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**Claire Bradley** is a Research Fellow at the Learning Technology Research Institute at London Metropolitan University. She has a Masters degree in Interactive Multimedia. She has worked on several UK and European research projects involving the introduction and evaluation of multimedia and eLearning in a range of learning scenarios. She has co-authored a number of journal articles and papers in these areas. Prior to working as a researcher, she worked for 12 years in developing and producing distance learning materials for adult learners.



**Richard Haynes** is a Multimedia Developer at Metropolitan University in London. He has recently completed an MA in Digital Media where his final project was a historic tour of Camden an area of London delivered on a Handheld PDA. With over ten years experience developing learning resources for Universities and Arts organisations, he has developed for a variety of digital media. Most recently he has been developing Learning Objects for the University, which won a European Academic Software Award 2004.



**Professor Tom Boyle** is Director of the Learning Technology Research Institute (LTRI) at London Metropolitan University. For the past three years he has been leading a major project on the development, use and evaluation of learning objects that has produced marked improvements in student performance. This work resulted in a European Academic Software Award (EASA) in 2004. He is also Director of the Centre for Excellence in Teaching and Learning (CETL) in Reusable Learning Objects, based on a partnership of London Metropolitan, Cambridge and Nottingham universities.



## Adult Multimedia Learning with PDAs - The User Experience

Can rich interactive multimedia learning experiences be created for adults to use on a Personal Digital Assistant (PDA)? This was the research question that prompted this exploratory work into creating mobile learning applications. The result is the development of two prototypes of multimedia learning applications for the PDA. The first is a mobile local history tour (see Figure 1), designed to support informal learning. The second is a learning object on Java programming (see Figure 2), for higher education students, which has been adapted for the PDA. The applications will be briefly described, with the underlying design and pedagogic principles. Both have been evaluated with representative target users, and the remainder of the paper will focus on the user experience of using the applications and the PDA in these two distinct learning scenarios. Despite their differences, a number of themes emerge. Some of these were expected such as the advantages afforded by mobility and portability and the new learning spaces that become available. Others not anticipated relate to the learning experience the PDA provides. Both user groups particularly liked the use of audio: for example "audio provided real depth to the tour", "I learn more by hearing". The students found the PDA object "much more interactive", "more understandable" and particularly liked it because it "is smaller than a book". The paper presents more of the in-depth and rich feedback from users, illustrating the success of this research.

Figure 1: The Mobile History Tour



Figure 2: The Java Learning Object

