RUNNING HEAD: The Definitive Detective

The Definitive Detective,

a CSILE Prototype

of a Constructivist Learning Environment

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Constructivism

". . .knowledge is constructed by learners as they attempt to make sense of their experiences. Learners, therefore, are not empty vessels waiting to be filled, but rather active organisms seeking meaning."(Driscoll, 2005) 387

Constructivist instructional strategies:

1. Promote authentic learning activities	8. Promote reflection
2. Promote problem solving	9. Promote multiple perspectives
3. Promote collaboration and social negotiation	10. Promote modeling and explaining
4. Promote exploration	11. Promote coaching
5. Promote hypothesis generation	12. Promote scaffolding
6. Promote roll-playing activities	13. Promote self-directed learning
7. Promote articulation	(Dabbagh & Bannan-Ritland, 2005) 206

I am a believer. I have taught at New Century College, and found the interdisciplinary approach applied there, the Learning Community, to be an operating, successful, constructivist environment. There is, perhaps, more scaffolding than the thoroughgoing constructivist would like to see, but the open, exploratory nature of the learning for the first year students is highly valued by the learners that encounter it.[1]

I believe, but I have to apply the following *caveats*:

First, I believe that there are some areas of learning that do not lend themselves to constructivist approaches. These include learning the alphabet and parts of speech, and learning numbers and how to use them. This is learning that has to be encoded so that it is almost unconscious, in order for the learner to read and write—to create meaningful, discernible communication; to manipulate numbers—to arrive at the tip on a dinner check, for instance.

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[1] During the course of a "first year" experience, I spoke with a student in the program who is in a wheel chair. I asked him how he liked it—and his response was a big smile, and the statement "I have never worked so hard in my life!"

Learners are not going to encrypt these things by interacting with the world. Foundations must be laid for any kind of discovery learning to be practicable.

Second, learners have different learning styles. I think the theorists forget this sometimes.

"Learning styles. . . refers to individuals' characteristic and preferred ways of gathering, interpreting, organizing and thinking about information. Some students prefer to work independently, while others do better in groups. Some students prefer to absorb information by reading, others by active manipulation."(Davis, 1993) 185 [2]

Not all of these styles work with the highly experiential, constructivist approaches. (Cassidy, 2004)

Third, constructivism, for me, is a step or two beyond complex. It's an incredible approach that can add great value to the learning process; it is also difficult to execute successfully. Instructors may resist anything that makes their jobs more complicated, and creating a constructivist approach to a given content area is definitely that. The "content expert" is hard to convince that his/her topic could be framed differently (i.e., something other than a textbook, lectures and multiple-choice tests), and until pay scales improve, teachers in K-12, adjuncts and teaching assistants have neither the time, the training, nor, frankly, the interest required to create discovery environments for their domains. The old saying about moving a cemetery— "the inhabitants won't help . . ." definitely applies here.

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[2]"*Convergers* rely on abstract conceptualization and active experimentation; they. . .move quickly to find solutions to problems; they are good at defining problems and making decisions.
Divergers use concrete experience and reflective observation to generate a range of ideas; they excel at brainstorming and imagining alternatives. (. . .tend to prefer solving problems that have definite answers. . .)
Assimilators rely on abstract conceptualization and reflective observation; they like to assimilate a wide range of information and recast it into a concise logical form; they are good at planning. . .and creating models. (. . .more comfortable observing, watching role plays and simulations and then generating concepts.)
Accommodators are best at concrete experience and active experimentation; they often use trial- and-error or intuitive strategies to solve problems; they tend to take risks. . . . (prefer hands-on activities.)" (Kolb (1984) in Davis, 1993) 187

And finally, I do honestly believe that constructivist principles are in no way harmed if, given all the variables in a typical learning situation, the instructor turns to other cognitive tools to assist in the learning. For example, adding an advance organizer to an activity in a learning community may be crucial to a range of learners getting from point A to point B within that activity. I know that is construed as "cherry picking," and to the dedicated constructivist it may also be heretical; theories are necessary and important, but conditions in the field sometimes must take precedence.

The CSILE as a Constructivist Environment

"So, activity theory claims that learning and doing are inseparable and that they are initiated by an intention. . . .Intentions are directed by objects of activity. . .[which] focuses the intended actions on the object." (Jonassen in Jonassen & Land, 2000)107

Constructivist Instructional Conditions

1. Embed learning in complex, realistic, and relevant environments. . .
2. Provide for social negotiation as an integral part of learning. . .
3. Support multiple perspectives and the use of multiple models of representation. . .
4. Encourage ownership of learning. . .
5. Nurture self-awareness of the knowledge construction process. . .
(Driscoll, 2005) 394

Computer Supported Intentional Learning Environment (CSILE) Characteristics

1. Provide a group-oriented knowledge-building environment in which the learner is responsible for learning

2. Foster student control of learning by helping students activate their own learning strategies and decide how to represent knowledge and how to share with others

3. Support intentional learning

4. Support multiple representations of knowledge through the use of media

5. Promote peer mentoring through social negotiation, articulation of ideas, reflection, discussion and shared understanding

6. Allow students to share in problem solving by working as a team and setting goals

7. Promote individual learning styles

8. Build a collective database of students' thoughts, ideas and understanding

9. Support self-regulated learning
(Dabbagh & Bannan-Ritland, 2005)

The important part of CSILE, for me, is the "Intentional." What is meant by "intentional learning?" I looked in the literature for definitions, to make sure that the theorists had not redefined it on me:

> ". . . Intentional learning (i.e., that related directly to the objectives). . .(Driscoll, 2005) 365
> *and*
> "(intentional dynamics). . . goal directed systems are not merely self-directed toward goals, but are directed by goals. These goals set up a path, or a bundle of virtual paths. . .to be perceived and acted on by the individual." (Young, Barab & Garrett in Jonassen & Land, 2000) 161

This is in contrast to *un*intentional learning, which I would guess is what the Jasper Series typifies. That is to say, the learner is immersed, and may not be aware of when learning is actually taking place during the adventure.

> "The primary goal of CSILE is to support learners in intentional and purposeful processing of information." (Jonassen & Land, 2000) 8

> ". . .CSILE provides metacognitive and procedural facilitation to help learners identify learning goals and make thinking (typically a covert process) overt." (Land & Hannifin in Jonassen & Land, 2000) 8.

The Definitive Detective is not *problem-based*, the concept of The Puzzle notwithstanding. The Puzzle is, as noted in the proposal, a "mythos," almost folklore, a concept which, for many, in all walks of life, provides an opportunity to experience a mystery, and observe the actions of the detective that solves it. The students are not being asked to solve it, but to interpret it, based upon history, culture, ethics, human emotions, character development, and other facets of the study of literature. They will write about their interpretations, and create artifacts that others can access and use. It meets all the instructional conditions listed above, and then some.

Expanding The Definitive Detective

The Definitive Detective computer supported intentional learning environment is designed to provide a place for literature students to sample and experience detective fiction as a genre of literature. It is designed for older students—high school seniors or general education literature classes in the first year of college. As such, I believe it could be expanded to just about any subset of literature that is suitable for study. I can see it as an environment for learners to encounter categories of poetry (sonnet, ode, epic), biography or autobiography, or drama. I think the group-oriented nature of the space, and the ill-defined nature of the studies would produce some interesting artifacts.

References

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