THEORIES OF LEARNING ENVIRONMENTS

Supporting Theories of Open-Ended Learning Environments

Melody J. Buckner

Northern Arizona University

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Abstract

This paper is a reflection and examination of two theories that relate to the open-ended learning environment. The first theory is the situativity theory. It is broken into two parts, the practice fields and the communities of practice. The second theory is the activity theory. The theory is defined as more of a philosophy and then an analysis of the activity system is presented. For each of these theories a practical application is discussed.

The last section of this paper addresses the situated learning paradox and how the open-ended learning environment can be effected by it.

Supporting Theories of Open-Ended Learning Environments

Open-ended learning environments typically include four components: (a) enabling contexts, (b) resources, (c) tools, and (d) scaffolds (Hannafin, Land & Oliver, 1999). Enabling context allows students have to have a framework where problems exist. Resources help students to solve the problems. Tools assist students in processing the resources. Scaffolds are guides or steps that allow the student to build on what they have learned. So open-ending learning environments enable the student the opportunity to solve problems and complete task using context, resources, tools and scaffolding. As students step through this process they will establish, revise and advance their knowledge and understanding by using these four components.

Situativity theory is explored in two different ways. The first being through practice fields and the second is in regards to communities of practice.

In the practice fields, the goal shifts from the teaching of concepts to engaging the learner in authentic task (Jonhassen, Land, 2000). The learner becomes an active participate in their own learning. They must take action in their learning, not just listening to an expert. They need to take ownership of learning experience. The teacher becomes a facilitator of learning, instead of the expert or a fountain of knowledge. There needs to be time for the student to reflect upon what they are doing and what they have accomplished. The learning needs to be loosely defined so that the student can do their own thinking. The learning should also be applicable in the real world. In a social context, the learning needs to be meaningful so that others can relate to it. And finally, the student should be challenged and engaged by the learning.

Communities of learners are described as having three components: a common cultural and historical heritage, including shared goals, understandings and practices; individuals becoming part

of an interdependent system; and the ability to reproduce as new members work alongside more competent others (Jonassen, Land, 1999, p. 49). With these components in place we engage students in working together in the learning process. We enable the students to interact with each other giving them a legitimate role in society through community participation and membership (Jonassen, Land, 1999).

Students come into the classroom with prior knowledge and experience. Adults in particular come into the classroom environment with a preconceived idea of how the classroom with function. They expect the instructor relay the information to them verbally. Then they will memorize it and regurgitate the information back onto a test. This theory encourages them to step outside of their comfort zone. They at first resist working in groups and resent having to figure out the answers for themselves. They groan, they wine, they even try to trick the answer out of me, but in the end they learn the material and retain it better because they took an active role in learning it.

Activity theory is not a true theory, but rather a philosophy for studying different forms of an established human practice. Activity theorists argue that conscious learning and activity are completely interactive and interdependent (Jonassen, Land, 2000). So activity and conscious processing do not occur alone. Not only do activity and conscious coexist, they are mutually supportive (Jonassen, Land, 2000). Learns are transformed by this type of learning process. Activity theory claims that the human mind emerges and exists as a special component of interactions with the environment, so activity and conscious processing cannot be separated. Individuals cannot understand something without acting on it (p. 105).

I find this to be true in my classroom environment. I teach computer skills to adults at a community college. If I were just to stand up in front of the class and lecture to them on how to use the computer most of they would not understand. They would consciously understand the principles of using the computer software but without the activity of hands on computer use they would not fully comprehend the functionality of software. Other activity I use in class that really helps students to feel more comfortable with computer is taking the computer apart and passing around the pieces. They get to physically touch the computer parts and it takes away some of the mystery of the computer.

In order to help analysis the activity theory an activity system has been established. There are several components that interact with each other to accomplish activities. The components consist of subject, tools, object, division of labor, community and rules. From these components come several different subsystems including production, consumption, exchange and distribution.

The production subsystem consist of the objects that attempt to produce the outcome of the activity system (Jonassen, Land, 2000). Included in this subsystem are the subject, tools and object. The subject is the student in the activity. The tools are the means by which the student acts upon the object. And the objects are the artifacts that are produced by the activity.

The next subsystem is consumption. This subsystem describes how the subject and the community collaborate to act on the object (Jonassen, Land, 2000). This involves the community. Meaningful activity is better accomplished by a group of individuals. We learn from each other because we each have something unique to contribute to the activity.

The distribution subsystem encompasses the division of labor. This is how the tasks are distributed among the students. This is very important in helping to determine the climate for the activity system.

References

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