A Study on Experts' Validation of E-Content

Mrs.G.Muppudathi

Assistant Professor, John De Britto College of Education, Thanjavur, Tamil Nadu, India.

ABSTRACT *E-learning is a means of education that incorporates self-motivation, communication, efficiency and technology. E-content is the only tool which is easy to use, will be relevant for teachers so that can easily convert their content into e-content. The development of educational multimedia content is not an easy task. It required systematic procedures and a unique combination of skills and talents. Evaluation of e-content is the final step in the development of multimedia based e-content. Developmental test is done during the development of the e-content learning material called developmental testing. The instructional design experts judge whether the treatment given to the subject matter is pedagogically valid and creative.*

Introduction

Today's world is a computer world. Most important activities are computerized. Education in the digital world of today can actually make that meaningful shift by ensuring that if students do not learn the way they are taught, they can be taught the way they learn. This pedagogical shift, when integrated into educational software and appropriate technology, can make learning exciting and enjoyable while securing successful learning outcomes in shorter time frames. A very remarkable trend in the field of education during the last five decades in the advanced countries has been the tremendous use of educational technology in making education more productive, relating it to the individual, providing instruction (teaching - learning) on more scientific bases, moving learning more powerful and lasting, making up the cultural handicaps of certain categories of pupils and for extending educational services in the remote areas (Soundri, 2010).

E-learning and E-content

E-learning is a means of education that incorporates self-motivation, communication, efficiency and technology. E-learning is a flexible term used to describe a means of teaching through technology. An important outcome of e-learning is E content. E-learning is a process and E-content is a product. With the advancement of technology in education sector, it has become important for teachers to adapt e-content and incorporating multimedia into learning. This approach of teaching has become an answer to the complicated modern, social, economic condition and an exploding population. There are many open source tools available these days but the only a tool which is easy to use, will be relevant for teachers so that can easily convert their content into e-content (Nisha Singh, 2012). E-content is the heart of e-learning. It is the core of any single or multimedia application, whether commercial or not. E-content is delivered via the internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio. E-content today is mostly viewed as a way to pre-service and carry forward cultural or historical heritage, to disseminate life style, scientific, educational and business information in some digitalized format, or to provide some interactive service to users.

Development of Educational E-Content

Digitalization of content and knowledge makes e-learning cost-effective to replicate and dispense. This process is not to substitute a teacher to supplement and enrich the knowledge of a teacher and the learner. It should meet the needs of the learners, user friendly and able to facilitate the learning process. It should have high impact on learner's detention, progress and achievement and relevant to the syllabus (Nachimuthu, 2012). The development of educational multimedia content is not an easy task. It required systematic procedures and a unique combination of skills and talents.

Evaluation of E-Content

Evaluation of e-content is the final step in the development of multimedia based e-content. The instructional e-content material must be evaluated at two moments (Romiszowski, 1989). They are,

- During the development of the material and
- During the actual use in teaching.

These two stages of material evaluation are called as developmental testing and field testing respectively. both these stages involve the verification of the effectiveness efficiency and suitability of the materials in relation to the instructional objectives to be achieved hence called testing, but they differ both in the moment at which they are carried at (during development or during use in the field) and in the methods employed.

Evaluation of multimedia-based material can be done at two levels. One is at the level of content and another one is at level of technology employed (Arulsamy and Sivakumar 2009). Once the entire content of programme is developed, a test CD-ROM should be created. This CD-ROM should be passed to various content specialists called experts in the specific field as well as sampling of the target audiences called users for evaluation and feedback. This test must be done for content accuracy, ease of use and appeal.

Development Testing by Experts

In the current study the developmental test is done during the development of the e-content learning material called developmental testing suggested by (Romiszowski, 1986). This test is mainly focusing on the validation of the content. This material validation includes the checking of the content for correctness by an expert in the subject matter and the checking the treatment given to the content by an instructional designer or experienced teacher in order to verify that the language is well chosen for the intended population, the examples and explanations are relevant to their interests and prior learning, the visual and graphic presentation really communicate what they should and the materials really do relate to the objectives that give rise to the e-content development project. The instructional design experts judge whether the treatment given to the subject matter is pedagogically valid

and creative. This testing involved the verification of the effectiveness efficiency and suitability of the materials in relation to the instructional objectives to be achieved and hence called testing in the moment at which they were carried at during development.

