E-CONTENT DEVELOPMENT: A BASE OF E-LEARNING

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Abstract

E-content is the base of e-learning software’s. Good quality e-content makes e-learning successful. Developing quality e-content is the teacher’s role. Present paper focuses on the concept of e-content development. It explains the nature of e-content. Paper explains the process of e-content development. Present paper elaborates the role of the teacher in the e-content development. Present paper gives information about instructional designs of CAI program. It states principles of e-content development and qualities of good e-content. Conclusion says that the teacher can make a good quality e-content.

Keywords: E-content development, e-learning, instructional material, pedagogical analysis, instructional designs.

Introduction

As we know ICT has become a part of our day to day life. We use mobiles, internet everyday for communication purpose. In the teaching learning process ICT has become a mode of instruction. ICT can be introduced in various forms like CDs, DVDs, CAI programs, video lectures etc. One of the greatest challenge of integrating ICT in education is lack of quality e-content. Teachers should contribute in e-content development. We all live in a digital world. Hence we need to create a digital learning culture and environment. Teachers should get mastery over the ICT skills and utilize ICT towards creating and improved teaching learning environment. E-learning is a mode of instruction and presenting the content effectively. E-learning can be in various forms such as web based learning, computer-based learning, mobile-based learning, virtual classrooms and digital collaboration etc. It includes the delivery of content via internet, satellite broadcast, mobile technology. To make e-learning successful a good quality development of e-content is necessary. For this teacher must be creatively present the content and produce effective e-material.

Today’s era is ICT based era. The concept of student centered learning and use of constructivism has been introduced. Various e-learning softwares are available in market. Schools are making use of such e-learning softwares in day-to-day teaching. But there is a vital role of teacher in the development of e-content. Teacher possess the mastery over the content. He knows how to simplify the things. Hence he should be the producer of e-content. Every teacher should produce and contribute towards e-content development of his own subject.
Background of the research

Learning with the help of electronic device is called e-learning. The content which are delivered through electronic media are e-content. It can be a simple text, an image, photograph, animations or simulations etc. This type of e-content is arranged and weaved in a meaningful way in the e-learning software. E-content is a raw data for e-learning softwares. To produce a good quality e-content study of teacher is necessary.

Effective learning is possible by five sensory means visualization, listening, smelling, sensing by touch and taste are used to know the facts of learning. According to psychological study human can grasp 80% learning by visuals, 15% through hearing and 5% with rest of the sensory items. Therefore it becomes necessary to present the contents by attractive means. In traditional methods of learning information was available only by written text. Grasping knowledge only by reading has it’s importance, but not virtually in all means. Any picture or photograph with written matter with again any kind of sound or music becomes more powerful for representation. It is further replaced with video or animated it becomes most effective.

To represent a content through electronic media through graphics & text needs creativity. Teacher can use this creativity with study to create a quality material for e-learning.

e-learning is a new form of education beyond traditional classroom learning. Computers, radio, television, mobiles, internet and intranet are the different media used in the e-learning process. Distance learning means education and training from remote teaching site. E-learning provides course over internet, intranet or on compact disk audio and video cassettes. E-learning provides services anytime and anywhere. Teacher has to arrange the activities & write the text related content to produce effective e-learning materials.

Need of the study

Imparting quality education to remote and rural regions of our country is very difficult. Again multi-lingual and multi-cultural population is separated over a vast geographical distances. E-learning methods can be used to overcome these difficulties. For creation of e-learning software’s producing good quality e-content writing is necessary. Such content should consider multi-languages, age-groups, urban & rural areas, social backgrounds. To write the content according to these factors there is a need to study how to generate quality e-content. To study what is e-content material and how it should be developed, present research is needful.

Importance of the research

- By the present research, researcher will be able to understand what is the concept of e-content development.
- Researcher would be able to tell the relation between e-learning and e-content development.
- Researcher would be able to understand how to generate e-content development.

Objectives of the study

1. To study the meaning of e-content development and to understand the nature of e-content development.
2. To understand the process of e-content development with respect to e-learning.
3. To understand the role of teacher in the e-content development.

