E-CONTENT DEVELOPMENT IN EDUCATION

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Abstract

E-content is a very powerful tool of education. It is the method of instruction that has attracted attention of students and teachers. It is the valuable resource for development of information rich society where everyone, irrespective of cast, religion, race, region and gender bias are empowered to create , receive share and utilize information. The present research paper focuses on the uses of e-Content development in education. E-content is facilitating to the teacher to effective manner. It is enhancing the learners knowledge level which leads to problem solving, creative thinking ,attitude, interest and it gives the future ideas on the basis of given links, and references.so the learning become interactive and students enjoy learning. Therefore it's necessary to develop the E content for Cognitive, Emotional, Behavioral and Contextual development of students because in e content there is uses of a combination of text, graphics, pictures, diagrams, Images, colors, symbols, keywords, sound and videos, so it become the learning through computers by using learning materials it helps to enrich the students understanding of concepts of each and every subjects.

Key Words: *E-content development*.

INTRODUCTION: E-learning, or electronic learning, has been defined in number of ways in the literature. The broader definition can include the use of the Internet, intranets and extranets, audio- and videotape, satellite broadcast, interactive TV, and CDROM, not only for content delivery, but also for interaction among participants. Holmes and Gardner (2006) point out that e-learning provide access to resources that promotes learning on an anyplace, anytime basis. However, E-learning is simply defined by Urdan & Weggen (2000), as a delivery of course content via Some definitions of e-learning are more restrictive, for example limiting e-learning to content delivery via the Internet electronic media such as Internet, Intranet, Extranet, satellite broadcast, audio/video clips, interactive TV and CD-ROMs. Unluckily, existing materials cannot be automatically transformed into e-content materials by just making them available from a website. A systematic and a scientific approach is needed to develop quality content. The e-content should follow appropriate instructional design methodology in order to assure meeting of learning objectives and expected outcomes. The effort spent in content preparation should be re-usable across various learning management systems.

All the e-content materials should focuses on a) Cognitive perspective that emphases on the cognitive processes involved in learning as well as how the brain works; b) Emotional perspective that gravities on the emotional aspects of learning, like motivation, engagement and fun c) Behavioral perspective highlights the skills and behavioral outcomes of the learning process, roleplaying, settings of job and d) Contextual perspective that concentrate on the environmental and social aspects which can stimulate learning.

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TYPES OF E CONTENT TOOLS:

(1) **SCORM** (Sharable Courseware Object Reference Model):- it applied to course content produces small reusable e-Learning objects.

(2) **AICC** (Aviation Industry Computer-Based Training Committee):- is an international association of technology-based training professionals that develops teaching guidelines for the aviation industry.

(3) **PROMETEUS** (Promoting Multimedia Access to Education and Training in European Society):- established with a clear underlying ideal to promote access to knowledge, education and e-content training for all European citizens.

(4) **ARIADNE** :- is a European Union project focusing on the development of tools for producing, managing, and reusing computer based pedagogical elements in University of Lausanne, Switzerland.

(5) **ADL** (Advanced Distributed Learning Initiative):- is a program from the US Department of Defense and the White House Office of Science and Technology, to develop guidelines needed for efficient and effective e-content learning.

(6) **AASL** (American Association of School Librarians):- has formulated the Information Literacy Standards for Student Learning and it concentrates the student, teacher and administrator.

MODELS OF E CONTENT DEVELOPMENT:-

There are several e-content Models which is as follows: i) An instructional design model by Kemp (1977) defined nine different components and adopted a continuous update with evaluation; (ii) teaching of media in a systematic approach model by Vernon & Donald

(1980) compared the different instruction design models; (iii) A Systematic Design of Instruction model by Dick & Carey (1990) described all the phases of process starts with instructional goals and ends with summative evaluation; (iv) Systems Reusable Information Object Strategy by CISCO (1999) consists of six content items viz., introduction; importance; objectives; pre-requisites; scenario; and outline with Learning Management System (LMS) and (v) Content based model by Cernea (2005) explained the learning objectives of a content and the contents accessibility and reusability between various Learning Content Management System (LCMS). E content development approach provides a large database of information specific to a course or content area and challenges the learner to analyze, compare, implement and evaluate based on their explorations of the data. Compared the effect of various models of e content development that affect the classroom teaching which involving video-based instruction, teacher discussion, demonstration, self-experimentation, etc., on the achievement of learners. It is found that most of the video-based instruction while self-experimentation under the guidance of the teacher was more effective.

