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E-Learning : Concept And Other Facets In Context To Higher Education In India

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ABSTRACT
This paper focuses over real and broader meaning, concept, types of e-learning. Author mentioned hypothetically pulley stretch model for blending learning. It is thoroughly explained that why e-learning becoming essential part of every segment of society. Since paper deals with correlations of such miraculous type of learning and education especially higher education in Indian context so most of the part of content here by concentrates over different aspects of electronic learning with reference to higher education studying students and research scholars. It is an exercise to explore opportunities and impact of e-learning in the lives of students. This is the great way to enhance learning system through e-learning tools and technology. In this paper author would like to give some ideas about how much useful e-learning is. Several benefits as stay memory in subconscious mind, concepts are universally recognizd and accepted ,Highly viable in research areas, widespread dissemination of knowledge, Information and knowledge to the villagers, tribes , illiterate people in remote and hidden areas, convenient as data be preserved, easy, saving of Time and Cost, continuous knowledge up gradation, pace with globalization, unity and integrity, access to best faculty and quality study pack, indiscrimination, dust and allergen free environment, individualized instruction, learning experience by experience, fast learner - Slow learner mechanism, cost effective for both students, institutes and organization, zero opportunity cost of time etc. are well enumerated in this paper.E-learning is based on five as Anyone, Anything, Anyhow, Anywhere, Anytime. Thus this is perfect, 100% saturated planned schematic technology which is limitless with innumerable features and specifications. Student just needs to connect himself with faculty or group or community, getting all updates and desirable information. What are needs, scope, methods to keep that e-learning up has been a point of discussion in this research work. Content preparation and presentation tools which make a learner to learn in hassle free environment. Applications, and challenges of e-learning in perspectives of casual and formal education in India expolarated here in this paper. Author took up related material from internet in progressing this tremendous laureate paper including top researches that done earlier by eminent workers.
KEY WORDS: pulley stretch model, tools and technology, individualized instruction, formal education

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INTRODUCTION

E-learning is the big resource and excellent method of learning which is far apart from conventional and traditional learning. e-(electronic) learning means all information desired by learners are displayed on screen in digital or electronic form , in which devices (generally computers and its allies) are used over a network , work on principles of nature of electrons which move in many components like microchips , transistors etc. that control and direct electric current. E -learning is based on five *A (AAAAA)* formulas which stand for *Anyone, Anything, Anyhow, Anywhere, Anytime*. It has basically three formats viz, text &digital, audio and video including animation. Therefore, e-learning is a type of Technology supported education/learning (TSL) where the medium of instruction is computer technology [1].This paper focuses over meaning, concept, needs, scope, methods, content preparation and presentation tools, applications, advantages and challenges of e-learning in perspectives of higher education in India's-learning is major part of I.T. service sector which is now become invincible for other sectors. We although have much information and knowledge which is disbanded hither and thither at different places across the world. This huge treasure of virtuous wisdom is now co-sealed and coin-jointed with technology thus emerged as information technology seated at single venue which is ultimately revealed and acquired its position in the form of e-learning.

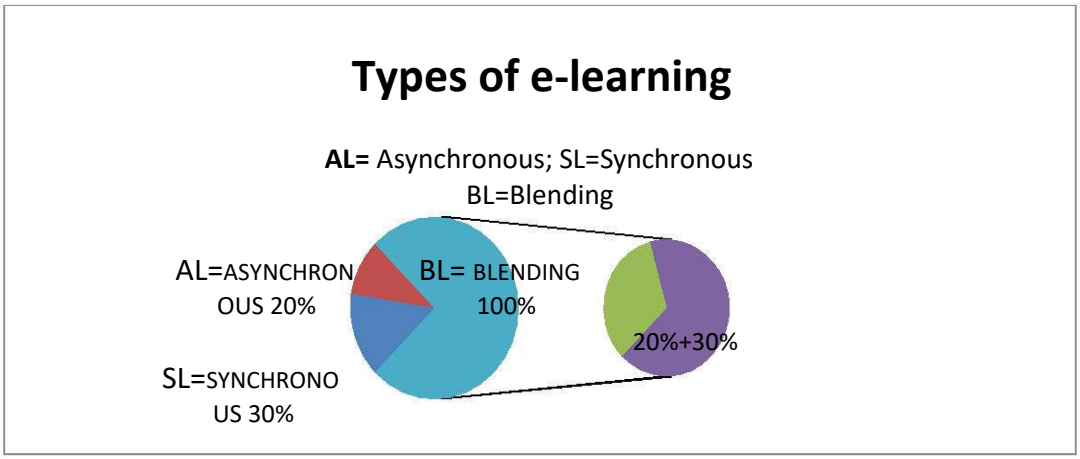
E-learning is becoming a need of hour for each section of society like student, academician, public &

