QUALITY ISSUES AND STANDARDS OF E-CONTENT

By

K.NACHIMUTHU* G.VIJAYAKUMARI**

ABSTRACT

The objectives of the e-content development by the University Grants Commission(UGC) are; (a) Generation of e-content, for all subjects, (b) Development of teachers' and experts' resources in e-journal creation; (c) Distribution of the e-content to teachers and students from formal and non-formal educational modes, for supplementing and complementing professional teaching and learning content; (d) Development of partnerships between educational institutions and the IT industry for the continuous development of new content and methodology taking into account contemporary technology.

The product of e-content should be technologically friendly, learner centric, teacher-cum- leaner friendly, self-evaluative, object based learning / teaching. This article explains the course material and its content, period of time taken for the study with its remunerations. The Course Development team methodology follows eight key steps to ensure the success of any e-content project; assessment, front-end analysis, design, planning, development, quality assurance, implementation, evaluation and customized on-site training.

In India, BSNL Pune is launching "Multiplayer services" that include e-classes, among other things. Maharashtra Knowledge Corporation Ltd (MKCL) is poised to supply the content for BSNL where the relationship between the two is on a revenue sharing basis. The e-content package development team consists of instructional designer, subject matter experts (SMEs), interface designer, programmer, and audio video editor and project managers. Most e-Learning programs can be taken when needed. E-Learning students can go through training sessions from anywhere, usually at anytime. Online e-content sessions are especially easy to keep up-to-date because the updated materials are simply uploaded to a server. Teachers also can review a student's scores and identify any areas that need additional training. Without a set strategy for e-content development, a program may fail. This paper also explains the advantages of e-content.

INTRODUCTION

Web based education and training programs are widely offered at educational institutions and companies today. The new electronic learning or e-learning systems employed by these programs may also be used by work teams at organizations to facilitate creative team performance. Various features such as discussion boards, virtual classrooms, digital drop boxes, task lists, calendars and other features of the e-learning systems can help teams to work and communicate more efficiently.

The advent of the Internet and the widespread adoption of advanced technological measures have led to a new emphasis on online education and training in the academia by providing unique alternatives for reaching larger audiences than ever before possible. In the contemporary, universities have the ability to provide distance learning opportunities through online classes for students-traditional or non-traditional, full-time or part-time, and international, who perhaps have had limited access to advanced educational opportunities. Online education is especially valuable to those students who juggle demanding work, familial and social schedules that necessitate access to learning in special forms.

Benefits of Web-learning

The term e-learning covers a wide set of applications and processes including computer based learning, web-based learning, virtual classroom and digital collaboration. However e-learning is becoming widely accepted as a substitute for online learning and web based learning. The web today is used in three different ways by educational institutions. (i)Web integration in the classroom teaching that works as supplement to the face-to-face teaching; (ii) Web used as a 'mixed mode' approach to complement normal teaching, which is normally called 'blended e-learning'; (iii) Web used

independently for teaching and learning as replacement of normal teaching.

If we want to get the Benefits of Classroom Training, without the classroom, we can follow the following rules through internet. (i) Choose only the modules and content that are relevant to one's needs; (ii) Access the modules from any location with a PC and internet connection; (iii) Use e-Learning on demand, 24 hours a day, 7 days a week; (iv) Use e-Learning Live to interface with expert of instructors and other lab professionals; (v) Get password-protected, automatic recordkeeping of your completed modules; (vi) Fulfill training requirements in regulated educational administrations, (vii) Help to develop each and every unknown area of knowledge. (viii) Use the content packages that are readily available for use. (ix) Self-service (x) Search Vs Menu oriented for free process; (xi) Media time-shifting like increased usage of digital recorders at home and (xii) Peer validated Knowledge.

Development of e-content methodology

Using the Creative Commons License, all content can be placed in the public domain. One of the most important aspects in the beginning stages of e-learning development is to ensure that there is a clear plan and set goals. Without a setted strategy for e-learning development, a program may fail. While there is no cookie-cutter strategy for achieving e-learning goals, the first aspect to consider is the e-content development methodology, which includes the following key points.

- Establish goals and objectives and determine the target audience
- Select the information that needs to be taught
- Identify why you are teaching the selected e-learning courses
- Establish a fixed budget time frame for delivery
- Determine the number of courses that need to be created
- Create standardized e-learning documents, such as storyboards and templates
- Identify the technologies that will be required for e-learning development
- Determine how the end users will access the courses
- Identify the scope of sophistication for delivery.
- Decide whether the courses be interactive and include animations, audio, video and/or simulations in advance.
- Determine whether the e-learning program should include tests and assessments.

