Articulation of Learners Requirements for Personalised Instructional Design in E-Learning Services

L. Sun, K. Ousmanou and S. A. Williams

Informatics Research Centre, The University of Reading, UK. Whiteknights, Reading, RG6 6AF, UK {lily.sun, k.ousmanou, shirley.williams}@reading.ac.uk

Abstract.

As e-Learning environments evolve, learners have become increasingly demanding on personalised learning which allows them to build their own knowledge pathway. This significant change in learning requirements imposes a new learning paradigm which ensures one-to-one learning with flexible mode of content configuration, and adaptive delivery and assessment. Although in the past years, Learning Management Systems (LMS) providers have upgraded system functionality to support instructional design for e-learning package, incorporating individual learners' personal learning requirements in content design still remains challenging. To involve learners in the content design requires identification of their personal learning requirements. This paper presents a method for articulating individual learners' learning requirements (e.g., learning styles, and prior knowledge), and representing them in a set of computable parameters in Learner's Profile. These parameters will then be mapped onto instructional design strategies which determine a selection of suitable learning content and sequencing of content with adequate instruction in a learning package.