

Case Study 1

MusicAR - Pedagogical Research and Evaluation

The MusicAR Project is concerned with *researching*, implementing and *evaluating* an augmented reality music teaching environment. Some of the generic concepts underlying various aspects of the environment (such as the 'virtual workspace') are already being implemented but the more specifically pedagogical concepts and techniques related to lecturer-student(s) and student(s)-student(s) interaction is currently at the research stage. This research will involve both lecturers and students at several of the CETL institutions and is intended to enhance the teaching and learning experience associated with music theory and performance in the first instance.

The CETL funding has supported the purchase of MusicAR project-related equipment at several of the cooperating institutions. Equipment includes interactive whiteboards and related computer systems. In particular we are purchasing a very large screen data-projection display system for installation in the main digital music laboratory at Teesside University and have already purchased a set of table PCs to interface with this display and interactive whiteboard facilities elsewhere on the site (and eventually beyond).

Structured discussions with teaching staff and students and observation of theory, harmony and performance classes at Teesside, Newcastle and Durham Universities are planned to take place throughout the coming academic year. Initial data gathering will result in modifications and additions to the augmented reality aspects of the MusicAR environment. Observation and feedback will drive the development of the system in an iterative process during this period. It is intended that students and staff will be able to use the environment on their own computers (both on- and off-line) in order to benefit from the 'learning object' potential of the system. Evaluation will take place following the installation and use of the result of each iteration.