



RESEARCH ARTICLE

E-learning: New trend in Education and Training

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Abstract

This paper tells us about what is E-learning, what is its impact on employee and student performance, what is its history, difference between E-learning and traditional learning, future of e-learning and some facts about e-learning that are collected from various websites of Internet are also included in this paper, fact show that it is growing in recent years. We also study advantage of and disadvantage of e-learning and what are types of e-learning. From this study we came to know that e-learning is growing in education and training sector more and more student are joined to e-learning more and more companies provide training to their employee through e-learning.

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Introduction

In this present scenario technology is so develop that you can learn anything anywhere, anytime through E-learning. Some companies have financial problem, they do not effort large no of trainers so they use e-learning which is interesting and save money, trainee also enjoys. In education sector various university provides degree through e-learning. Students are get enrolled in various courses, they study through elearning methods and the give their exam online. They need not to attend traditional classroom, it is good for those student who are working and don't have time to go classroom.

In UK companies like Can Studios, CBTL, Clive Shepherd, Cobent limited providing e-learning software for training and education. In India companies like NIIT Limited, Gurukul Online Learning Solutions, Tata interactive system, Magic Software, 24X7 Learning, Educomp providing corporate training and education through e-learning.

In E-learning you can learn through internet, Intranet, CD-ROM, DVD. E-Learning is the use of technology to enable people to learn anytime and anywhere. E-Learning includes education, training, and the delivery of just-in-time information and guidance from experts.

E-learning means Electronic learning According to Derek Stockley 2003 "*The delivery of a learning, training or education program by electronic means. E-learning involves the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material.*"

The use of electronic media and information and communication technologies in education, teaching and training is called E-learning.

2. Review of literature

According to **Andrews Richard and Haythornthwaite Caroline**- E-learning is the use of technologies in learning opportunities, encompassing flexible learning as well as distance learning; and the use of information and communication technology as a communications and delivery tool, between individuals and groups, to support students and improve the management of learning

"E-Learning: The future of learning" White Paper- According to this research paper

Corporate e-learning is currently a small part of training and education only 66% of respondents reported they were using, or were planning to use, a learning portal in the near future. The on-line training market is forecast to double in size for each of the next 3 years, reaching approximately \$11.5 billion by 2003. Authors tell us about benefits of E-learning like Increased reach and flexibility enabling learners to engage in the learning process anytime, anyplace

and on a just-in-time basis, Decreased cost of learning delivery, and reduced travel, subsistence costs and time away from the job .

An examples of E –Learning

- ❖ Training is a constant requirement of sales organization but its cost is very high and classroom training does not provide effective result in this case E-learning is a better option where sales team access from their laptop when they have time and learning environment to improve sales effectiveness.
- ❖ A pharmaceutical company re-engineers its induction programme to reduce classroom time and increase levels of learning by using an E- learning environment with a new employee discussion forum.
- ❖ A management consultancy uses an e-Learning environment supported by on-line coaching to improve the quality of sales proposal writing

Carabaneanu Luciana, Trandafir Romica, Mierlus-Mazilu Ion, “Trends In E-Learning”- This research article is about the latest trends in e-learning. Some trends of e-learning are Mobile technologies, Simulations in e-learning process, Adaptive learning environments (ALEs) Open source e-learning tools Standards development. Yet, some years ago, not many people have heard of the term “e-learning”. A lot of people have heard of terms such as distance education or distance learning, yet with the introduction of e-learning, distance education took on a whole new meaning. With e-learning, the possibilities for getting knowledge and information out to the learner at her/his own pace opened a whole new world for knowledge transfer. In recent years terminology changed and it went from using such terms as “technology-supported learning, distance learning and distance education” to “online learning and web-based training” to “e-learning”. Today, e-learning allows us to share and manage knowledge and skills of the professionals who work in our colleges and universities, and to get the right information to the right people, when and how they need it.

