

ORLD 4050 - Intro to Adult/Continuing Education

Fall 2006

Assignment #1

Topic

Adult Learning and Technology: Integrating Carl Rogers' Principles in the Design and Delivery of Technology-Enabled Science Lessons in Higher Education.

Introduction

In recent years, higher education institutions are giving priority to the integration of technology into curriculum, especially as the advancement of computer and communication technologies offers educators unlimited opportunities to create situated and authentic learning environments. There is however the need for faculty to strive to apply adult learning theories into their practices so that they can create technologically effective and meaningful learner-centered instructional activities.

In his book - *Freedom to Learn for the 80s* (1983), Carl Rogers (who views learning as an activity that should lead to personal growth and development), proposes a "client-centered therapy" approach to adult learning - an approach which has the following characteristics:

1. *Personal involvement*: the affective and cognitive aspects of a person should be involved in the learning event.
2. *Self-initiated*: a sense of discovery must come from within
3. *Pervasive*: the learning makes a difference in behavior, the attitudes, perhaps even the personality of the learner.
4. *Evaluated by the learner*: the learner can best determine whether the experience is meeting a need
5. *Essence is meaning*: when experiential learning takes place, its meaning to the learner becomes incorporated into the total experience.

(Merriam, S.B. & Caffarella, R. S. 1999, p.258).

Having been teaching science (chemistry) at the college level for a couple of years, and also actively engaged in creating technology-enhanced learning environments for such learning activities, I will like to take a brief look at how these five characteristics as outlined by Rogers can be applicable in this field of practice.

Application of Principles

1. *Personal involvement:*

By Personal involvement, Rogers is implying that faculty must structure student concerns as well as their input into the design of their technology-based lessons. In the case of the sciences, this can be achieved by getting learners to prioritize the topics to be covered, learn at their own (or a mutually agreed) pace, and give them a sense of ownership of the learning process.

2. *Self-initiated:*

Though adult learners may respond to external motivators, it is their internal priorities such as job satisfaction, self-esteem, higher quality of life etc., that tend to be more significant motivating factors, and if any of these can be related as part of technology-enabled learning processes, they will respond more positively. With the current multimedia and internet technologies, it is fairly easy to create science learning environments that are authentic and relate to student's real-life needs and future goals.

3. *Pervasive:*

Traditional schooling tends to create dependent learners, and it is thus the duty of the adult educator to move adults (who invariably will have gone through traditional schools), from their old habits into new patterns of learning. Technology is a perfect tool that can be used in this direction, especially in science education. Learner-centered multimedia simulations and non-linear web-based learning resources allow learners to construct their own learning paths and can assist learners re-examine their biases and habits.

4. *Evaluated by the learner:*

Technology-based lessons can incorporate students' initial reflections and expectations of the learning process, such that during the course of the lessons, learners can evaluate whether their experiences are meeting their needs and goals. For example, in-built self review exercises and quizzes, which enable learners assess themselves on the fly, can be built into lessons.

5. *Essence is meaning:*

Rogers states that when experiential learning takes place, its meaning to the learner becomes incorporated into the total experience. Adults possess of wealth of lifetime experiences, and so the design of technology-based science lessons must include opportunities for them to use their knowledge and experiences in ways that will not only be meaningful, but also serve to enrich their previous experiences. Case studies, reflective activities, group projects etc. are examples of such learning activities.

Conclusion

It is often argued that with the help of technology, educators can design and implement interactive, learner-centered and self-directed learning situations. Practice, however cannot be devoid of theory. The above analysis therefore looked at how some aspects of the humanist theories of adult learning can be applied in the design of technology-enabled learning activities. Based on these concepts, educators must structure student input into their design, and also create lessons that are not only relevant to adult needs, but flexible enough to allow the learner to move through lessons anytime, anywhere and at their own pace.