**Concept of e-content**

E-content is the material which can be transmitted through electronic media. It can be in the form of text, graphics, sounds, animations and combination of all the modes with a mixture of activities and the text content.

E-content is the raw material for generating e-learning softwares. It can be CDs/DVDs, CAI programs, self instructional materials, simulations, tutorials, drill and practice softwares. E-content is the base of all these softwares.

We read books & texts to get the knowledge. There are some activities which are in books. Teacher can integrate the text & activities with audio visual effects to produce a good quality content. E-content is a content generated in such a way that it can be visualized with audio-visual effects, it should promote critical thinking, it should motivate creative ideas. Such content should be written by the teacher or subject expert. There should be new activities, assignments, tutorials, visual clips, quizzes which should be developed as e-learning material. Writing such content is the responsibility of the teacher. Any teacher who has study of the content & have creativity can develop such innovative e-content.

**Nature of e-content**

E-content should be designed in such away that it should simplify the things. For this help can be taken of audio-visual aids. It should create interest to learner. E-content can be in the form of stories in languages, a video clip of historical places, geographical journeys, flowchart of logical mathematical expressions, scientific experiments any kind of activity/assignments which are designed with creativity. Then an e-learning software makes it in a visual way.

E-content should bridge the gap between a teacher and taught. It should promote understanding of the subject, student engagement and motivation for learners.

E-learning developers gives them audio-visual effects, sounds, animations. But the content which is the base should be creatively designed and promotes constructivism. It should have student centered approach. Self-instructional material should be designed in such way that the learner get motivated to learn. It is the role of e-content writer to generate such content which will be effectively given through audio-visual media. E-content should be supportive to learning.

**Principles to be considered while preparing e-content**

- Target Group
- Objectives of the text-matter
- Nature of the text matter
- Number of students
- Eligibility of teacher
- Availability of time
- Teacher’s Control over Equipment
- Practicability
- Arrangement for Evaluation
Development Process of E-content: All the material that is on website is not useful. A systematic and scientific approach is needed to develop quality e-content. Teacher should study instructional designs models & steps for creating e-content.

Computer Aided Instructional Programme Development Stages

Steps of the Development of Self-instruction Devices
1. According to the needs and Operational Analysis
2. Objectives and Explanations
3. Compilation of information
4. Planning
5. Formation of a Grid
6. Test and Review
7. Final Means Development
8. Divisional Test
9. Review for Final Achievement
10. Broadcasting

The phases of e-content development are as follows

The Analysis Phase
The Design Phase
The Development Phase
The detailed description of above phases are as following.

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

**Qualities of good quality E-content**
- It should be in simple language.
- It should be communicative and self-explanatory.
- It should explain content specifically and to the point.
- It should simplify the content with examples and audio visual media.
- It should use the appropriate use of multimedia platforms.
- It should be informative, accurate and reliable.

**Role of teacher in the development of e-content**
Teacher is a platform for delivering the content. Teacher has a content knowledge and ability to illustrate & simplify. Hence teacher plays a vital role in developing e-content. Teacher can
design new activities which will be suitable for multimedia platform. It requires subject expertise and a high level of creativity to design e-content. Teacher should design the e-content and activities related to the subject texts. These activities should be creatively designed so that it should motivate students to learn, empower their imagination, problem-solving, critical thinking. He should appropriately make use of audio-visual media. He should make the text in a live way with images, animations, and sounds. He can use various forms of assignments like quizzes, stories, videos, and reflecting on the topics. In structuring the e-content, a pedagogical analysis is useful for a teacher. He should have study on instructional strategies & methods of delivering the content. Teacher should follow instructional design steps for creating e-content. Teacher can create a good quality of self-instructional material as a mode of e-learning. Thus, teacher is a creator and structural designer if e-content on which e-learning is based.

**Conclusion**

E-content is a base for e-learning. Teacher can make good quality e-content. It requires subject expertise, patience, creativity, and structural knowledge to develop good quality e-content. E-content is a learning object which can be used by any people with a vast geographical area which can be reused. Teacher can create e-content & instructional material which forms e-learning material for all people. Study of pedagogy and instructional design helps in developing efficient e-content. Teacher should produce quality e-content for successful e-learning.

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