning environment, by linking aspects of the community of learning concept, as a way to demonstrate the power of social software to the learning process. The trends of interactive learning incorporated in the e-learning environment demonstrated below are from the Proceedings Ascilite Singapore 2007, Conference, and provides a pictorial view of several exemplary practices used at institutions around the world to project the affordances of social software tools, and its capability to engage learners in project-based learning tasks. The full table is available in the McLoughlin and Lee (2007) research.

Table 2: (abbreviated below), provides examples of pedagogy 2.0 in tertiary teaching and learning (McLoughlin & Lee, 2007).

Reference/ author	Institution/ Country	Description of technology use	Pedagogy employed
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Read (2005)	Drexel University, USA	Drexel distributed <i>iPod Photo</i> players to their Education freshmen in September 2005. Read reported there were plans for a variety of learner-centred applications, including but not limited to having students record study-group sessions and interviews, as well as having them maintain audio blogs to connect with administrators and peers during the work experience semester.	Peer-to-peer learning, distributed intelligence approach
Lee, Chan & McLoughlin (2006)	Charles Sturt University, Australia	Second year undergraduate students take charge of producing talkback radio-style podcasts to assist first year students undertaking a unit of study that the former group previously completed.	Learner-centred instruction; student-generated content
Evans (2006)	Swathmore College, iUSA	Students studying a literature course read short passages aloud and record them as podcasts, as well as creating separate podcasts discussing the passage they chose and its relationship to other material.	Development of digital and social competencies
Frydenberg (2006)	Bentley College USA	Students in an introductory information technology class work in pairs or groups to produce vodcasts to teach topics from the course schedule to their peers.	Peer teaching, reciprocal learning
Sener(2007b)	University of North Carolina at Pembroke, USA	A wiki-based encyclopedia is created by students, the goal being to create entries on a variety of subjects related to law, criminal justice, sociology and criminology.	Student-generated
McCarty (2005; 2006)	Osaka Jogakuin College, Japan	Students are interviewed by their professor, perform roles, and/or present their own creations, in contribution to the professor's bilingual podcast feed and blog targeted to those studying Japanese or English as a foreign language.	Cross-cultural collaborative work using student-generated content
Yew, Gibson & Teasley (2006)	University of Michigan, USA	Learners organise and display blog posts and bookmarks, with keywords or tags, openly and in a collaboratively manner. This allows all stakeholders to use social software to organise, share and coordinate knowledge.	Community of learning
Wenzloff (2005); Richardson (2006)	Macomb Independent School District, Michigan, USA	Social bookmarking is used to compile and share resources with teacher training participants/ student teachers. The instructor also subscribes to the RSS feeds of the students' <i>Furl</i> sites, to see what they are reading as well as their comments about the sites.	Resource-based and collaborative learning

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McLoughlin and Lee (2007), present exemplary tools for supporting learner-centered teaching and learning in the elearning environment (p. 669), the table also lists the type of pedagogy employed, which is important to realize the implications of social networking in the



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next generation of e-learning practices.

The literature supports through documentation that participatory learning is a contributor to student satisfaction in online learning, and along with text based interactions, develops cognitive learning. The integration of advanced social networking tools, according to Tu, Sujo-Montes, Yen, Chan, & Blocher (2012), “empower learners to create, share and organize personal learning environments in open network environments,” by engaging in social and collaborative activities (p. 13). As evident by the exemplary practices presented in the table above, curriculum is an important element on which to scaffold participatory learning.

Asynchronous and synchronous learning tasks are the inclusive design for grounding the curriculum and positioning students to structure learning outside of the traditional teacher-led teaching environment. Interactivity with the course content and interaction with peers are important for promoting an active and participatory learning environment that uses a range of activities, supportive of the affordances of web 2.0 tools, such as blogs, and social networks.

The exemplary practices presented in this research show an “array of taxonomies that categorize interaction,” (Muirhead & Juwah, 2004) that allow real learner interactivity. Textual discourse simulates the verbal and vocal communications used in the face-to-face learning environment to enhance learning, and project social presence through computer-mediated communications activities, (Swan and Shih, 2004, p. 118).

## **Conclusion**

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In conclusion, the literature shows that much research is underway in participatory learning and its efficacy with the advent of Web 2.0, technologies, and the capabilities for transformation of e-learning. This research shows how the use of various types of technology has a positive effect on student participation and interaction in the e-learning environment, and affects learner perception of project-based learning. In the very near future, participatory learning will transform the roles of teachers, learners, and technology within the e-learning environment.

**Recommendations for the future**

Tu, et al. (2012) states, “online learning should use reflections from the past and look to the future to establish online learning for the future” (p. 18); this is portrayed in the literature and in this research to project learner interactions in the e-learning environments. The unimpeded implications of the World Wide Web will continue to change the culture of distance learning as it explores ways to connect learners to simulate face-to-face learning. The important transformations realized with the technological innovations, are evolving, because of the information freeway, and the emergence of innovative communication tools. The literature states that the implications for advance web affordances in e-learning, for sharing, creating, and forming learning communities is continuing to evolve.

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### References

- Armstrong, D. A. (2011). Students' perceptions of online learning and instructional tools: A qualitative study of undergraduate students use of online tools. *TOJET: The Turkish Online Journal of Educational Technology*, 10(3).
- Dolan, S. (2011). Grounding the curriculum. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings Ascilite Hobart 2011*, 367-373. Retrieved from: <http://www.ascilite.org.au/conferences/hobart11/procs/Dolan-concise.pdf>.
- Kirkwood, K. (2012). Provisioning participatory learning: creating opportunities for student-centred online cooperative academic support. *Journal of Academic Language & Learning*, 6(1). Retrieved from Retrieved from <http://journal.aall.org.au/index.php/jall/article/view/144/132>
- Mabrito, M. (2004). Guidelines for establishing interactivity in online courses. *Innovate*,1(2). Retrieved from [http://www.innovateonline.info/pdf/vol1\\_issue2/Guidelines\\_for\\_Establishing\\_Interactivity\\_in\\_Online\\_Courses.pdf](http://www.innovateonline.info/pdf/vol1_issue2/Guidelines_for_Establishing_Interactivity_in_Online_Courses.pdf).
- McLoughlin, C. & Lee, M. J. W. (2007). Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. In *ICT: Providing choices for learners and learning. Proceedings Ascilite Singapore 2007*. Retrieved from <http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdf>

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Muirhead, B., & Juwah, C. (2004). Interactivity in computer-mediated college and university education: A recent review of the literature. *Educational Technology & Society*, 7(1), 12-20.

Roper, A. R. (2007). How students develop online learning skills. *Educause Quarterly*, 30(1), 62. Retrieved from <http://www.educause.edu/ero/article/how-students-develop-online-learning-skills>.

Sbihi, B., & El Kadiri, K. E. (2010). Towards a participatory E-learning 2.0. *International Journal on Computer Science and Engineering*, 2(1), 1-7

Swan, K., & Shih, L. F. (2005) On the nature and development of social presence in online course discussion. *Journal of Asynchronous Learning Networks*, 9(3), 115-136.

Tu, C. H., Sujo-Montes, L., Yen, C. J., Chan, J.Y., & Blocher, M. (2012). The integration of personal learning environments and open network learning environments. *TechTrends*. 56(3), 13-21.

Vrasidas, C. & McIsaac, M. S. (1999). Factors influencing interaction in an online course. *American Journal of Distance Education*, 13(3), 22-36.

Wikipedia, the free encyclopedia. What is active learning. Retrieved from <http://en.wikipedia.org/wiki/Action-Learning>.