government, corporate & commerce, industry, press, social & community sector .'e-learning' in India is invigorating into higher study. E-learning is a broader term involving 'on-line-learning' and 'preservative -learning' (stored data) not 'conservative-learning' or traditional learning. In fact, e-learning technology is not a replacement for traditional learning process but it can be a substitute or complementary or an additional facility for students in India. Classroom traditional learning methods getting turned towards IT based i.e., e-learning in current scenario as seen globally. However India is far behind in this turning point in to higher studies. Nevertheless conditions are becoming feasible to inculcate such learning in our country as students have been bored by the chalk duster, blackboard method which can be replaced by computers, laptops, tablets, and other electronic devices. Networking websites and cloud e-learning are being and will be widely used by the Indian students. Social Networking sites are now best tools enhancing wisdom of students across the world in easy going ways. All academic, professional, vocational, commercial stuff can be taken up and accessed on free will of users [2].The motive of e-learning is to integrate software and hardware through online and offline education and web technologies based multi -agent system. Information technology coalition with teaching which leads to progressive and advanced teaching learning system as e-learning [3].

TYPES

There are basically two types of e-learning: synchronous e-learning and asynchronous e -learning. Synchronous, means "at the same time," involves interaction of learners with an instructor via the Web in real time. Asynchronous, which means "not at the same time," allows the learner to complete the WBT at his own choice and time, without live interaction with the instructor or teacher.

Asynchronous Methods as Embedded learning which is information that is accessible on a self-help basis, 24/7. It can be delivered to the place of work, or to mobile learners. Electronic performance support system (EPSS) is a type of embedded learning. The advantage is that embedded learning offers learner the information they need whenever, wherever he needs that [4].Blended learning is a new form of learning known as blended learning is emerging. As the name suggests it is combination of synchronous and asynchronous learning methods. It combines e-learning tools with conventional classroom training to ensure maximum effectiveness. Students can prepare for, consolidate and recall classroom experiences online, while gaining the benefits of interaction with teachers and students via an actual or virtual classroom [5].



Hypothetical Model suggested by Vishwakant (author)

Pulley stretch mechanism in which blending learning leaves its effect much times as SL & AL. Big circle has 150% (Total of BL,SL and AL) having 100% weightage of BL plus 30% for SL and 20% for AL. Small circle indicates SL(30%) and AL(20%). BL is pulling SL &AL. When SL (30%) &AL (20%) fuse in the form of BL their potency get double (100%). Conversely if learner uses SL & AL separately 100% by 100% their potency doesn't work in their proportions.

{1} NEEDS, OPPORTUNITIES AND SCOPE:

The adoption of e-learning in all spheres—corporate, business houses, public organizations, government sectors, rural development areas, schools, universities, etc—is low at present. The Indian market is not as rich as international market. E-learning in India has been most successful in the corporate segment where it is seen as a means of achieving business goals and motivating employees [6].A lot of work has to be done to make e-learning successful for education, both formal and informal and to cultivate faith of people in online higher degrees in India except given by renowned research centers [7].If e-learning reaches the remote and rural parts of India, it would be much faster to educate people. In the area of higher education, the supply and demand are not balanced in India thus the available universities are not enough to accommodate all the people seeking education. To fill up this entry, distance education already existed but still dreams are not coming true. E-learning can play a major role at this level to propagate higher education at gross level.

Although IT service sector of India is growing at a faster rate. This pace of growth is not looked in to e-learning application in most of the educational centers and varsities except IIT, IIM and some research centers. Technology based e-learning came out through a serial analogy of hardware, software, media delivery system and communication systems including networking. E-learning could meet the requirements of society by offering integration of all institutions in higher education, access to best faculty and quality study material, avoidance of human bias, dust free -learning, individualized instruction, learning in experience, unique fast learner - slow learner mechanism, flexibility, cost effectiveness, zero opportunity cost of time. E -learning in India has a very big potential, big opportunity and a bright future as dissemination , expansion of higher education getting broader across the world (Global homogeneity) so learning activities can be shared from institute to institute round the clock round the world . Student wants flexibility in learning process apart from traditional classes and needs services accessing whenever, wherever he requires. It will be useful in improving utmost knowledge without any confusing lecture which raises skills of students which leads to self-learning by trial & error method and assessment. On the other hand study material &contents vis a vis audio-video demos can be stored and repeated whenever learner needs.

Use of multimedia makes effective communication in teaching learning process as attracting international teachers and students, to bring about e-twinning of institutions and to plan more inter-country exchange programs. To conclude global exploration into any branch of knowledge is possible only through technology enabled learning. i.e., e-learning.

