

Online Learning System: Wheel of Fortune in Education System

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Abstract

In trending world, mobility has come into existence. Teaching paradigms have also modified and altered to adapt with modern trends. Traditional student-teacher interaction has taken a new look of online teaching. The approach of online learning has broadens the outlook of students to be more intuitive and responding. The wide range of repository is accessible and user-friendly for effective learning system. Online learning system has evolved as a platform for hassle-free and round the clock knowledge imparts system. This paper focus on online learning system and its ongoing projects.

Keywords: Online learning system, IGNOU, NIOS, Online Tools

Introduction

With the rapid growth in technology, traditional classroom teaching has taken a step ahead to transform basic method of learning into online learning method. In earlier years of teaching, teacher- student relation was formal and rigid. Students were dependent on only teacher and textbooks. Students were merely silent audience and could not invoke independent thinking process.

In today world, Scenario of teaching is modified to encourage students to be interactive by exploring vast knowledge available over the media. The modern teacher has to help, to guide and facilitate the learner's development. The teacher core objective is to inspire and to motivate the young learners and provide assistance to the adult learners in their hunt for knowledge and skills.

There are various types of technologies currently used in classrooms. Among these are:

- Computer in the classroom: Having a computer in the classroom is an asset to any teacher. With a computer in the classroom, teachers are able to demonstrate a new lesson, present new material, illustrate how to use new programs and

show new information on websites.

- Class blogs and Wikipedia: There are a variety of Web 2.0 tools that are currently being implemented in the classroom. Blogs allow for students to maintain a running dialogue, such as a journal, thoughts, ideas and assignments that also provide for student comment and reflection. Wikipedia, an online encyclopaedia, are more group focused to allow multiple members of the group to edit a single document, create a truly collaborative and carefully edited finished product.
- Wireless classroom microphones: Noisy classrooms are a daily occurrence and with the help of microphones, students are able to hear their teachers more clearly. Students learn better when they hear the teacher clearly.
- Mobile devices: Mobile devices such as tablet or smart phone can be used to enhance the experience in the classroom by providing the possibility for professors to get feedback.
- Interactive Whiteboards: An interactive whiteboard that provides touch control of computer applications. These enhance the experience in the classroom by showing anything that can be on a computer screen. This not only aids in visual learning, but it is interactive so the students can draw, write or manipulate images on the interactive whiteboard.
- Digital video-on-demand: Digital video eliminates the need for in-classroom hardware and allows teachers and students to access video clips immediately by not utilizing the public Internet.
- Online media: Streamed video websites can be utilized to enhance a classroom lesson.
- Online study tools: Tools that motivate studying by making studying more fun or individualized for the student.
- Digital Games: The field of educational games and serious games has been growing significantly over the last few years. The digital games are being provided as tools for the classroom and have a lot of positive feedback including higher motivation for students.

There are multiple tools that are utilized depending on the local school board and funds available at their disposal. The flow of this research paper is: a. Section II provides the contribution of researchers in this field. b. Section III provides in-depth knowledge of the meaning of online learning system. c. Section IV discusses the research methodology and objectives. d. Section IV briefs case studies of IGNOU and NOIS. e. Section VI summarizes the paper in Conclusion.

Literature Review

Karmakar and Nath (2014) analyzed new education strategy that gathers knowledge and education both by synchronous and asynchronous methodologies to effectively face the need to rapidly acquire up to date know-how within productive environments. In the present review paper the authors discusses on e-learning methodologies, strategies and tools. E- learning includes informal and blending learning, network and work-based learning. The e- learning methodologies based on both asynchronous and synchronous methodology. The authors have made a thorough study on different issues and aspects of e-learning. The paper resolves that e-learning is a revolutionary way to empower workforce with the skill and knowledge it needs to turn change to an advantage. It is already established that e-learning can be used as a tool for knowledge management. The authors suggest that synchronous tools should be integrated into asynchronous mode to allow for “any-time”, “any-where” learning model. This environment would be primarily asynchronous with background discussion, assignments and assessment taking place and managed through synchronous tools.

Sharma, Wasim and Siddiqui (2014) concentrates on the Indian education scenario, presentation tools for e-Learning, challenges faced by E-learning in India and future of e- Learning in India. A few suggestions have been made to use E-Learning for informal and vocational training, which is highly effective for a developing country like India where a majority of population is living in rural/ remote areas and has received almost negligible formal education.