UGC -Objectives of e-content development

The objectives of the e-content development by the UGC are; (a) Generation of e-content in all subjects, (b) Development of teachers' and experts' resources in e-journal creation; (c) Distribution of the e-content to teachers and students from formal and non-formal educational modes, for supplementing and complementing professional teaching and learning content (d) Development of partnerships between educational institutions and the IT industry for the continuous development of new content and methodology taking into account contemporary technology.

Quality issues and Assistance

Proposals for the development of e-content can be submitted by any of the following persons to UGC.

(a) Teachers, including retired teachers linked with colleges and universities, and with experience in teaching UG and PG courses (b) Colleges or university departments. (c) A college or university.

The quality of e-content should be (a) Technologically friendly so as to be downloaded and used on any computer either independently or connected in a LAN (b) Learner Friendly for easy navigation (c) Learner Centric to be useful in self-instructional mode (d) Teacher Friendly so as to be used in various teaching-learning methods such as classroom lectures, tutoring to a group, lab session etc. (e) Learner Centric Pedagogy be employed. Specifically the designer of the e-content should pay attention to the teaching model used, such as simple information communication, exploratory approach, discovery approach, mastery learning etc. (f) Many types of interactive should be included to make learning

Sl.No	E-learning Course material	Hours of study	Amount (Rs)
1.	Assembled Content	Upto 15 Hrs	5,000 – 10,000
2.	Assembled content	Total 15 -50 Hrs	10,000 – 1,00,000
3.	Created content	Upto 5 Hrs	10,000 – 1,00,000
4.	Created content	Upto 16-150 Hrs	1,00,000 – 5,00,000
5.	Created content (per course)	For whole course	3,00,000 – 5,00,000

Table 1. Course material and its allowances

effective and efficient (g) Self-evaluation: The e-content should use plenty of evaluation material to give feedback to the learner as to his/her achievements in a topic of course. It should include formative as well as summative evaluation. (h) Object Based Learning/ Teaching: The content should specifically state the objects of learning/teaching and should employ different strategies for skill, competency and functionality developments. The level of assistance to be provided will depend upon the magnitude of work to be done for the successful completion of the proposal. For the content measures mentioned above, the support to be provided will depend upon the proportion of assembled and created content. Table1 explains the detailed allowances for all contents.

The Course Development team methodology follows eight key steps to ensure the success of any e-learning project. They are Need Assessment, Front-End Analysis, Design, Planning, Development, Quality Assurance, Implementation, Evaluation and Customized On-Site Training.

e-content in India

The e-content course material development and associated web based learning described here does not seek to replace traditional teaching and learning, but is expected to supplement them. The inclusion of e-content is now inevitable, and the UGC initiative is designed to meet the new challenges, and to help India take the lead in this newly emerging field. BSNL Pune is launching "Multiplayer services" that includes e-classes, among other things. Maharashtra Knowledge Corporation Ltd (MKCL) is poised to supply the content for BSNL where the relationship between the two is on a revenue sharing basis. Elsewhere, at the 1st ICT conference, the Indian Embassy in Addis Ababa declared that India is committed to develop and promote E-learning in Africa. A few Indian e-learning companies are enlisted with NASSCOM, but simple enlistment does not mean that they are 'competent'. BSNL declared that India is going to have the largest number of mobile subscribers in the world by 2009. Most Indian subscribers are likely to be people who are illiterate and have no need for hi-tech learning. And so they are not going to be interested in 'learn-skills' and 'managerial knowledge' at all.

An Indian expert in handling e-content challenges to be at it, at the stage of client interaction, storyboarding or development. In short he or she should necessarily be a multi-tasker and problem-solver. For instance, any project manager without through understanding of storyboarding techniques will obviously fail to add good or bad storyboards (SBs). Most e-content professionals are not even aware that delivery of an e-content is Mass Communication, a communication that is very powerful when compared to the mass media. While the news products available in the mass media have a short shelf life, the shelf life of an e-content and e-learning course could span months, or several years. The different authoring tools published are HTML, CD-Rom, Single-File Executable SCORM, and AICC, CourseMill 4.0, SCORM and Zirada. For eg. The content namely" Educating and Understanding the Exceptional Child" (Teacher name - W. Killion, Hours of study -15 hours, fees to be paid $104.00) .

The term e-content covers a wide set of applications and processes including computer based learning, web-based learning, virtual classroom and digital collaboration. However, the e-content is being widely accepted as a substitute for online learning and web based learning.

