Communication

COLLABORATIVE DEVELOPMENT OF E-LEARNING COURSEWARE

B.R. Mandre

E-learning itself demands the anywhere anytime type of learning activity. It’s basic purpose is to break the barriers like time, place, age in learning. Author in this paper concentrates on another side of the coin – the development of the e-learning material or courseware. They propose a model of e-learning courseware development paradigm based on collaborative efforts thus facilitating learning and related development activities beyond the barrier of the borders.

Keywords: E-Learning, distance learning, E-Learning Courseware, collaborative development

Introduction

Learning is a process of acquiring the knowledge of something of interest. It is basically associated with the interaction of the learner with entities having the knowledge repository. These entities may include the teacher, books, notes, events, CDs, Internet, etc. The E-learning is the technology-assisted process of learning. Most often the E-learning is self-paced in the absence of teacher (Brodsky, 2003).

Learning itself emphasizes on the learner-centered process as opposed to the teacher or subject-centered process. In this way the courseware in E-Learning is the only source of knowledge for the learner (Pete and Khalili, 1998). It demands a challenging task of developing the courseware, which represents the teacher, guide and assistant to the learner. From this point of view, authors in this paper propose a paradigm of development of e-learning courseware. It focuses on the collaborative development model, which can bring the best teachers of the topic of interest together around the world.

This paper discusses the Internet based collaborative model of development in detail. But, for the proposed models various implementations are also possible. The paper briefly reviews these implementations.

The proposed model is so generic that it can be applied to any subject of any stream. But, in this paper the authors assume the development of e-learning courseware for the programming subjects in computer science and engineering.

Courseware Development Model

In this model, an organization can initiate and coordinate the whole development of the project. The model involves many courseware developers, which can be geographically dispersed. The organization appoints an expert of the subject as the project coordinator for the courseware development project. The project coordinator of the system is responsible for project coordination and overall management.

* Assistant Professor, Department of Computer Engineering and IT, SSVPS BS Deore College of Engineering, Dhule, Maharashtra, India.
The project coordinator prepares the scope of the courseware and detailed topic list. He is also responsible for assigning topic developers for each topic. He is provided with the list of experts of the subject. He assigns the topic to each such selected and interested topic expert.

Each topic expert or developer thus receives his/her share of development. Each topic developer works in parallel resulting in less time for development. For some cross-linked topics, the topic developers can work in collaboration avoiding the repetitions.

**Advantage**
The proposed model provides many advantages. It is basically a framework, which can be utilized in variety of applications. The system proposes a structured and hierarchical approach in the development of the E-learning courseware. It allows the sharing of the functions among the people involved in the development and management of the system. The people involved in the system may be geographically at various different locations.

The development project can be shared across the various institutes and organizations irrespective of the geographical locations.

**Opportunities**
The model gives the opportunities to develop better inter-organizational relationship allowing the sharing of experts among various organizations. The model offers new employment opportunities for the freelancers to work from home.

The model facilitates the development of strong relationship with industry and academia. The industry experts may contribute to develop better curriculum and industry oriented courseware. The experts from the academic institutes may provide better theoretical foundations. This finally results in better courseware for the learner in the e-learning system.

**Conclusion**
The e-learning offers the opportunity to learn and acquire the required skill even in the absence of trainer on anytime and anywhere basis. The e-learning is also benefiting from the advancement in Internet and Communication Technologies. By taking this opportunity, this paper proposes a model of collaborative development of the better e-learning courseware by involving the best people in the knowledge domain. In this way this system results in the better e-learning courseware and thus resulting in the more penetration of the e-learning in the society.

**Reference**