{2} E-LEARNING CONTENT PREPARATION AND PRESENTATION TOOLS :

Technology enabled learning is evolved through a combination of hardware, software, media delivery system and communication systems including networking [8].Desktop, laptop or notepad, palmtop or hand held computers, electronic blackboard, electronic writing pads, mouse, trackball, joystick, light pens touch screen, optical mark / character recognition, bar code reader, digitizing tablet or digitizers and a cursor (puck) or a pen(stylus), speech or voice input device, printers, scanners, copiers and faxes are some of the hardware devices.

Software's includes voice recognition, hand writing recognition, information management programs, learning packages in removable disks and in hard disks, data base management and data processing software's, information banks (dictionaries, encyclopedias, almanac, references), digital books, educative games, programs and languages, skill Training, self -learning packages, edutainment (education and entertaining) software's, presentations, word processors, spreadsheets, designers, audio and video animating and editing software's.

Delivery systems includes audio and video conferencing aids, dishes and antennas for satellite communication, web cameras, digital video and still cameras, cell phones, speaker phones, telecommunication linkages, modem, server, LCD and/or D.L.P. Projectors. Some communication services include, telegraph, dialog (telephony, video telephony, telemetry, teletex, telex, videotext, facsimile, video surveillance, Electronic Meeting Systems (audio, video, groupware, teleconferencing.), Retrieval (videotext, broad band), Messaging (voicemail, video mail, electronic mail), etc.[9].

{3}METHODS AND APPLICATION OF E-LEARNING :

Multimedia is highly useful in Research, Teaching, and Learning. In research, review of related and earlier studies can be done through various search engines. Panel discussions, presentations by learners and teachers, submission of assignments, feedback from students, 360^0 performance appraisal system for teachers, recording for future, workshops, multiple choice tests, guest lecturers from distant university experts, case study, projects, remedial teaching, training the absentees, disseminating instructions, easy evaluation methods, on-line objective testing, student -created projects, experimentations, e-merging learning workshops etc are some of the easy tasks where e-learning can take place easily. 3D graphics are used for creating various models of science and math. Hypermedia, interactive multimedia, multimedia presentations, virtual reality community, personal information management programs, departmental information management programs, documentation of teaching materials, etc. will also enhance applications in higher educational system.

{4} ADVANTAGES (BENEFITS) OF E-LEARNING:

Stay memory in subconscious mind

It was observed by many researches that if a person perceives any material either in text or pictorial forms on the screen it leaves last longer effect in to the subconscious mind of brain. Stored data in this part getting recharged time to time and remind as rememorized whenever requires.

Concepts are universally recognize and accepted

Since abundant material lay down on internet, so cross investigation is possible for the content through different websites and locations. Once any material comes recorded and stored at server etc. that generally had already been verified from different sources so it finally becomes acceptable globally. Doing such steps help the teacher and student to reach on the conclusion which ultimately accepted and recognized by studious community especially in higher education.

Highly viable in research areas

E-learning is very worthwhile in research and academic arena. Full history, reviews and relevant content is always available in many ways in such a mode .These materials can be traced and used in further research by forthcoming researchers.

Widespread dissemination of knowledge

If e-learning reaches the remote and hidden areas that would not be less than miracle in reaching information and knowledge to the villagers, tribes , illiterate and deprived people .The whole India will be a knowledge hub and be spoken as *Vishwa – Guru.*

Convenient as data be preserved

Basically most of the E-learning tools provide saving and recording facility so that you can re-look the data, listen lecture or you can revise topics again at your convenient. E-Learning tool broadcast via local network over LAN or over the Internet, so you can learn from anywhere. You can enhance-learning process by viewing all past video and presentations.

Easy

Learner needs to learn the operation of the tools once, after that he can easily operate it again. Student can able to use it very easily as most of the tools are user-friendly. Using the same software file Transfer and other tasks become very easy so student can submit their assignment very easily to the teacher.

Saving of Time and Cost

At single point, one can avail all kind of knowledge. No need to go for schools or colleges. Thus great advantage from the cost of books, notebooks, bags, exam fees, transportation cost, uniform and other expenditures. The time which can be saved by not going at learning centers physically, can be utilized at any other creative options.

Continuous utmost Knowledge up gradation

If learner accesses internet and other technical devices, his knowledge utmost upgrades multidisciplinary. Whatever inventions are done, new technologies found, new ideas and researches existed and other latest topic are easily accessed by accessing computers and other technical devices.

Pace with globalization

If one wants to keep pace with world scenario sustain, one should possess the potentials that can

make one competent to other. Knowledge of Computers and technology is also one of them. By e-learning online and offline, one can sustain in various fields easily.

