

Enriching a Pedagogical Model for the Implementation of a Virtual Training Environment

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Abstract

The progress of a project for the training of e-learning professionals in South East Asia is reported in this paper. A web-based survey identified key areas for the professional development. The process of content design is explained as well as the enrichment of the pedagogical model. The Virtual Training Environment is underpinned by this model and the potential role of learning objects is consequently discussed.

1. Introduction

The expansion of the use of ICT has led organisations to accommodate for the growing demand for necessary skills. Regarding the Asia Pacific region, reports estimate that the e-learning industry follows a rapid growth, which leads to an increase in the demand of relevant professions [1]. Within this context, Middlesex University successfully bid for a grant to engage in the Asian Distance Education – e-learning Professional Training (ADEPT) project with the aim of fostering excellence in e-learning in higher education institutions of South East Asia. The four institutions involved are Middlesex University (UK), University of Twente (The Netherlands), Singapore Polytechnic (Singapore) and Kasetsart University (Thailand). Expertise for the running of the project was drawn upon the experience of the Global Campus (GC) programme which was created by Middlesex University and uses web technologies for the provision of flexible learning arrangements for home students and high-quality courses to partner institutions abroad.

2. Training needs analysis

A web-based survey was developed which consisted of 36 items and was delivered by “Survey Monkey” software. Responses were collected from 52 participants (8 recruited by Middlesex University, 18 from the University of Twente, 18 from Singapore

Polytechnic, and 8 from Kasetsart University). A “filtering” facility divided the data depending on where the participants were born and their country of work. Thus, two subsets of data were produced, “East” (e.g. Far East, South East Asia etc.) and “West” (e.g. Europe, North America etc.). The majority of the participants have had more than 3 years experience in e-learning.

The most important aspects of training for e-learning professionals were rated as follows: communication skills (76% of the participants), module design (60%), providing student support (54%) and role of the instructor (54%). The participants also rated the importance of skills for e-learning professionals: design for learning (65%), pedagogy (63%) and communication skills (61%). In terms of different perceptions among cultural subgroups, 84% of the Eastern background participants considered communication skills to be a very important aspect of teaching whereas Western participants reported student support as the most crucial one. Secondly, with regard to necessary skills, pedagogical skills are the most important factor for Western participants, followed by design for learning and communication skills. Eastern participants rated design for learning and communication skills as the most important ones. Training that covers evaluation, role of the instructor, quality monitoring, assessment and professional knowledge were areas that the participants considered of importance. Renewed attention to pedagogical issues has also been reflected in the responses of the sample, more clearly among Westerners. The analysis has also shown that frequency and the tone of online communication are significant. The participants also expressed an interest in interactive action and gathering information on writing for the web.

3. Pedagogical Model

The proposed course follows a modular structure, where the content of each module is divided into learning units. The learning units are implemented according to the SCATE pedagogical model. Previous

to this, the I CARE pedagogical model was distilled from basic instructional design practice, adapting five steps of instruction: Introduction, Connect, Apply, Reflect and Extend [2]. The *Scope* section places every unit in the context of the course and states the specific objectives. The *Content* section contextualises new information. The *Activity* section is where newly acquired skills and knowledge are put into practice. The *Think* section gives students an opportunity to reflect on their newly acquired skills and knowledge. The *Extra* section provides closure, prompts further exploration and learning, and assessment.

As explained the units were developed on the modular basis of the SCATE model. The framework is further developed with additional problem based activities and scenarios. It is expected that the constructivist features of the pedagogical model will be further enriched.

4. Moving towards a Web-based VTE

The content of the course has been developed after the end of the training needs analysis and the selection of a suitable pedagogical model that would accommodate the needs of e-learning professionals. The main thematic areas include an overview of pedagogical approaches, tutor roles, communicational issues and facilities in Virtual Learning Environments (VLEs), feedback, assessment strategies, tutor roles and cultural issues. At present the GC VLE is a compound system including primarily the OASIS content delivery and communication system based on the WebCT platform, complemented by PAM, a Project Assessment and Monitoring system. The OASIS environment is mainly used for the provision of learning material that includes lecture slides and the content for each unit in accordance to SCATE.

For the ADEPT project it was decided to structure the VTE following the current OASIS VLE integrated with embedded tools for the creation of learning content and the development of learning portfolios. Primarily the VTE is required for the delivery of an online training course leading to a three-day locally delivered course for e-learning professionals. A key aspect of the VTE is a number of activities based on training course notes and presentations in the form of a learning journal. Furthermore, the *Think* part of the SCATE model includes structured discussions on given topics for each session. Finally, an individual portfolio including activities, discussions and self-reflection must be completed.

One of the aims of the VTE is to provide a web-based tool for building learning objects and online

courses. There is the need for an application providing a framework for the development and review of learning materials. Interoperability with the OASIS e-learning platform is a key consideration. The current phase of the ADEPT project is concerned with the “development and management of accessible, reusable and traceable learning content” [3]. Authors of learning content have access to several learning objects that correspond to a number of elements of the SCATE model. A number of alternative pedagogical models are currently under review for the authors to have a plethora of options to choose the most suitable pedagogy or elements of a pedagogical model. This process follows suit existing work on sequencing techniques utilizing filtering and instructional planning processes [4].

5. Conclusions

This paper provided an overview of designing and implementing an e-learning initiative for the training of e-learning professionals in Southeast Asia. The project is currently focusing in the implementation of the pilot course and the emphasis is given on how the delivery will successfully respond to the demands of the trainees.

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