

International Journal of Advanced Research in Computer and Communication Engineering

DOI: 10.17148/IJARCCE.2022.115144

Design and Implementation of E-learning System

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Abstract: Now a information and communication technology made deep effect on human life. But E-Learning system are use to online learning refers to instruction that is delivered electronically through multimedia and internet platform and application. It is used to digital tools for learning with other terms such as web based learning, computer – assisted instruction, and internet based learning. The Research results shows that the design implementation of the proposed system integrate all the critical and valuable communication tools that of effectively improve the collaboration in elearning environment.

Keywords: E-Government, E- University, E- learning, Course materials

I. INTRODUCTION

E-Learning is an alternative to a traditional classroom learning experience and is often referred to as "online learning: or "remote learning" or "digital leraning" or "distance learning" education. E-Leaning refers to the use of various kinds of electronic media and information and communication technology that electrically or technologically support learning and teaching. Depending on whether a particular aspect. Component or delivery method is given reaffirm.E-Learning include numerous type of media that deliver text, audio, images, animation and streaming video, and include the technology application and processes such as audio video tape. E-learning has given people in college approachability to data, wherever one looks data of e-learning is there. Sometimes there are many different mobile devices as well as their many ways that these benefit people around the contient anytime.

College and instituted are required to respond to the development of information and communication technology (ICT), especially after the internet has been become fast and everybody have opportunity to benefit from this facility. Student become more familiar to uses this useful technology after the insurrection of social media in last decade. E-learning mainly used in online course, where the dominant learning technology employed Today is the type of system that organize and delivers these course. There are improve interaction between student and their instructor for there classes.

Aims and Objective

- 1.To facilities the development of information technology.
- 2.To revels the use and technology of wireless network to the user.
- 3.To provide alternative way attending education.

Instructional Design Model For E-Learning:

Depending on the model that can be considered as an instructional system design model consist of five phases: Analysis, Design, Development, implementation and Evaluation will be called (ADDIE) model. This model can be applied to any form of e-learning such as blended learning ,instructorled E-learning , self paced E-learning. Each phase-in ADDIE model.

The phases of ADDIE model:

Analysis: In order to understand infrastructure of the education system, this data required phase of design process which collect by using survey and interviews. Also ,the identifications of the problems, opportunity and outline the goals and objective will be addressed in the placed.

Design: After identifying the goals and objectives in the previous phase. It is necessary to start and design the and structure the system. Also overall system requirements helps to design the system.



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Development: The actual process of creating the developing the design of training material and assessment material stated here. The system developed in address of performance gap existed in the analysis and design phase performances.

Implementation: In this phase, it is the time to decide how to intend to deliver course —contend to the learners. The delivered process of the course is based on the analysis phase performance.

Evaluation: Evaluation phase can be done previous phase; individually or all of them together. Evaluation strategies used to combination of self evaluation and learner evaluation. Limitation and quality of the system will appear in this phase.

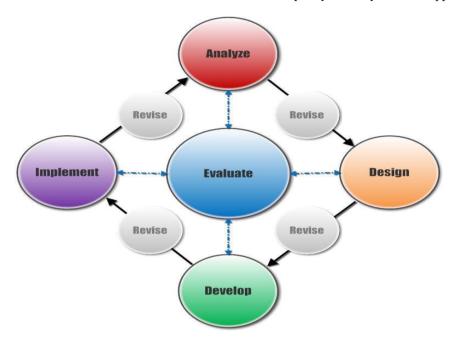


Fig no.(0.1)

II. LEARNING PLATFORM

Different type of learning platform are used in the host learning course and make then available to learner. It include the following topics

- Different type of learning platform(VLE, LMS, LCMS);
- Intellectual property and open source learning management systems;
- Solution for limited internet connectivity.

What are learning platform?

A number of organization and educational institution use the learning platform to deliver and manage their learning processes. A learning set of proactive online service the provide the learner with access the information, tools, and resources to support educational delivery and management through the internet.

There are variety of learning platform with different level of complexity, but their most feature include;

- Learning content management creation, storage, access to resource.
- Curricular mapping and planning lesson planning, personalized learning experiences, assessment.
- Learner engagement and management learner information, process tracking.
- Tools and services- forums, messaging system, blogs, group discussion.