Unity and Integrity

All colleges & varsities, research institutions, regulatory bodies, professionals, academicians and students can be integrated on regional, state, national and international level. Sharing of knowledge, experience, infrastructure and technology will enhance the effective and efficient utilization of available resources. Students can have an access to unlimited storehouse of information at any hour and from any place.

Access to best faculty and quality study pack

Since e-learning overcomes distances, a few good teachers can be scaled up. Faculty availability is not in geographical isolations or even time because of recorded classrooms. The expert teachers also will be identified and honored by the demand for them from learners.

Indiscrimination

E-learning helps removing all biases of sex, religion, color, caste, area etc.

Dust and allergen free environment

Unlike in *c*halk and talk method, e-learning atmosphere becomes dust free and healthy.

Individualized instruction

E-learning also offers individualized instruction, which print media cannot provide. It makes learning exciting, engaging and compelling. Blended programs can integrate e-learning with face-to-face workshops, coaching, action learning and a huge range of other learning methods to cover a range of needs, styles and approaches.

Learning experience by experience

Difficult subjects and topics become more interesting, easier and more appealing by e -learning. It is an active experience with the emphasis on interactivity and 'learning by doing'. Also, many studies have proved that absorption levels are at least 20% higher in e-learning compared to traditional learning [10].

Fast learner - Slow learner mechanism

Both slow and fast learners can take their own time of learning because they do need separate timings. And hence the overall stress in the classroom environment can be removed on the basis of continuous learning.

Cost effective for both students, institutes and organization

E-learning makes the best knowledge products available at an affordable rate by cutting down the travel and extra living expenses. Overall cost for the organization is also reduced (instructor's salaries, meeting room rentals, and student travel, lodging, meals, etc.

Zero opportunity cost of time

Since -learning can be planned after regular working hours or on holidays or at home, the opportunity cost of the time spent on training is zero. Learning time is also reduced to an average of 40 to 60 percent, as found by Brandon Hall [11].

{5}CHALLENGES TO BE FACED BY E-LEARNING:

At very first level we see in Indian perspective as when user keeps online, connection run out due to server miscarriage. This problem folds up when networking, power supply cut off even learner is offline that makes whole computer technology crippled. Secondly illegal or immoral sensitive material may distract youth from e-learning goals.

The personal touch, faces and eyes interactions, discipline are some of the stimulating and motivating factors in the conservative learning process. The impersonality, suppression of communication mechanisms such as body language, and elimination of peer-to-peer learning, reduced social and cultural interactions are major drawbacks associated with e-learning mechanism. Human interaction usually lost in asynchronous learning so instructive or tutorial support becomes essential to understand contents. Therefore it is to consider that during-learning, learners are although not isolated with technology but human interaction as instructor should be encouraged through audio or video -based web-conferencing programs and threaded discussion boards. Teacher-teacher, teacher-student, student -student interactions should be encouraged in various ways. Discussion groups can also be formed on-line to proceed debates. The usage of e-boards, chats, e-mail, and tele-conferencing, may help remove this potential drawback to some extent. Other

demerits includes no feasible interests of villagers are seen in e-learning in educational context, although e-governance is going on in social welfare schemes through panchayati raj in India.
Maintenance of saved data and system repairing is another issue for Indian home users. In social context language, literacy, computer and allied trainings are big hurdle in implementing e -learning in higher studies in India.

CONCLUSION

21st centuries is century of information technology which became effective tool for communication. On such technology support side we need adventurous faculty collaborators willing to share both their content expertise, and their experience as effective teachers and communicators. Now world became global village and its boundaries are getting broken by implementing information technology for human advancement in civilization at climax as dissemination, propagation and extension of rich information and wisdom. The knowledge resource from the best brains of various institutes, colleges and universities has to be used for bringing about a better society. E-twinning of institutions around the world will help them to share their infrastructure and technical expertise. Whatever we retrenched from this research text is to understand the significance of e-learning methods, tools and techniques and types, needs, scope, opportunities and challenges in the higher education system in India. India has to play a great role as *vishwa –Guru* on this planet. E-learning is to be adopted as a learning strategy with techno-savvy foundation in education system especially in higher ones in India. Now a days Indian student can rise up his study circle by using tremendous tools of hassle free e-learning as described here. This e-learning keeps student always wakes up. Student feels classroomious surrounding all around when he uses computer. Although this concept is new for Indian student but at least he came to know the feasibility, value of e-learning in his educational sets up, courses and goals.Thus students are giving their thoughts to this concept and they are reforming mindsets for adoption of e-learning. Those who are not learning in university premises can avail facilities from other varsities via WWW.COM. Overall scene for Indian higher education is that future of e-learning is very bright where a vast majority of youth is standing to wish higher education and research .To meet these conditions e-learning will be ultimate process which helps in raising socio-economic growth including literacy and education.

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