

**E-CONTENT DEVELOPMENT AND DELIVERY BY USING THE
INFORMATION AND COMMUNICATION TECHNOLOGY
FOR HIGHER EDUCATION**

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ABSTRACT: *Advances in Information and Communications Technology (ICT) have created unique opportunities in the field of Education & Training and have a profound effect on the way teachers teach and how learners learn. Open source software and multimedia are used for the content development and reach out the student To understand the best creative approaches for e-content production, This paper introduces readers with the objectives of adopting digital media and open source software in technical education for the classroom management and better content delivery to the student for effective learning. the new-age digital literacy among teachers and the specific challenges to suit mixed learning needs in the varied contexts of technical education in India.*

KEYWORDS – ICT, Open Source Software, Education, Multimedia

I. INTRODUCTION

In education for the learning of students classroom teaching is conventional education form of learning in this method physical presence of teacher and student is important becoming not suitable for requirement of social progress and education development after the computer evaluation dramatically changes in learning come in classroom teaching it enables the computer based teaching (CBT) in education which have reached largely in rural areas because it enables the learner can learn from anywhere and at anytime .now a day’s learners required a content which is relevant, mobile friendly, self-paced and personalized these need can be fulfilled by the e-content which are easily downloaded on the learners mobile and their computer, so that learner can learn at their own comfort and requirement. To support the CBT need good e-content for the effective learning and teaching and all these e-content required the multimedia authoring tools which are helpful to develop effective, interactive and interesting content for the learner. this e-content delivered mostly through the internet although in the past it was delivered using secondary storage media like CD-ROM, Memory card, pen drive these e-content eliminate the geographical gap between teacher and the student and it starts the concept of online learning and the virtual university which provide the online degree courses.

II. E-CONTENT AND LEARNING

E-content is profitable to the student and furthermore accommodating to educators for all individual direction frameworks; e-content is the most recent technique for the guideline that has pulled in more thoughtfulness regarding assembling with different concepts. The ultimate aim of the e-content is to abolish the disparity among the learners through effective education. E-content is facilitating to the teacher to effective manner. It is enhancing the learner knowledge level which leads to creative thinking and it gives the future ideas on the basis of given links, and references [1][4].

E-Learning all types of electronic upheld learning and instructing, which are procedural in character and plan to impact the development of information with reference to singular experience, practice, and information of the student. Data and

correspondence frameworks, regardless of whether organized or not, fill in a particular media (particular in the sense explained already) to actualize the learning procedure [2].

E-content development

E contentment development is similar to develop a software e-content development is art and use of appropriate technology it consists of planning, analysis, design, development, testing, and evaluation phases.

Planning: Without the perfect plan, calculating the strengths and weaknesses of the content, development of content is meaningless. Planning kicks off a content flawlessly and affects its progress positively.

Analysis: It is the most important as it identifies areas in our current situation. This phase is about analyzing accountability considered by the views of subject experts, target audiences, objectives a, audience skill, budget of the e-content, delivery methods and its constraints with due dates.

Design: Once the analysis is complete, the step of designing takes over, which is basically building the architecture of the project. It involves the complete design of the learning solution. It helps to plan for 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.

Development & Implementation: The actual task of developing the software starts here with data It concerns the actual production of the e-content design. It makes the e-content by blending of writings, sound, video, movements, references, web journals, connections, and MCQs (different decision questions) with some programming details like home, exit, next Once the content is developed, the stage of implementation comes in where the product goes through a pilot study to see if it's functioning properly 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.

Testing: The testing stage assesses the content for errors and documents bugs if there are any. We should test the spelling botches, content mistakes, clearness of pictures, pertinent recordings, proper sounds, timing of activities, and hyperlinks

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

Methodology

In e-Content development process needs several aspects. Content should follow the Appropriate instructional design methodology in order to assure meeting of learning Objectives and expected outcomes. e-content materials focused on (a) Cognitive point: it focuses on the cognitive processes involved in learning as well as how the brain works; (b) Emotional point: it focuses on the passionate parts of learning, similar to inspiration, engagement, fun, and so forth.; (c) Behavioral point of view: it centers around the abilities and behavioral results of the learning process, role-playing, settings of occupation and (d) Contextual point: it focuses on the environmental and social aspects which can stimulate learning.

III.AUTHORING TOOLS

In the era of the digital word every single aspect of education is transferred in the online environment these content are developed by authoring tools. Authoring tool used by the content developer for creating an e-content by linking together the objects such as text paragraph, an illustration, audio, video to each other and sequencing them in an appropriate order for effective and interesting learning content. Authoring system also supports scripting language for more sophisticated content development [3][5].

S.NO.	Authoring Tool	Features of Authoring tools
1	Adobe Presenter 11	1.It converts the power point presentation into material that can present to online community learners 2. suitable for the beginner in online course authoring.
2	Quick Lessons	1. easy to use for the non-technical content developer. 2. Can be developed interactive and media-rich content.
3	The Xerte Project	1.Online accessible no need to download. 2.support library of animation templates that will make the course creation as simple as possible
4	Composica	1.Provide a collaborative plate form to develop highly interactive e-learning content 2.support social authoring
5	Udutu	1. It is free open source authoring tool. 2. Good for training material development. 3. Perfect for the academic and corporate user.
6	Lesson Writer	1. This is suitable for teachers for creating a comprehensive literacy lesson plane for any content. 2. use to organize classes curriculum and report.
7	iSpring Suite	1. This authoring toolkit for PowerPoint, no need for any training to get started. Anyone can create lessons that will adapt themselves to the screen size of the viewer, so learners will be able to access them from any device 2. The suit supports interactive assessments, screen recordings, video lectures, and conversation simulations.
8	Easygenerator.	1. Enable the learners to evaluate their achievements. 2. support the cloud-based content.
9	authorPOINT	1. This is one of the best tools to use for developing multimedia presentations that can share across platforms. 2. ELearning content can publish it on platform, which looks like a virtual classroom that supports chat, content sharing, communication via audio and video, and session recording features.
10	GoAnimate	1. Go Animate is a great tool to use for creating professional animated videos.

IV.CONCLUSION

Present economic and education demand force the education system to consider and adopt the e-content for the learners and use the open education learning model for reaching among the wide number of learners without investing the much more use the appropriate content development and delivery authoring tools for the interesting and effective learning process.

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