Dua, Wadhawan and Gupta (2016) analyses traditional education system which no longer fulfills the modern day complex needs where everything is dynamic and evolving at a very fast pace. There is a huge amount of transformation that takes place in the present world in every nanosecond. Therefore, a new and modern way of education is required to handle such transformation arising as a result of creation of huge amount of information in a systematic manner. Thus, to resolve the shortcomings of the traditional education system, the world is moving towards digital education which addresses all the issues and challenges of traditional education. Through this research paper, an attempt has been made to discuss the upcoming trends in digital education system that will shape the future of our coming generations for the better.

Gaikwad and Randhir (2016) research throws a light on e-learning which has emerged as a wheel of change. There were three modes of e-learning that were discussed. They are: online mode, hybrid/blended mode and e-enhancement mode but only e-enhancement mode is being presently used by the professional and non-professional courses’ teachers in Indian higher education. It also summarizes several opinions regarding the comparison between traditional learning, classroom learning and e-learning.

Lone (2017) research focuses on challenges that India still faces for implementing the new technologies in education. Technology cannot replace teachers, but only complement them. The digital platforms and solutions are utilized to deliver secure and quality content as well as more importantly provide access to quality teachers. The educational technology has changed education for better – making it more affordable and accessible. This is more important in Indian context because we have a massive deficit of access to high quality education till college level due to a number of seemingly insurmountable challenges, ranging from geographical distribution to socio-economic condition of the learners who attend a majority of Indian educational institutions. Also, the cost of educating one of the world's greatest populations has been steadily increasing and there is expectation that technology may make education affordable for those who are so far unable to benefit from the same.

What exactly is Online Learning System?

As per definition on the web, it is inferred that online education system is a system which is credible of imparting education or courses through medium of Internet to the students residing at remote locations. Such courses are feasible if the interaction of teacher/ instructor and students is periodically scheduled such that one-fourth of total course time is spent together in a physical setting for lectures, labs or exams.

Online education covers enormous degrees and courses. Through this education, student can choose multiple online degrees or courses from a list of available online universities that have a provision of online education.

Though online education in India is still on its way in gaining popularity, there are few online degree courses and online Universities in India that provide online education. While online education in India is still in its infancy, online education abroad is quite a hit among the people. The main attraction of online education is the flexibility through which education is imparted – through the Net. And more appealing is the fact that a person can pursue an online course within the comfort of his home or any other place that he chooses.

Research Methodology and Objectives

This research paper is conceptual and Exploratory in nature. In order to meet such objective secondary method is adopted. The secondary data was collected through books, periodicals, journal and published material related Online learning for the study. The research approach laid focus on certain objectives that can prove as an asset for analysis of the scenario.

- To understand Online Learning and explore its potential in Indian Higher Education scenario.
- To examine how Online Learning is a boon for higher education in India and the application of new introductions.
- To explore the future of Online Learning in India.
- Analyze students' perception towards online learning models and its significance with the skill development, effectiveness and employability.

Research questions were considered as the first and the most important condition for differentiating among the different research strategies. Since, this research used a questionnaire to assess the online learning strategy in educational institutions, Survey strategy was chosen. In addition, this research attempted to assess the online learning strategy in higher educational institutions among the two different disciplines namely Engineering Institutes as well as Arts and Science colleges. The research adopted 'Stratified random sampling' which is a probabilistic sampling option. The first step in stratified random sampling is to split the population into strata, i.e. section or segments. The strata are chosen to divide a population into important categories relevant to the research interest. The second step is to take a simple random sample within each stratum. This way a randomized probabilistic sample is selected within each stratum. Each strata should be mutually exclusive (i.e. every element in the population can be assigned to only one stratum) and no population element can be excluded in the construction of strata. Stratified random sampling is used instead of simple random sampling when the categories of the strata are through to be too distinct and too important to the research interest. Factor analysis and standard deviation with percentage analysis is used in statistic data analysis. The population for the study consists of online learning strategy in higher educational institutions from the discipline of Engineering and Arts & Science.

The present research felt the population too exhaustive since there are many colleges in India. So a northern region of India was considered at once where there are four major states of Haryana, Himachal Pradesh, Jammu and Punjab as well as two Union Territories of Chandigarh and Delhi-NCR. The research adopted stratified random sampling in selection of institution from the two disciplines. The respondents for the research were the Students' of the different discipline and courses, which were selected at stratified random.

