Dr Michael Gardner, Director of the Digital Lifestyles Centre, University of Essex

Title: Using Project Wonderland to develop and deploy virtual 3-D collaborative environments for teaching and learning

Abstract: This presentation will describe Project Wonderland - Sun microsystems Virtual Workplace - and how it is being used in a number of R&D initiatives at the University of Essex. This includes the MiRTLE project which has developed a virtual environment for real-time lectures. This is a mixed reality collaborative environment that supports local and remote students in a traditional instructive higher education setting. It aims to augment existing teaching practice with the ability to foster a sense of community amongst remote and co-located students. In addition, the project is experimenting with the use of sensors to be able to provide a means of manifesting the emotional state of the remote students on their respective 3-D avatars. The presentation will overview the development of the MiRTLE platform, and highlight some of the key issues in developing and deploying this environment, and will briefly describe some of the research areas being explored which can make use of this as an educational platform.

Biography: Dr Michael Gardner is Director of the Digital Lifestyles centre at the University of Essex. This centre explores future lifestyles based around the technical vision of ambient and pervasive computing. This includes the co-creation, innovation and design of new services based on a Living Laboratory approach, combined with the development of pervasive computing technologies in inhabited and networked environments. The centre brings together the social and technical expertise of a number of research groups at the University, based on a balanced portfolio of research, teaching and commercial activities. He is also Deputy Director of the Institute for Social and Technical Research (ISTR) at the University of Essex. This new institute, which was founded in April 2002, carries out research that combines the social and technological sciences to generate insights into personal and social use of information and communication technologies. In 1987 he joined British Telecom (BT) Research Laboratories at Martlesham Heath and during his 15 year career worked on a range of high- technology projects. This included leading the technical R&D activities on the BT e-learning research programme (for 5 years). He has published numerous papers in his field and regularly makes invited presentations within academia and industry. He is also the inventor of a number of technology patents.