How E-Learning Can Increase ROI for Training By Thing's Research Department:

This research paper is about how e-learning can increase ROI for training Research gave 10 points about e-learning benefits and increased ROI for training 1)E-learning saves time without decaying learning benefits 2)minimizes travel costs3) you can learn from E-learning away from work 4)it is cost effective 5) meet the need of Geographically diverse Employees 6) more consistent course delivery 7) more individual instruction 8) better learning result than traditional learning 9) Less employees turnover 10)Customer satisfaction increases

Thomas P. Burke says that - many companies use e-learning to cut cost, and to reach a scattered audience, in many ways, on-line learning - known as e-learning - has made it much easier to cope with the delivery and management of workforce training. Employees can take courses independently, and in some cases, on their own time. One factor that has made web-based training more effective is the emergence of inexpensive learning management software that allows employers to deliver and manage courses from their own web sites. These LMS applications are designed to register students track and report on their progress, signal when employees need refresher training, and even deliver certificates of completion. E-learning is cost effective and it is more effective than traditional training and it give positive impact on employee performance. The key to developing a successful learning environment is to rely on training professionals to design and implement the training. However, it's up to management to identify and target specific training needs that will measurably benefit the business.

Das Anirban, Dilip K. Banerjee, and Basu Kajla “Implementation of E-Learning in West Bengal to Enhance the Present GER in Higher Education” International Journal of Innovation, Management and Technology, Vol. 2, No. 3, June 2011-This paper outlines a complete facility of e-learning process like, model e-learning classroom, web enabled systematized way of quality learning process, digitized methodologies to interact with instructors and fellow friends, online examination system and other many other facilities which will enable to get the already dropped out or going to be dropped out or regular students interested in learning so that the enrollments of higher education in West Bengal will increase. E-learning may be an outstanding way out to enhance the overall gross enrollment ratio (GER) in higher education. E-learning in West Bengal is proposed where the entire process will be controlled by the control room of e-learning that may be present at higher education ministry of West Bengal and zone wise e-learning centers will be there to interact with the web server present at control room through some specific credentials. In this way the higher education aspiring students can be provided so many facilities by means of e-learning based education.

Anand Rimmi, Saxena Sharad, Saxena Shilpi says that we have made study about the awareness and impact of E-learning in selected rural areas in India, the providers and learners ratio and an analysis on the collected data has been made to find the advantages of E-learning resources and their affect on social and mental development of the individuals belonging to rural areas. E-learning is found to be highly emerging knowledge tool today. It has wide scope in developed as well as in developing countries. The areas which are undeveloped and not so educated get attraction of E-learning. E-learning provides a method of delivering knowledgeable contents through CD, DVD, multimedia and other tools. The main constraint identified in this process is availability of proper bandwidth, willingness of E-learners and some sort of skill set to deliver the material to learners. Overall, 48% providers found E-learning is beneficial to rural gentry for knowledge, better job opportunities, and promotions and to learn new developing technologies in the market. Specially focusing towards rural areas it helps in developing people's social and mental ability. Although some negative consequences are also observed in flourishing E-learning in rural areas because of lack of awareness, unwillingness, illiteracy and lack of proper infrastructure, yet it has a broad scope in near future and we believe that it will definitely help poor gentry to fill the gap between educated developed cities and rural undeveloped areas.

Kakoty Sangeeta, Lal Monohar, Sarma Shikhar Kr -They are trying to establish the line and type of research work in E-learning environment that people are working on. It focuses mainly the prospective areas of research in this domain. Though E-learning is a very broad area, we are concentrating and focusing the education system only which is the more promising area of whole E-learning scenario. We start this paper with an introductory note on the relationship between e-learning and education system. It followed by the recent market and its growth in this developing country. There are many challenges in implementation of undergoing technological changes and developments. The security of services, the encryption of messages and the common taxonomies to describe services and service access points in e-learning systems environments are all in need of consideration. However, supporters of e-learning are always looking forward some new developments. Technology advancements will continue to reshape learning over the Internet with increasing use of advanced tools and techniques. So by employing the new technology in e-learning environment, one can make the system more attractive and interactive for learner that may help to build a learner centric platform in this environment.

Ibrahim Abdullah, Mohd Rozar Norlinda Binti, Bin Razik Muhammad Ashlyzan, Kamisah Binti Kormin Kamisah Binti - They did study to measure comparative effectiveness between two learning environment which was develop on the base of Kirkpatrick's four-level evaluation model and then a case study was applied to test all the levels of the framework. These four levels include participant reaction, learning, achievements, behavior of employees, and results. This study is based on comparative analysis of two groups on two training methods. The groups are traditional training and e-learning training. The comparative analysis is based on the quantitative data collection through closed ended questionnaire. All the questions are approach to the four levels of the Kirkpatrick's Model. To complement the quantitative data, this study also approach the qualitative collection data using depth interview and open ended questions to use for more closely describe the views of the respondents. For both methods all the questions are approach to the four levels of the Kirkpatrick's Model. The respondents are from all levels of employees are about 60 employees in one of the chemicals Industry located in Kuantan, Pahang. However, in this study have split out to another respondents to support the results of employees, the respondents are managers and supervisors; they will give answer from the same questions to support the truth on the results quantitative data collection from the employees. The collection results indicated that there is no difference in the rating of the effectiveness of the two training methods based on Kirkpatrick's model. But from the interview result, the participants demonstrated a preference for traditional training over elearning training.