Case Studies: IGNOU & NIOS

IGNOU (Indira Gandhi National Open University)

The IGNOU (Indira Gandhi National Open University) in its more than 25 years of existence has established itself as the single largest University in the world of democratic. IGNOU is serving around 2.0 million students only in India and apart from India in more than 30 other countries with more than 20 Study Schools and a vast network of around 70 regional centers, more than 1800 study centers and tele learning centers and more than 45 centers in other countries. The University offers around 140 Certificate, Diploma, Degree and Doctoral programs comprising around 1350 courses. IGNOU combines conventional teaching and learning methods very effectively with Information and Communication Technology and Satellite based teaching and learning systems.

IGNOU has taken few major initiatives towards developing e-learning environment for distance learners. E Gyan Kosh: a national digital repository, PAN- African E Network and Sakshat a one stop education portal of the Ministry of Human Resource Development (MHRD) and e-Learning platform for LIVE (Library and Information Virtual Education) are some important initiatives of the Indira Gandhi National Open University.

NIOS (National Institute of Open Schooling)

The NIOS (National Institute of Open Schooling), formerly known as National Open School (NOS), with approximate figure of 1.5 million students are enrolled, has emerged as the largest open schooling organization in the world. This was initiated as a project in 1979 by the CBSE (Central Board of Secondary Education) the Open Schooling program has now taken shape as an independent education system in India.

NIOS is now globally recognized for its sustainable learner centric school education, skills up-gradation and training through open and distance learning. NIOS is also known for ensuring convergence of open schooling organizations. By this approach it is getting closer to an inclusive learning society, human resource development, global understanding and national integration. Facts about NIOS:

- It is the largest Open Schooling system in the world. It involves more than 22,35,000 learners have taken admissions since year of 1990.
- More than 20,000 learners are take admission every year in Vocational Education Courses and more than 2,50,000 in all available courses.
- Around 64,000 learners have been certified in different Vocational Courses since 1995.
- NIOS reaches out to students through a network of more than 900 vocational

centers across the country and abroad.

- NIOS has more than 2,800 centers for all the available programs.
- NIOS imparts education through distance mode using a media mix of self-instructional print materials, audio visual and CD-ROM supported by Personal Contact Programs (PCP) and Practical Training Sessions. These are further supported by Radio Broadcasts and Television programs.

Conclusions

As per our research findings, conclusion can be drawn that with the rapid growth in internet connectivity, online learning system has gain a boom. Online learning plays a vital role in educational development as a wheel of growth in education sector. In the present paper, limelight has been drawn on Online learning system which acts as foundation to interactive learning system. A brief contribution of researchers is studied and case studies of open learning schools are reviewed. In underdeveloped and developing countries, online learning raises the level of education, literacy and economic development. Online Learning can be developed through proper investigation and plan of action. It is analysed that the developing wave of adaptive learning will help higher education, women as well as government.

References

- Goswami, C (2014). "Role of Technology in Indian Education", International Proceedings of Economics Development and Research, Vol. 79, No. 6, January 2014.
- Lone, Z. A. (2017) "Technology in Education in Rural India", International Journal of Engineering Science and Computing, Vol. 7, No. 7, pp. 13953 – 13955.
- Gaikwad, A., Randhir, V. S (2016)." E-Learning in India: Wheel of Change", International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 6, No. 1, pp. 40-45.
- Dua, S., Wadhawan, S., Gupta, S (2016)." Issues, Trends & Challenges Of Digital Education: An Empowering Innovative Classroom Model For Learning", International Conference on Science, Technology and Management, Pp. 695 - 702, India International Centre, New Delhi.
- Karmakar, A., Nath, A (2014). "E-Learning Methodologies, Strategies and Tools to implement lifetime education anywhere anytime", International Journal of Innovative Research in Advanced Engineering (IJIRAE), Vol. 1, Issue 4, pp. 193 – 201.

- Sharma, S. K., Wasim, J., Siddiqui, J (2014). "E-Learning in India", International Journal of Advanced Research in Computer Engineering & Technology (IJARCET), Vol. 3, No. 1, Pp. 113 -117.
- Mohan, P (2004). "Building an online course based on the e-learning standards: Guidelines, issues and challenges", Canadian Journal of Learning and Technology, Vol. 30, No. 3, pp. 15-31.
- Eugene P. K., Panchanatham N (2016). "E-Learning Strategy in Higher Educational Institutions in India", Research & Reviews: Journal of Educational Studies, Vol. 2, Issue 1, Pp. 18 -23.
- Siddiqui, A. T., Masud, M (2012). "An E-learning System for Quality Education", IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 4, No. 1.
- <http://www.digitallearning.in/magazine/may08.pdf>. Last accessed on 11/01/2019