Book Section:

eprints@whiterose.ac.uk
https://eprints.whiterose.ac.uk/

Online Learning Support in Constructivist Environments

Maggie McPherson and Miguel Nunes

Department of Information Studies
University of Sheffield
Regent Court, Sheffield, S1 4DP, UK
m.a.mcpherson@sheffield.ac.uk

Abstract

Academic learning can essentially be seen as a constructivist process. This of course, is an alternative approach to traditional university teaching, insofar as learning is facilitated rather than taught. In consequence, learning in online constructivist environments has to be supported by appropriate resources and requires a number of specific skills from both tutor and learners, that is, online tutor skills, online learning skills and specifically designed online learning facilities.

Academic Learning and Constructivism

In terms of Higher Education, defining academic learning is not unproblematic. In general terms, it can be seen as a series of activities that promote acquisition of high-level knowledge, such as critical thinking and problem solving in addition to the gathering of facts/concepts. In order to promote these skills, learning must take place within the context of a holistic experiences in which the learner is completely engaged, and results from the combination of acting and reflecting on the consequences (reflective experience and reflective thinking) of the learning activities. Therefore, learning is in general a continuous process of reflective experience in which a person is actively constructing her/his own view of the world.

Academic learning is thus defined here as the process of constructing knowledge and the development of reflexive awareness, where the individual is an active processor of information. Learning occurs through interaction with rich learning environments, and results from engaging in authentic activities, and social interaction and negotiation.

This need for situated learning, social negotiation and multiple perspectives implies that a number of different learning strategies must be adopted to assist the learner in the construction of knowledge [2]. The adoption of these different strategies creates learning environments that Grabinger and Dunlap [1] term Rich Environments for Active Learning (REALs). REALs promote learning within authentic contexts, and encourage the growth of learner responsibility, initiative, decision-making, intentional learning and ownership over the acquired knowledge. Additionally, REALs should provide an atmosphere that encourages the formation of knowledge-building learning communities, which assist collaborative social negotiation of meanings and understandings among the members of the community (peers, tutors, subject matter experts).

In consequence, learning in online REALs has to be supported by appropriate resources and requires a number of specific skills from both tutor and learners. This need for learner support clearly requires a different approach from conventional theory. Online Learning Support (OLS) could be defined as computer-mediated approaches to support and facilitate learning, using a combination of skills that encompass information and IT expertise, as well as expertise in the educational uses of online learning resources, environments and communication technologies. In the light of this, it is possible to distinguish three different components of OLS:

- online tutor skills:
- online learning skills and;
- specifically designed online learning facilities.

Thus, the online tutor must, in addition to the subject matter expertise and traditional pedagogical training, be able to demonstrate additional networked and communication literacy skills (NICLS) necessary to be successful in a REAL.

Conclusions

Using constructivism in online learning is not intuitive to either learners or tutors. Both groups were probably educated in highly objectivist educational systems and are often ill-prepared for the independence, action and interaction required by this epistemology. Successful online learning courses require, much more than well-designed environments, motivated tutors and interested learners. A set of information, communication and social skills need to be acquired by both tutors and learners prior to the online learning activities.

Bibliographic References

[1] Grabinger, R. and Dunlap, C. Rich environments for active learning. *Association for Learning Technology Journal*, 1995, **3**(2).

[2] Nunes, J. M. and Fowell, S. P. (1996) Hypermedia as an experimental learning tool: a theoretical model. *Information Research New,* 6(4), 1996, 15-27.