Objectives of the Study
To validate the multimedia-based material includes the checking of the content for correctness by the experts in the subject matter and checking whether the treatment given to the subject matter is pedagogically valid and creative.

Research Questions
The specific research questions of this study are listed below:

1. What are the response categories of the experts towards e-content?
2. What are the percentages of rating given by experts on e-content?
3. Are there any differences among the responses given as Rating?
4. Is the e-content a valid one and can be used to the target audiences?

Tools Used
• A test CD-ROM developed by the investigator.
• The questionnaire designed by (Romiszowski, 1986) was referred by the researcher in the current research named as Evaluation questionnaire on e-content for expert (EQECE). The purpose of this questionnaire was to as-

sess the quality of the e-content. In other word, the questionnaire aimed at ensuring the validity of the e-content by the experts. The questionnaire focused on obtaining the experts' opinion on the various quality aspects of e-content such as introduction of the topic, content, layout and text elements, delivery, use of multimedia, graphics, animation and music enhancements and technical production. This tool consists of 26 positive questions with 4 response categories such as yes, partly, no and cannot say. The evaluation questionnaire on e-content especially designed for the experts contains the following dimensions:

• General aspects of the e-content
• Questions for written text
• Questions for audio recordings
• Questions for visuals
• Questions for audiovisuals

Methodology
A test CD-ROM was passed over to the randomly selected 10 experts and they are requested to offer their remarks if any, by choosing any one of the given four responses such as Yes, Partly, No and Cannot Say for each of the aspects of e-content. The satisfactory result implies all the quality aspects e-content has within and it a valid tool and can be used in the research process. The data were collected by distributing the tool to 10 experts from various fields such as Educational Technology, Education and Computer Science departments. The following table indicates the rating given by the experts on the quality of e-content;

Table -1: Percentage of Responses given as Rating by Experts on E-Content

S. No	Response Category Given by Experts	Question No. on Quality Aspect	Total No. of Items	Percentage(%)of Items
1.	Yes	1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 17, 21, 22, 23, 24	16	61.53
2.	Partly	3, 9, 14, 15, 16, 18, 19, 23, 25, 26	10	38.46
3.	No	-	-	-
4.	Cannot Say	-	-	-
Total			26	100

Discussion and Inferences on Experts Rating
Out of 26 questions on the quality of e-content, 16 (61.53%) questions were rated as "Yes" by all the 10 experts. It is evident that the developed e-content contains all the 16 quality aspects positively. Another 10 aspects (38.46%) were rated as "Partly" by all the experts. No aspect was rated as "No", and "Cannot Say".

Conclusion
The above findings imply that the e-content has all the quality aspects within; it is a valid tool and can be used in teaching and learning process. The exposure of e-content integrated with multimedia instructional strategy will show the acquisition of theoretical knowledge at deeper level as it contains all the qualities in it.

REFERENCE Arulsamy, S., and Sivakumar, P. (2007). Application of ICT in Education. 1st edition, Hyderabad: Neelkamal Publication Pvt. Ltd. | Nachimuthu, K. (2012). "Pleasures and pressures of e-content in teaching". International Journal of New Innovations, 1(2): 337-340. | Nisha Singh. (2012). Teacher training of e-content, education forum of India, IGNOW, New Delhi, Retrieved from <http://www.admissioncorner./com>. | Romiszowski, A.J. (1986). Developing Auto-Instructional Materials: From Programmed Texts to CAL and Interactive Video: Kogan Page, 1st edn. New York: London/Nichols Publishing. | Soundri, M. (2010). Enhancing the quality of technology in primary school teachers – challenges. Dept. SSA, IGNOU, New Delhi, India.