According to **David oye, Salleh Mazleena, Iahad Noorminshah** -E-learning is the answer of global changes, labour market and productivity .This paper shows that the employer's can integrate individual learning with organizational needs and provide employees with knowledge and skills they need. In medical and healthcare environment constant training is needed so E-learning is the better option of training of workforce in medical and healthcare it is cost effective and saves time .Paper also looked benefits and barrier of E-Learning

Bose Kabita (University of Botswana) wrote an article reports the experience of an E-learning pilot project selected by the Educational Technology Unit (Edu Tech) of the Centre for Academic Development (CAD), University of Botswana (UB). This E-learning package was designed and delivered in connection with the three-credit course "Issues and Trends in Early Childhood Education" (EPI-642), which is required for the first year of the master's program in the Department of Primary Education. The course was taught via a flexi-time, gradual, phase-by-phase transition from traditional face-to-face teaching to the electronic medium of an E-learning lab (called SMART classroom). This course utilized a student centered E-learning package that retained the learning qualities of traditional teaching, personal guidance, and mentoring, while seeking to enhance students' research and computer skills. Author find that objective of project is achieved. It feasible to design and deliver a mixed-mode, blended, flexi-time, and student centered course, which in turn provided students with the basic course contents, facilitated the development of research skills empowered them with basic computing skills, and, more significantly, provided them the basis for lifelong learning. The author is of the view that a step-by-step approach with student-oriented-active learning, designed to encourage students to explore information and materials available on a wider spectrum (e.g., Internet access), and provide a basis for their active participation in collaborative life-long teaching/ learning processes, would enable them to reap the real benefits of an E-learning course. The author hopes that this approach may be one day popularised in the region. It is important to remember, however, E-learning requires planning, which is especially important for courses reliant on a particular technology (Mantyla and Woods, 2001). The author hopes that for the benefit of its entire population, the Government of Botswana will adequately plan for greater Internet connectivity and increase computer and Internet access accordingly. By increasing access to technology, only then will the people of Botswana become truly engaged and thus competitive in today's global economy.

3. Objective of Study

- 1) To study what is E-learning?
- 2) To know about history of E-learning.
- 2) What are the different types of E-learning?
- 3) What is the impact of E-learning on employee performance?
- 4) To study difference between E-learning and traditional learning.
- 5) What are the advantages of E-learning?
- 6) What are the disadvantages of E-learning|?

4. Methodology

The analysis of this paper is totally depending upon secondary data like journal, books and various website from internet

5. History of E-learning

- ❖ In 1960, the University of Illinois initiated a classroom system based in linked computer terminals where students could access informational resources on a particular course while listening to the lectures that were recorded via some form of remotely device like television or audio device.
- ❖ In the early 1960s, Stanford University psychology professors Patrick Suppes and Richard C. Atkinson experimented with using computers to teach math and reading to young children in elementary schools in East Palo Alto, California. Stanford's Education Program for Gifted Youth is descended from those early experiments. In 1963, Bernard Luskin installed the first computer in a community college for instruction, working with Stanford and others, developed computer assisted instruction.
- ❖ Early e-learning systems, based on Computer-Based Learning/Training often attempted to replicate autocratic teaching styles whereby the role of the e-learning system was assumed to be for transferring knowledge, as opposed to systems developed later based on Computer Supported Collaborative Learning (CSCL), which encouraged the shared development of knowledge.
- ❖ Computer-based learning made up many early E-learning courses such as those developed by Murray Turoff and Starr Roxanne Hiltz in the 1970s and 80s at the New Jersey Institute of Technology, and the ones developed at the University of Guelph in Canada. By mid 1980's, accessing course content become possible at many college libraries.
- ❖ With the advent of World Wide Web in the 1990s, teachers embarked on the method using emerging technologies to employ multi-object oriented sites, which are text-based online virtual reality system, to

create course websites along with simple sets instructions for its students. As the Internet becomes popularized, correspondence schools like University of Phoenix became highly interested with the virtual education, setting up a name for it in 1990.

