Collaborative Learning in Virtual Learning Environments: Supporting High Quality Educational Interaction [linked with the Community Task Force, i.e. CHALCS]

Tim Barker
Computer Based Learning Unit
University of Leeds, LS29JT

Chapeltown And Harehills Assisted Learning Computer School (CHALCS) is a community-based school which provides tutorial support for pupils out of school hours. The Chapeltown and Harehills district of Leeds faces the problems often associated with inner-city ethnic minority areas, notably poor housing, single parents and high unemployment. These factors combine to create a culture of crime such as vandalism, drug abuse and violence. These social problems in turn create educational problems such as truancy and disinterest. CHALCS was established in 1987 to address these problems by providing out of school tuition for English, Science and Information Technology.

The project involves supporting learning across the curriculum through the use of new technologies, particularly internet connectivity and other Computer Based Learning packages. The work is currently aimed at ‘A’ level students who are mostly from a scientific background. However, there is presently a notion that CHALCS would be beneficial to a wider variety of students.

A number of areas have been identified by the students, such as problem-solving, written and critical skills. In the first instance a prototype system will be installed which will allow data to be gathered as to its suitability. This data will also suggest where further support is required.

Virtual Learning is defined as technologically supported education, such as distance learning over the internet or the use of computer-based learning materials over an intranet. Important functionality which is required includes provision for collaborative problem-solving, on-line discussion forums and electronically-mediated resources.

There is undoubtedly a need to further support the learning of the pupils at CHALCS. It is proposed that a system will be installed which will facilitate computer-based learning within the context of a learning environment, specifically supporting writing and problem-solving skills. Several such environments are commercially available but, at least initially, it is proposed that an integrated component-based solution will be advantageous in assessing the needs of the pupils. Quantitative and qualitative data will need to be gathered by following a combination of research methodologies, such as the experimental and ethnographic approaches.

1 The author is now contactable at tim@timbarker.org