

E-LEARNING DEVELOPMENT TRENDS FOR EDUCATIONAL INSTITUTIONS-A STUDY

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Abstract: The use of e-learning in the educational process improves the quality of practical training and provides a better understanding of the course.

The rapid increase in internet connectivity has been an important catalyst for the growth of e-learning.

Today, the world is changing as faster than before. Learning and development strategies of companies should change with time to address the emerging challenges. We noticed that there are a few factors which are persistent over time for both students and teachers that can be considered major challenges for e-learning. These factors are the following ones: support, flexibility, teaching and learning activities, access, academic confidence, localization and attitudes. This paper describes about the most modern E-learning development trends for educational institutions and also focused on the important characteristics of modern learners, most recent Impact of E-learning on Students performance, growth of E-Learning, Limitations of E-learning. By Knowing these characteristics, eLearning professionals give the opportunity to turn eLearning courses into modified eLearning experiences.

Keywords—e-learning, modern learners, educational institutions

I.INTRODUCTION

E-learning has become an important part of higher education. It expands the educational resources, supports students in their learning, develops learners' skills, inspiration and knowledge, prepares them from being productive in their workplaces of today's society.

Today, the world is changing at a faster rate than ever before. Rapid change in technology, a significant surge in the number of smartphone users, and constantly evolving social media have changed the way people learn new things. Learning and development strategies of companies should change with time to deal with the emerging challenges. Organizations need to adopt modern tools and techniques that enable the people to learn in a most efficient manner.

We live in a world that is characterised by abundant information, advanced technology, a rapidly changing society, greater convenience in daily lives and keener international competition. It is important that all stakeholders are practical and take a leadership role in identifying how ICT can enhance

our education system, particularly in the areas of teaching, learning and assessment.

Different methods of learning:

Definitions:

E-learning refers to electronically supported learning and teaching of any type. Learning of any form, digital communication, electronic devices or the internet is used to support the learning process might be described as a form of e-learning. E-learning can either be computer based learning or internet based learning, but it is important to remember that it does not essentially require a computer or an internet connection but in need of electronics.

M-learning is an acronym of mobile learning, which means learning with portable devices that allow the student to learn in different environments or anywhere. Mobile learning is as well electronic in nature, but it refers specifically to these handheld devices and portable technology.

Best uses:

E-learning is a extraordinary resource for making education more interesting and interactive, using online learning platforms like Game Classroom to convert traditional classroom learning.

M-learning is the best one where there is concrete gain to be had from the potential for mobility. for example, allowing students to utilize mobile devices is an extraordinary way to keep them engaged and working whilst still giving them the freedom to explore. A new innovations like the Scavenger Hunt app present very good opportunities to take advantage of roaming whilst learning.

Major challenges for e-learning :

We noticed that there are a few factors which are persistent over time for both students and teachers that can be considered major challenges for e-learning. factors: support & guidance, flexibility, teaching and learning activities, access, academic confidence, localization and attitudes.

- **Support and guidance** for students , this refers to the support systems needed for the student to easily make it through the course.
- **Flexibility**, it refers to the classical mantra of e-learning being learning for “anyone, anytime, anywhere”.
- **Teaching and learning activities** , this challenge refers to the different teaching and learning activities that can be undertaken during a course.
- **Access** means the use of ICT for distance education makes way in to the technology an enabling factor, but access also refers to the quality of the connectivity.
- **Academic confidence** ,refers to the students’ previous academic experience and qualifications.
- **Localization of content** ,it is about how the course material is adapted in order to fit local culture, traditions and religious beliefs.
- **Attitudes on IT and e-learning** , positive or negative attitudes come from society, politicians, students and teachers

II.RELATED WORKS

Tagreed Kattoua(2016), aims to provide a discussion of the current e-learning environments including their characteristics, limitations, advantages and the major factors that affect the acceptance of such technologies. And concluded that a successful e-learning system should consider the personal, social, cultural, technological, organizational and environmental factors.

ERMA PEMA(2017), focuses on the general features of e-learning tools, their advantages in the teaching process as well as the pedagogical principles for their best integration in the curriculum. Also examine some practical applications of some mentioned tools in higher educational institutes to support the arguments stated.