- ❖ In 1993, Graziadei described an online computer-delivered lecture, tutorial and assessment project using electronic mail. By 1994, the first online high school had been founded.
- ❖ By 1994, CAL Campus presented its first online curriculum as Internet becoming more accessible through major telecommunications networks. CAL Campus is where concepts of online-based school first originated, this allowed to progress real-time classroom instructions and Quantum Link classrooms. With the drastic shift of Internet functionality, multimedia began introducing new schemes of communication; through the invention of webcams, educators can simply record lessons live and upload them on the website page.
- ❖ Practitioners such as Harasim (1995) put heavy emphasis on the use of learning networks
- ❖ In 1997, Graziadei described criteria for evaluating products and developing technology-based courses include being portable, replicable, scalable, and affordable, and having a high probability of long-term cost-effectiveness.
- ❖ Now, there are currently wide varieties of online education that are reachable for colleges, universities and K-12 students. In fact, the National Center for Education Statistics estimate the number of K-12 students enrolled in online distance learning programs increased by 65 percent from 2002 to 2005. This form of high learning allowed for greater flexibility by easing the communication between teacher and student, now teachers received quick lecture feedbacks from their students. The idea of Virtual Education soon became popular and many institutions began following the new norm in the education history.
- ❖ The emergence of E-learning is one of the most powerful tools available to the growing need for education. The need to improve access to education opportunities allowed students who desire to pursue their education but are constricted due to the distance of the institution to achieve education through "virtual connection" newly available to them. Online education is rapidly increasing and becoming as a viable alternative for traditional classrooms. According to a 2008 study conducted by the U.S Department of Education, back in 2006-2007 academic years, about 66% of postsecondary public and private schools began participating in student financial aid programs offered some distance learning courses, record shows only 77% of enrollment in for-credit courses being for those with an online component.
- ❖ In 2008, the Council of Europe passed a statement endorsing e-learning's potential to drive equality and education improvements across the Europe.
- ❖ Recent studies show that the effectiveness of online instruction is considered equal to that of face-to-face classroom instructions but not as effective as the combination of face-to-face and online methods.