PHASES OF C CONTENT DEVELOPMENT:- In e-content development aspects consists of six phases, following figure shows the flow chart of analysis, design, development, testing, implementation and evaluation phase.
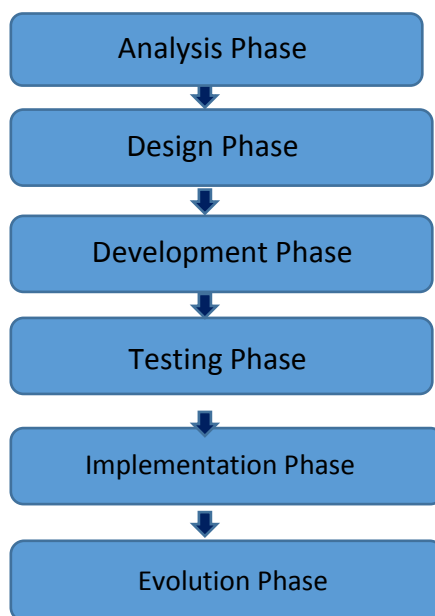

Fig1: Flow Chart of Phases of E- content

1. **The Analysis Phase**: It is the most important as it identifies area's in our current situation. This phase accountability considered by the views of subject experts, target audiences, objectives and its goals. In this phase, we must know the audience, and

their skill, budget of the e-content, delivery methods and its constraints with due dates.

2. **The Design Phase**: It involves the complete design of the learning solution. It helps to plan of an e-content preparation. In this phase, we must know the planning, use of relevant software; required skills; creative and innovative interactions of subject contents like texts, pictures, videos and suitable animations.

3. **The Development Phase**: It concerns the actual production of the e-content design. It helps to create the e-content by mixing of texts, audio, video, animations, references, blogs, links, and MCQs (multiple choice questions) with some programming specifications like home, exit, next etc.

4. **The Testing phase**: It helps to administer the e-content in the actual educational field. In this phase, we must test the spelling mistakes, content errors, clarity of pictures, relevant videos, appropriate audios, timing of animations, and hyperlinks.

5. **The Implementation Phase:** It helps to administer the e-content to the target audience. This phase explains how to install and how to use it and their difficulties experienced while using e-content. It checks the product accuracy and quality maintenance.

6. **The Evaluation Phase**: It helps to satisfy the e-content and its effectiveness. This phase considers feedback from both learners and instructors. After the feedback reactions, the e-content is designed again as post-production for effective delivery of e-content.

USES OF E CONTENT DEVELOPMENT IN EDUCATION:-

1.The teaching learning with help of E- Content produces Learning by doing, learning by investigation, learning by using themes, learning by testing, learning by simulation, learning by role-playing so the learning of students become more effective so the concepts regarding school subject student understand easily.

2. As per the UGC (University Grants Commission, India) guidelines of e-content development needs the following categories like i) home, (ii) objectives, (iii) subject mapping, (iv) summary, (v) text with pictures & animations, (vi) video and audio, (vii) assignments, quiz & tutorial, (viii) references, glossary & links, (ix) case studies, (x) FAQs, (xi) download, (xii) blog and (xiii) contact that made students confidence level become high so they can easily learn.

3. E-learning is a process and E-content is a product. E-content is generally designed to guide students through lot of information in a specific task. An e-content package can be used as teacher in the virtual classroom situations.

4. The quality of learning depends not only on the form of how the process is carried out but also on what content is taught and how the content is presented. This approach of teaching has become an answer to problems. In a class room, technology stimulates the learner and gets the learner involved in the learning.

5. Books are an extension of brain; video is an extension of eye; audio is the extension of an ear, audio conferencing is the extension of mind & vocal cord computer is an extension of fusion on mind, hands & eyes; satellite technology is an extension of human reach and computer network is an extension of human co-operation.so the learning of student become active.

6. E-content is valuable to the students and also helpful to teachers for all individual instruction systems; e-content is the latest method of instruction that has attracted more attention to gather with different concepts. So it is easy to do self -study the learners through effective education.

7. E-content is facilitating to the teacher to effective manner. It is enhancing the learner knowledge level which leads to problem solving, creative thinking ,attitude, interest and it gives the future ideas on the basis of given links, and references.

8. E-content is electronically supported learning and teaching. The Information and communication systems whether networked learning or not, serve as specific media to implement the learning process.so the learning process become interactive and students enjoy learning.

CONCLUSION:-

E-content investigate the implications of new forms of social networking, knowledge sharing and knowledge building. so e-content as a digital technology, the commercial interest that is invested in it and the largely unregulated content of Internet based sources. It is enhancing the learner knowledge level which leads to problem solving, creative thinking ,attitude, interest and it gives the future ideas on the basis of given links, and references.so the learning process become interactive and students enjoy learning. Also it's necessary to develop the E content for Cognitive, Emotional, Behavioral and Contextual development of students because in E content there is uses of a combination of text, graphics, pictures, diagrams, Images, colors, symbols, keywords, sound and videos, so it become the learning through

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