Learning platform are usually referred to as virtual learning environment (VLEs), learning management systems (LMSs) or learning content management systems (LCMSs). These terms are often used correspondently, and deposit differences these platforms, they have many features in common.



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Quality Of E- Learning:

The quality of an e learning course is enhanced by:

- Learner-centred content: E-learning curricula should be relevant and specific to learner needs, roles and responsibilities in professional life. Skills, knowledge and information should be provide to this end.
- Aggregation: E- Learning content should be segmented to facilitate assimilation of new knowledge and to allow flexible and to allow scheduling of time for learning .
- Engaging content: Instructional method and techniques should be used creatively to develop an engaging and motivating learning experience.
- Interactivity: frequent learner interaction is needed to sustain attention and promote learning.
- Personalization: Self paced course should be customizable to reflect learner interests and needed; in instructor-led course, tutors and facilitators should be able to follow the learner, progress and performance individually.

III. METHODOLOGY

In formal education system there is a course of study (content) that need to be learnt by learner. The technique of learning or teaching this content is the method. Some examples of lectures, inquiry based learning, project based learning, and problem based learning. Theses different method carry some inherent advantage and disadvantage. E -learning system are good solution for the online learn the technique and technology. This e-learning management system many educational and non educational institution offering traditional learning program. Over the year method of teaching becomes more important that the content in education, because the different communication and network technology made a vast amount of different content readily available to many learner.

IV. CONCLUSION

The main contribution of this paper in our new model for E-Learning management system using semantic wed. This paper are explain the e-learning model like analysis, design, development, implementation, evaluation. E-learning model are just not a technology. From the above discussion we conclude that e-learning is an innovative technique or a form of ICT(information communication technology) used in providing learning experiences to the student on- line through the use of internet services and Web technology of computer on the same lines as witnessed by us in the form of e-mail, e-banking, e-booking, and e-commerce in our day-to-day life. E-learning is also having some disadvantage which are discussed earlier. The flexible and global nature of e learning course has led to an increased number of e- learning enrollment. With the progressive forms of technology, has grown tremendously. But according to me, classroom learning is essential too as it enable you to actually understand and experience the concepts you learn as well as learn other concept and get new ideas from the mentor apart from the specified syllabus. E-learning offers to raise educational standard in school. Large range of tools are available for teaching and learning. The research results can be the data base to efficiently design learning activities and using media online, and LMS for lecturer in higher education. Besides ,they encourage online learning for more learning respond of learner and teacher.

ACKNOWLEDGMENT

I would like to thankful of the department of computer science and engineering for providing guidance, useful and practical suggestion, technical support for research environment to accomplish this work. And most importantly to our guided **prof. Jiwne sir** for guidance and wisdom giving us inspiration and knowledge.

REFERENCES

- [1]. Alexander, s 2001. E-Learning development and experience. Education and training, Bradford 43(4-5):240-248.
- [2]. https://uniprojects.net/project-materials/design and implementation of e-learning system
- [3]. Dutta, A.K., A.-A. Mosley, and M.M. Akhtar, E-Learning in higher Education: Design and Implementations. International journal of computer science Issues, 2011.8(4).
- [4]. Boezerooij, P,E-Learning strategies of higher education institution: an explorty study into the influence of environmental contingencies on strategic choices of higher education institution with respect to integrating e-learning in their education delivery and support processes.2006:university of Twente, CHEPS
- [5]. Adelsbergeret, H. et al. "The Essen model: a step towards a standard learning process" 2003.
- [6]. "A use-case based model for learning resources in educational" Quemanda, J. and B. Simon,

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International Journal of Advanced Research in Computer and Communication Engineering

DOI: 10.17148/IJARCCE.2022.115144

- [7]. Biggs, J. (1999). Teaching for Quality Learning at University. Buckingham. Open University Press. See also http://www.dmu.ac.uk/~jamesa/learning/solo.htm. Last accessed 23rd March 2004.Society for research in higher education.
- [8]. https://ijarcce.com/papers/cloud-computing-based-on-predictive-acknowledgement-system/CloudComputing Based on Predictive Acknowledgement System Ashish B. Deharkar1 , Hirendra R. Hajare2