Olga V. Yanuschik(2015), focuses on the problem of teaching mathematics to students of an engineering university learning in a non-native language. The results helps to identify the main difficulties facing international students when they begin their studies at Russian universities. Also also describe a methodology of teaching mathematics using e-learning as web-based instruction.

Yousef Mehdipour(2013), describes the current state of mobile learning, benefits, challenges, and it’s barriers to support teaching and learning. Four key areas Were addressed : 1. An analysis of Mobile Learning. 2. Differentiating E-Learning from Mobile Learning 3. Value and Benefits of Mobile Learning 4. Challenges and Barriers of Mobile Learning.

Oye, N.D.(2012), discusses on e-learning methodologies and tools. The different categories of e-learning tincludes informal and blending learning, network

and work-based learning. Focused into three major e-learning tools (i) curriculum tools (ii) digital library tools and (iii) knowledge representation tools. Finally suggests that synchronous tools should be integrated into asynchronous environments to allow for “any-time” learning model.

Marina Kuimova(2016), provides the literature review regarding the use of e-learning, its advantages and disadvantages. Examine students’ insight of e-learning courses based on the Moodle platform at National Research Tomsk Polytechnic University. The findings from a survey of 67 students reveal that the respondents highlighted the following advantages of e-learning courses: convenience, combination of theoretical and practical material, on-line testing and apprehensibility of the assessment criteria.

Adnan Sharaf Ali(2015), examines the latest trends in e-learning. In particular, the author comes to the unpleasant observation that the situation of the distribution of e-learning in the Republic of Yemen is not at the highest level. In this context, the article is useful for developers of e-learning systems in this country and in other regions with a similar problem.

Miss Deepali Pande(2016), focuses on the current situation of e-learning in India and its future. Also compare the growth rate of e-learning India with respect to other developed countries. Although e-learning has a potential in India , the adaption to this is very slow .

Andreea Maria Tîrziu(2015), provide a framework for teachers for a better e-interaction with students. Approach: It shows the literature and research that focus on e-learning statistics. Results: Continuing to learn and tried new methods of communication will aid in improved learning and foster teacher-student respect and collaboration. Value: There are effective techniques to presenting face-to-face material in the online environment that will allow the student to achieve a higher level of satisfaction of learning and cognitive understanding of the course material.

Siddharth Sehra(2014), reviews the comparison between e-learning and distance learning techniques, discussing the effectiveness, drawbacks and advantages of both. Some case studies have been analysed and recommendations for enhancing the effectiveness of these techniques proposed for better and interactive dissemination of education.

Mohammed Waseem Ashfaque(2014), discuses on the trends in education in modern way that is Smart learning prevailing in higher education through the implementation of Smart learning and it’s Standardization in education. Focuses on the use Smart learning as a supplement to traditional teaching, as an supportive component the process of teaching and learning.

Meaghan Lister(2014), suggests that there are four main considerations when designing e-learning and online courses: i) course structure, ii) content presentation, iii)

collaboration and interaction, and iv) timely feedback. An analysis of the literature was conducted to identify similarities and differences, to identify patterns and to search for common themes on the design of e-learning and online courses.

Ekta Srivastava(2013), describes 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 . Also studied 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.

Joi L. Moore(2015), implemented a mixed-method analysis of research articles to find out how they define the learning environment. In addition, surveyed 43 persons and discovered that there was inconsistent use of terminology for different types of delivery modes. The results reveal that there are different expectations and perceptions of learning environment labels: distance learning, e-Learning, and online learning.

III. OBJECTIVE OF STUDY

- 1) To study about how modern learners cope up with the most common e-learning challenges?
- 2)To study about Expanding Of E-Learning?
- 3)To study about top Learning and Development trends?
- 4)To Know the Impact of E-learning on Student performance?
- 5)What are the Limitations of E-learning?

IV.METHODOLOGY

1) HOW MODERN LEARNERS COPE UP WITH THE MOST COMMON E-LEARNING CHALLENGES:

Every modern learner is unique. Each one comes from a different cultural and educational background, but they also find some common characteristics that they tend to share.

1.Easily distracted.