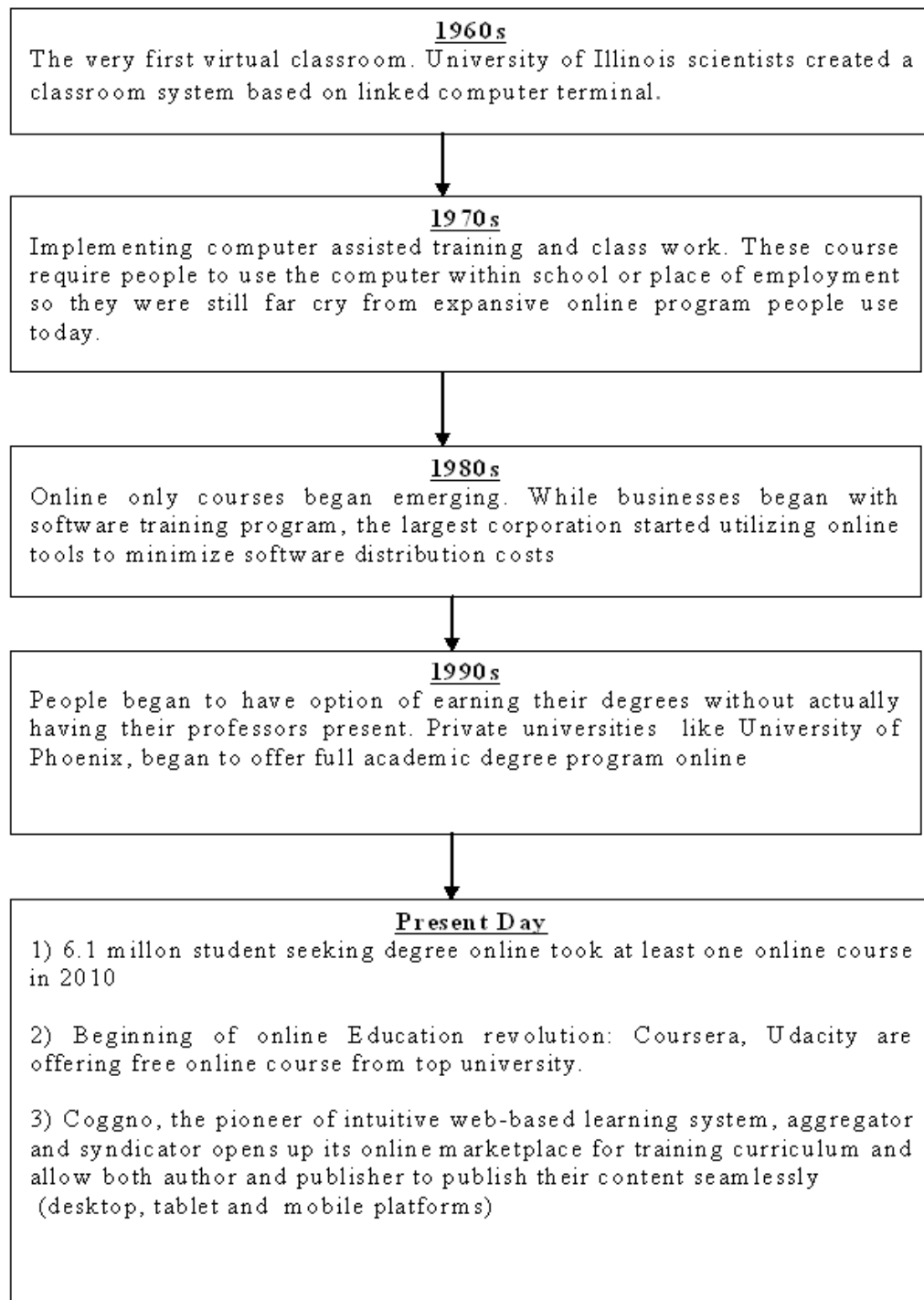


Fig 1 : History of E-learning

(Source: [http://pinterest.com/pin/122582421079083705/history of e-learning](http://pinterest.com/pin/122582421079083705/history-of-e-learning))

6. Types of e-learning

There are two types of e-learning

1) Synchronous

2) Asynchronous

Synchronous e-Learning means interaction of trainer and trainee at the same time over the internet .Synchronous technologies also allow people to interact with peers and experts.

Synchronous E-learning is like a virtual classroom that duplicates the capabilities found in a real classroom. A virtual classroom provides:

- **A place to meet:** Trainer and trainee use their computers to go to a virtual meeting place instead of a classroom.
- **Take attendance:** A list of trainee is recorded.
- **Lecture:** Trainer can choose from a variety of synchronous technologies including:
 - Slide presentation
 - Audio and video conferencing
 - Application sharing (A trainer can also let the trainee take control of the application to practice performing tasks.)
 - Shared whiteboard (group of people communicate by typing comments, drawing, highlighting and pointing)
 -
- **Interaction with Trainee:** Students can indicate when they want to speak by virtually raising their hand. Teachers can let students speak through audio and video conferencing. Teachers and students can use instant messaging and chat.
- **Quizzes:** Teachers can present questions to students.

Asynchronous e-Learning allows the student to complete the Web based training on his own time and schedule, without live interaction with the trainer. People learn anywhere at any time There is complete flexibility with asynchronous training, which comes in two forms, Discussion Groups and self-paced.

(i) **Self-Paced Courses**

People can get the training anywhere at any time. This can include just-in-time training where a person gets exactly the training he or she needs to perform a task. Self-paced courses are created with e-learning authoring tools. Self-paced courses can be delivered in many ways including:

- Internet
- Intranet or Local Area Networks
- CD-ROM or DVD

- (ii) **Facilitated asynchronous** -Training involves a trainer and group of trainee, but the interaction is not in real time. The trainer will post assignments on a Web page, which typically includes online reading or research conducted on various Web sites. Trainee communicate with each other through threaded discussions (also known as online bulletin boards), and submit their homework to the trainee via e-mail. A **facilitated asynchronous** is a very efficient way to provide expert answers to a large group people. A single answer to a common question can benefit many.

7. Difference between E-learning and Traditional learning

<u>S.No</u>	<u>E-learning</u>	<u>Traditional Learning</u>
1.	E-learning refers to the use of electronic media and information and communication technologies (ICT) in education/training	Traditional learning, also known as back-to-basics, conventional education or customary education, refers to long-established customs found in schools that society has traditionally deemed appropriate
2.	24x7 access	You can learn only in definite time
3.	E-learning ensure a person who enroll in course what he/she learn and computer is being capable of taking test, giving instruction, clarifying doubts and calculating your grade in real time.	In traditional learning personal attention of teacher /trainer not provided to every student/trainer, some student/trainer are attentive while others are not, it is not confirms that student/trainer is learning or feeling boredom.
4	It is cheaper and efficient .Thousands of trainer/student can participate in E-learning	It is very costly , you require a room than chairs ,table etc than limited student can sit in a classroom
5	It is good for those people who are working and don't have time to attend class	It is not good for working people
6	Learn in your speed	You have to adjust according to teacher, sometimes many students not able to understand the topic.
7	Student motivation is high due to involvement in matters that are closer to them and to the use of technology.	Student motivation is low