Standards of e-content course

e-content course has definite benefits over traditional classroom training. While the most obvious are the

flexibility and the cost savings from not having to travel or spend excess time away from work, there are also others that might not be so obvious.

1. It's self-paced : Most e-Learning programs can be taken when needed. The e-courses allow the learner to go through smaller chunks of training that can be used and absorbed for a while before moving on.

2. It's less expensive to produce: Once the asynchronous training programs have been developed, e-Learning is virtually free, once the users reach the break-even point. Synchronous programs will have continued costs associated with the instructor managing the class, but will still be lower than traditional courses.

3. It moves faster: e-Learning courses have been progressed up to 50 percent faster than traditional courses. This is partly because the individualized approach allows learners to skip material they already know and understand and move onto the issues they need training on.

4. It provides a consistent message: e-Learning eliminates the problems associated with different instructors teaching and slightly different material on the same subject.

5. It can work from any location and at any time: e-Learners can go through training sessions from anywhere, usually at anytime. This Just-In-Time (JIT) benefit can make learning possible for all the computer users.

6. It can be updated easily and quickly: Online e-Learning sessions are especially easy to keep up-to-date because the updated materials are simply uploaded to a server. CD-ROM-based programs may be slightly more expensive to update and distribute, but still come out cheaper than reprinting manuals and retraining instructors.

7. It can lead to increased retention and a stronger grasp on the subject : This is because of the many elements that are combined in e-Learning to reinforce the message, such as video, audio, quizzes, interaction, etc. There is also the ability to revisit sections of the training that might not have been clear the first time around.

8. It can be easily managed for large groups of students : Learning Management Systems (LMS) allow corporate training directors, Teachers, Planners and others to keep track of the course offerings, schedule or assign training for students/ employees and track their progress and results. Teachers can review a student's scores and identify any areas that need additional training.

Development team

The e-content package development team includes:

- *Instructional Designer:* (Subject Matter Experts (SMEs) are the actual spices that add flavour, aroma and taste to e-learning.) The designer concentrates on the content and organizes its presentation in ways that meet the educational goals and purposes of the package.
- *Interface designer:* The designer organizes access of information and a clear, usable and attractive interface.
- *Programmer:* The duty of the programmer is to implement the design.
- *Audio video editor:* The duty of the audio video editor is to edit the sound system (if any) and visuals of the package in such a way to ensure the effectiveness in accordance with the objectives of the instructional designer.
- *Project managers:* To uplink the media package into the internet for every one's access.

Advantages of e-content

- Access to educational resources from outside the institution on a global and instant basis.
- Quick and easy way to create, update and revise course materials through low cost, off-the shelf software.
- Increased and flexible interaction with students through e-mail and discussion forums.
- Location and time independent delivery of course materials.
- Interactive and dynamic learning experience through online assessment tools, simulations and animated learning objects.
- Increased learner control through hypertext based

presentation of information.

- Opportunity for international, cross cultural and collaborative learning.
- Ability to serve a large number of learners at a potentially reduced cost.

Conclusion

This article defines learning objectives accurately to ensure the effectiveness of the content and design. By this methodology, the Custom Development Services team would be able to eliminate project risk and reduce project ambiguities. It ensures that our education system does not only meet, but also exceed client expectations. Each and every SMEs require all the team worker's knowledge, because a person has to play the role of the author of the content and also a planning manager. Some of the companies like Lactora, Trivantis, Agilent, Mindflash have announced the objective of "forget the papers, OHPs, LCDs and focus on our net interaction", which is to achieve the focus on digital information in the development of e-content methodology.

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ABOUT THE AUTHORS

** Lecturer in Education, Dept. of Education, Periyar University, Salem, TN.*

***Research Scholar, Dept. of Education, Periyar University, Salem,TN.*

Dr. K. Nachimuthu is currently working as a Lecturer in Education, Department of Education, Periyar University, Salem. He had his PG degrees in Botany, Journalism & Mass Communication and in Information Technology. He received his M.Phil., and Ph.D., from Madurai Kamaraj University. He has 22 years of experience in the field of teaching. He has published few books on Innovations in Education and School Management and 104 papers in various national and international conferences. He is also a member of various Organizing committees and has life membership in several Professional societies in national level.

G.Vijayakumari is currently working as P.G Asst in Botany, Govt. Hr. Sec. School, R. Pudupalayam. She received her P.G in Botany from Madras University and M.Phil., and Ph.D., in Education from Madurai Kamaraj University. She has 15 years of teaching experiences and specialized in Educational Technology and Biology Education. She has presented 46 papers in various national and international conferences.