Modern learners have a lot on their well-known plates. They are thinking about several number of things at one given time, making it easy to get distracted when they are

trying to complete an online course. Ask few questions that make them reflect upon the topic. Tell them emotional stories that gets them fascinated about the subject matter. Combine images and videos that remind specific feelings, as well as characters with whom they can relate.

2.Sociallearners.

With no doubt, modern learners are more social when compared to previous generation. They spend a maximum portion of their day on social media networks, catching up friends and reaching out to business contacts. In fact, social networking has taken the place of face-to-face communication. Modern learners are more likely to post on a Facebook page or respond to a tweet. This shows that eLearning experiences must be mutual and social. To organize to your modern learning audience, we have to include online group projects and social learning online experiences via project management platforms and social media sites to adapt to the way students would learn.

3. long for constant knowledge.

Modern learners demands information anytime and anywhere. If they want to learn more about a topic, they just jump on their mobile or tablets and find out what they need to know to satisfy their curiosity. Were as in previous generations they had to venture to the nearest library to develop their knowledge, now knowledge is always at the modern learners' fingers. In terms of eLearning, we can give them supplemental eLearning resources so that they can search on their own. Also provide them tutorials, that helps them in their "moment of need".

4.Always-on-the-go.

Your eLearning course should be mobile-friendly. Think that your learners does'nt have time to sit at home on their PCs and complete online modules on a regular basis, means you have to give them learning wherever they are. This can be achieved by choosing a LMS that characteristics a responsive design and automatically detects the learner's device and offers the optimal display. However, you should remember that you don't overload your learners by presenting more information at once. Make it easy by offering shortcuts of information on a regular basis, such as five minute modules that each covers on specific sub-topic.

5.Independent.

Though they bloom in social learning environments, modern learners are also independent. They aren't afraid to find the knowledge they need to achieve their goals. If they don't find the information they are looking for online course or they simply look elsewhere. They mainly search for learning experiences that give them control over the process.For example, some may look forward multimedia-based online courses while others may prefer interactive scenarios.Finally, eLearning pros must design eLearning courses that are customized for each learner

by doing thorough viewers research and provide different types of eLearning activities.

6.Impatient.

The truth is that we live in a busy world where nobody has the patience to sit through a lengthy eLearning course. However, modern learners few are particularly impatient. They are used of getting information at a moment's notice that you have to grab their attention and manage time effectively, or you may run the risk of disengaging them. They knew that there is an plenty of information just waiting for them on the internet, so they won't waste their time with an online course that doesn't provide to their needs.

7.Overworked.

One of the most common behaviour of modern learners is that they are overworked and overwhelmed. Many carry out a wide variety of job tasks, which are very difficult to balance their home life with their careers. This means that they don't have enough energy or effort to devote to eLearning. They are also overwhelmed by the abundance of information that is online today. Give them time to take it all in and look for signs that your learners are really absorbing the key ideas and able to maintain for future use.

2)EXPANDING E-LEARNING:

The hasty increase in internet connectivity has been an important catalyst for the growth of e-learning. A robust internet ecosystem, with a huge number of local and global players, will help online learning make further inroads. The story is not limited to educational institutions alone.

With the number of internet users in India expected to reach 250 million, rivalling the US and second only to China, India's potential as a huge market for e-learning is enormous. A large number of new users are accessing the internet for the first time from their smartphones, which is an ideal, personalised and commerce-enabled platform for e-learning adoption.

Universities will observe more students accessing their coursework from outside the traditional classroom. As per the Docebo report issued in July 2017, India's online education market size is set to grow to \$40 billion by 2018 from the current \$20 billion. Only India has the largest education systems in the world with a network of more than 1 million schools and 18,000 higher education institutions. More than half of the country's 1.2 billion population falls in the target market for education and related services.

E-learning brings exclusive advantages, the prominent being the ability to provide personalised attention to all students. In a conventional set-up, this is only possible when a highly skilled tutor offers one-to-one tutorials. A new advantage is people living in smaller towns and cities can get access to the best possible learning resources from across the world, at a very affordable price. This helps create a level-playing field.

The developing wave of adaptive learning will help students with various levels of intellectual capabilities to glean

the best from the learning process at their own pace, without feeling left out.