8. Impact of E-learning on Employee/Student performance-

According to Tim Ellis “**Staff E-learning Survey Report**” dated 24th April 2009 to 29th May 2009. There is one question in questionnaire “**Q11. Does the use of e-learning tools have a positive impact on student experience/performance?**” The answer of this question is majority of staff still believe that e-learning has a positive impact on student experience/performance, in 2008 - 89 % of respondent says that yes and 2009 -82% of respondent says yes.

E-learning gives positive impact on employee performance. Employees enjoy learning on E-learning. Suppose you are working in bank ,you have some problem while working on computer so you just open your bank intranet just write your problem and get solution in few minutes while in traditional learning you have to wait for training session, it is so overcrowded that you unable to ask any question from trainer . It is very easy to use and gives solution within few minutes, you can send a mail to expert of the problem and expert gives you a correct advice how to solve a problem. Employees leave organization due to lack of training and unable to work it increase the cost of organization but after the E-learning employees can learn anywhere, anytime. Employee retain more because combination of multimedia and instructional design can produce a very rich learning experience that is repeatable and in some good practice activities with feedback and employee have a learning environment that's going to help

him to retain the course content which will produce results. Employee hesitate asking question from trainer in classroom training while in E-learning he/she can learn again and again and ask any question comfortably.

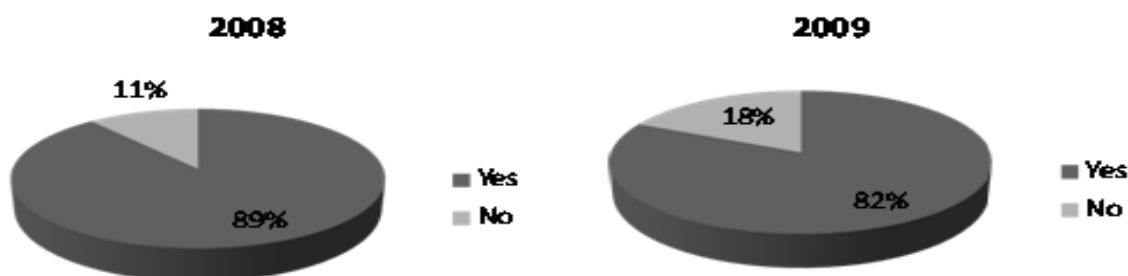


Fig 2 :Pie Chart showing E-learning gives positive impact on Student Experience/Performance

(Source:<http://www.lancs.ac.uk/celt/celtweb/files/e-learning%20staff%20survey%202009%20report.pdf>)

Some facts about E-learning

- ❖ A nine-year survey of the research literature in training published by Fletcher and Tobias in ‘Training and Retraining’, commissioned by the American Psychological Society, and published in 2000, concluded that: Learners learn more using computer-based instruction than they do with conventional ways of teaching, as measured by higher post-treatment test scores.’
- ❖ Specific studies from Fletcher (1999), Kulik (1994), Willett, Yamashita & Anderson (1983) all confirm that learners learn more using computer-based instruction than they do through traditional classroom methods.
- ❖ **In the world most of the companies using E-learning to train their employees. According to Cross knowledge (distance learning solutions) UK, Spain and Benelux nearly 40% of companies train more than 50% of their employees via E-learning. France lags behind at only 17%. E-Learning is most used within the services sector – 43% of service-based companies train more than 50 % of their employees via e-learning.**
- ❖ British companies, despite having used E-learning for less time than other countries, are quickly developing their application of E-learning: in 2011, 51% of companies delivered at least one training via E-learning to over 50% of their employees compared to 39% in 2010.
- ❖ 68% of the European samples of companies that use E-learning have a headcount of over 10,000.
- ❖ The use of E-learning looks to increase in 2012. Given the economic climate, many companies are seeking to maintain or cut back their overall training budget, furthermore they are looking to reduce training cost per learner in order to be able to train a greater number of employees without increasing spending on training.

