

## Chapter 12

# Web-Mediated Education and Training Environments: A Review of Personalised Interactive eLearning

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### ABSTRACT

*This chapter reviews the concept of personalised eLearning resources in relation to integrating interactivity into asynchronous learning. Personalised eLearning resources are learning resources which are selected to suit a specific student or trainee's individual learning requirements. The affordance of personalised eLearning would provide educators with the opportunity to shift away from eLearning content that is retrieved and move towards the provision of personalised interactive content to provide a form of asynchronous learning to suit students at different degree levels. A basic introduction to the concept of ePedagogy in online learning environments is explored and the impacts these systems have on students learning experiences are considered. Issues, controversies, and problems associated with the creation of personalised interactive eLearning resources are examined, and suggested solutions and recommendations to the identified issues, controversies, and problems are reviewed. Personalised interactive asynchronous learning resources could potentially improve students' learning experiences but more research on the human computer interface of these authoring tools is required before personalised eLearning resources are available for use by non-technical authors.*

DOI: 10.4018/978-1-4666-3649-1.ch012

## **INTRODUCTION**

This chapter provides a review of personalised interactive eLearning resources. Personalised eLearning resources are suitable for integrating interactivity into asynchronous learning. Asynchronous learning is the learning which takes place when a student has the opportunity to interact with learning resources and return at a later time to discuss or question the content with peers or lecturers. Alternatively, asynchronous eLearning refers to the learning which takes place through communication with other students or lecturers who are not necessarily online at the same time; this type of learning is facilitated by the use of: e-mails; discussion boards; blogs; and wikis.

Personalised eLearning resources refer to the creation of eLearning resources which have been specifically selected or tailored to suit the learning preferences of individual learners. Personalised interactive eLearning resources provide students and trainees with the opportunity to engage with interactive eLearning resources which have been specifically selected relevant to their individual requirements. The benefits to be achieved by enabling students to interact with personalised eLearning resources will be discussed. The objectives of this chapter are to provide the reader with a clear understanding of the concept of personalised eLearning resources and how these resources can integrate interactivity to form asynchronous learning. Also, to provide an overview of the issues, controversies and problems associated with the creation of personalised eLearning resources and some of the solutions to be considered to make personalised eLearning resources achievable.

## **BACKGROUND**

Electronic learning (eLearning) has not impacted on education and training quite as much as expected. Educational environments refers to formal teaching environments which provide a

broad range of instruction for students and also issue recognised standardised certification of awards at various levels of academic achievement. The potential use of technology in higher educational environments has not yet been fully realised (Donnelly & O'Rourke, 2007). Higher level educational Institutions provide tuition and examinations which lead to high level qualifications for successful students in: Bachelor; Master; or Doctoral degrees.

The reasons for the low adoption rate of eLearning or the use of learning management systems (LMS) are numerous; some reasons are mentioned in this chapter. LMSs are computer applications or systems which have been specifically developed to facilitate the use of technology by lecturers or trainers when instructing students or trainees. Over the years several lecturers have expressed concerns that engagement with eLearning would lead to redundancies and their active participation in the use of a LMS would lead to the demise of the lecturing profession (O'Donnell, 2010). Others were of the opinion that eLearning would weaken the branding of their educational environment (Sonwalkar, 2008). Some lecturers are afraid of putting all their work from over the years onto the world wide Web (www) for fear that it will be stolen by others (O'Donnell, 2008), copyright theft, that is: others who never took the time to create class handouts and learning resources of their own would use the online learning resources created by others as their own. Several observed that the pedagogical benefits to be achieved through the use of technology enhanced learning (TEL) had yet to be proven. TEL refers to the use of technological devices and communication mediums to augment the learning experience. Quite a few simply admitted that they would not have the time required to create eLearning resources and that no designated time table allocation of hours was allowed for the creation of TEL resources. Several lecturers admitted to lacking sufficient computer skills and knowledge of eLearning platforms to enable them to create eLearning ac-

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