- ❖ Between 2010 and 2012 the number of companies that train between 10% and 50% of their staff will grow from 30% to 45 % of the sample surveyed. Without a doubt, this is influenced by the widespread adoption of 2.0 technologies made popular by Generation Y which promote collaborative knowledge sharing and the exchange of best practices.
- ❖ The results of the barometer confirm that E-learning has become a credible delivery method for all sizes of enterprise. Whether the company has less than 1,000 employees or between 1,000 and 10,000, the number of users is on the up. Many companies like Franklin Covey, Toshiba, Michigan Office of Public Health Preparedness Sales Readiness Group's, Xerox are using e-learning to increase efficiency and effectiveness of their employee. E-learning increase ROI of employee and it reduces the cost of training
- ❖ In 2010-11, colleges enrolled 31,394 FTES (full time equivalent) in E-learning instruction, an increase of 1.6 percent from 2009-10. This was markedly less than the 66 percent growth over the previous two years.
 - ❖ Online learning, with no face-to-face instruction, is the most popular form of E-learning, comprising 65 percent. Online learning increased by 401 state FTES, or 2 percent.
 - ❖ Hybrid, which combines online with some face-to face, was 31 percent of all E-learning as it increased by 1, 067 FTES or 12 percent.
 - ❖ In 2011 77% of American Corporations were using online learning in 1995 this number was only 4%. This means the number of companies using online training methods is dramatically increasing mainly because technological barriers are diminishing and customer priorities are shifting away from stand-alone training courses.
 - ❖ Corporate training alone is a \$200 billion industry. E-learning represents \$56.2 billion of this. This will grow into a \$107 billion market by 2015. (GIA – Global Industry Analysts).
 - ❖ The E-learning market is now more than 13 years old (the word “e-learning” was coined in 1998). Since then, E-learning has continued its rapid evolution and radically changing the training industry
 - ❖ The US and Europe account for over 70% of the global eLearning industry. The fastest growing market, however, is Asia Pacific, with eLearning revenues expected to grow at an annual rate of 20%.
 - ❖ E-learning is the second most important training method within organizations, with companies increasingly moving towards blended learning and E-learning, rather than instructor led training sessions. The global market for eLearning is forecast to hit over \$100 billion by 2015, with growth from the benefits of reducing operational costs, flexibility and simple training programs.
 - ❖ According to 2011 Towards Maturity Benchmark Survey, 72% of the 600 companies surveyed said that learning technologies such as eLearning and mobile learning helped their business adapt more quickly to change, an increase of 11% on last year.
 - ❖ According to New Ambient Insight Report, the Asian eLearning market is expected to reach \$11.5 billion by 2016. It is revealed that the 2 countries with the highest growth rates in the world are Vietnam and Malaysia, with 44.3% and 39.4% respectively. Following closely behind these countries are Thailand, Philippines, India and China, with 30%-35% growth rate.
 - ❖ 4, 600,00 college students are currently taking at least one of their classes online and by 2014 this number will increase to 18,650,000. By 2019, half of ALL classes will be done online.
 - ❖ E-learning is generally shorter than classroom training on the same subject by up to 25-60% (according to Brandon Hall, 2001 and Rosenberg 2001).
 - ❖ In 2011, 51% of companies delivered at least one training session via eLearning to over 50% of their employees, compared to 39% in 2010. And for 76% of companies, the most popular delivery method of E-learning is blended learning. The 47% already using this approach are planning to intensify usage. (European Survey 2011)
- ❖ E-learning is proven to increase knowledge retention by 25% to 60%. Corporate eLearning exploring a New Frontier, WR Hambrecht.
- ❖ Corporations save between 50% and 70% when they replace instructor-based training with E-learning (IOMA 2002). Training with E-learning means that courses can be delivered into shorter sessions and spread out over different days so that the business would not lose an employee for entire days at a time.

Additionally, it improves productivity as employees no longer need to travel or fight rush-hour traffic to get to a class.

- ❖ According to Towards Maturity Report 2011, E-learning courses were the most popular learning technology that year, used by 80% of employers.
- ❖ Instructor Led training loses ground to E-learning moving from 70% of training delivered to 62%. Self-study e-learning (asynchronous) is on the rise now accounting for 15 % of all training delivered. (2006 ASTD Industry Report)
- ❖ Not surprisingly, the more advanced forms of E-learning are much more popular among larger firms and companies that are technology-savvy. At Fortune 500 firms, 73.6 percent of technology-delivered training comes through networked, online methods. (workforce.com)

9. Future of e-learning

According to MISS WADZANAI GANGATA “E-learning is not a new phenomenon. One can trace its beginning to the 1980s. Today E-learning is gaining more and more significance within the realm of higher and tertiary education.” She did study on education system what is the impact of E-learning on our education system and future of learning. She did survey by interviewing in Mthatha people and surrounding areas and searching on various websites of Internet. According to the data analysis in 1990 5% of education system using E-learning, in 2000 it increase to 16%, in 2011 it increase to 28%, in 2014 according to study it will reached to 49%. It means the future of e-learning is bright it is growing since 1980.

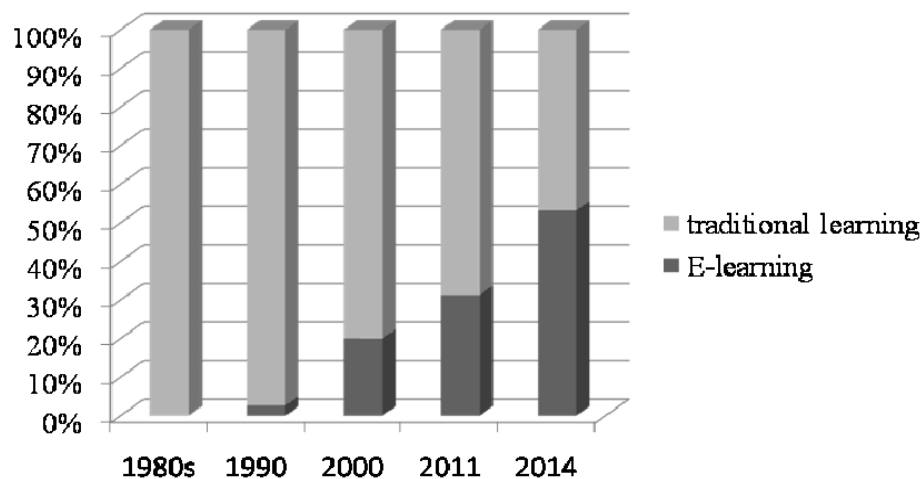


Fig 3 :Bar graph showing the growth of e-learning since 1980

(Source: [http://www.wsu.ac.za/academic/allppt/gangata.pptx/future of E-learning.](http://www.wsu.ac.za/academic/allppt/gangata.pptx/future%20of%20E-learning.))

10. Advantage of E-learning

- 1) 24x7 Easy accessibility any where any time.
- 2) Stronger understanding because it includes multimedia, quizzes, training part can replayed if something is missed you can replay it.
- 3) It saves time.
- 4) Saves training cost.
- 5) Improve performance of employees.
- 6) Interaction of trainee and trainer can be done online.
- 7) Students may have the option to select learning materials that meets their level of Knowledge and interest
- 8) Develops knowledge of the Internet and computers skills that will help learners through out their lives and careers

11. Disadvantages of E-learning

- 1) Unmotivated learners or those with poor study habits may fall behind
- 2) Lack of familiar structure and routine may take getting used to
- 3) Students may feel isolated or miss social interaction
- 4) Instructor may not always be available on demand
- 5) Slow or unreliable Internet connections can be frustrating
- 6) Managing learning software can involve a learning curve
- 7) Some courses such as traditional hands-on courses can be difficult to simulate
- 8) Bias towards tech-savvy students over non-technical students,
- 9) Teachers' lack of knowledge and experience to manage virtual teacher-student interaction
- 10) Asynchronous communication hinders fast exchange of question,

12. Limitation of E-learning

- **Computer literacy and access to equipment.** –One of the big limitation of E-learning that a trainer/student should be computer literate he/she should know computer. If student/trainer doesn't know computer he/she is unable to learn from E-learning method.
- **Some topics are not appropriate for E-learning.** –Topics that require physical exertion and practice, such as sports and public speaking, are covered in e-learning. However, e-Learning can be a useful companion to traditional education for teaching background and technical information.
- **Students themselves can be a limitation to E-learning.** – A student who studies on E-learning program should be self motivated and discipline because no one is there to say be concentrated on your study.

13. Conclusion

From this research paper we can conclude that E-learning is growing in training and education sector .More and more companies using E-learning in giving training to there employee , various Universities providing education through E-learning. It has more advantage than disadvantage like it is cost effective, saves time, 24x7 accesses, learn your own speed, quick answer of any problem etc. E-learning future is very bright it is growing since 1980 till now. All the student and trainer enjoy it and feel comfortable in using it.

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Notes

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