Online coaching will absolutely cause a threat to conventional methods of teaching while online learning can by no means look at completely replacing schools because schools offer much more than just academic knowledge inside their campuses. However, private coaching centres will have to take a second look at their business model and adopt digital learning aids to sharpen their offerings.

3) E-LEARNING DEVELOPMENT TRENDS FOR EDUCATIONAL INSTITUTIONS:

Here are top seven learning and development trends that will dominate 2017.

1. Gamification :

Gamification is the old one, but the originality factor fades away compared to the tried and tested one. Students like gamified learning environment, no matter their age. They make mistakes and learn from them, getting rewarded for every right answer, the recognition for their results, and most of all, having fun while learning. Teachers can gamify lessons in a variety of ways, knowing that even the smallest changes can have big positive results.

2. Mobile:

Smartphone users worldwide has crossed a number of 2 billion in 2016. Students spend major time on their smartphones, to do a majority of the daily tasks including learning new concepts.

The idea of micro-learning must tap the audience who love mobile. Through micro-learning can deliver bit size content to the learners when they need it. Use Live Stream micro-videos to catch students attention. Rise in Mobile devices is a global phenomenon. Thus, you can use this strategy to engage more employees from developed as well as emerging economies. Google's Primer is the best example of training throughout micro-learning that is being used efficiently on a large scale.

3.Social Learning:

Social learning is not new. It has been there for quite some time. Still the changes in the structure of workforce is needed for social learning as an integral part of learning and development strategies.

Two factors are driving the need to adopt the social learning in organizations. At first, today increasing number of companies are using distributed workforce. In the absence of physical proximity between the employees, internal social

media networks for learning and development were playing a critical roles in the seamless exchange of ideas.

Secondly, the proportion of millennial in the workforce is increasing continuously. The millennial generation have grown up with social media and find the email a highly unproductive medium to communicate. So, they use social media frequently to share files, videos and communicate efficiently.

Facebook,twitter were recently launched “Workplace” that allows organizations of any extent to adopt social media for learning and developmental purposes.

4. Study at your own pace:

Not everyone has the same pace of learning. A few students pick up things fast, others need time to grasp a concept. The set of students may or may not have similar doubts. So, it gets easier for them to study a certain topic or a subject at their own comfortable speed.

One of the major advantages of distance learning is that you can study at a pace that is comfortable for you. This benefits for the E-learning as well, you can spend as much time as you want to on a certain topic without having a fear of being left out or not understanding. This creates a much more effective learning for student. The same topic can be revised time after time.

5.Video-based learning

This is strongly connected with the flipped classroom technique. The time at the classrooms is about collaboration and interactivity, students can make clear any aspects of the lesson that they didn’t understand, by discussing it with their peer and teachers. The time spent at home can be used for preparing for the next classroom discussions, and it almost always involves a video of the teacher presenting and explaining the new lesson. In addition to the flipped classroom, YouTube offers an immense variety of educational videos, that are hardly ever longer than 20 minutes.

6.Adaptive learning :

In adaptive learning, the instructions are given based on individuals’ preferences and inputs. The training methods can be improved by teaching only those concepts which are not known to a user. Also, the users can learn at their own pace.

No two learners are same and therefore, adaptive learning speed ups the learning of individuals while lowering the cost of content delivery. Vendors use adaptive learning to optimize the resources while delivering the maximum value to their clients. The adaptive learning is ideal for most of the employees. Average performers can use it to improve their

performances in the future, while high performers use it to quickly sharpen their skills.

7. Virtual Reality

Virtual reality is just going to change the training and development background across organizations. Using VR, the learners can have an immersive experience. The concepts of augmented reality can be used to create a real environment for teaching difficult concepts. For example, a real life case study which is based on leadership can be created in augmented reality and learners can play the roles of various characters in these cases to learn leadership lessons.

To such kind of lessons, the pupils need not be physically present. They can be located anywhere across the globe. They simply need to have a fast internet connection, a computer or mobile, and a 3D headset suitable for VR.This technique can come out as the most powerful learning methods in near future.

4) Impact of E-learning on Students performance:

Over the past few years, adoption of technology in the education has increased significantly. Most of the universities wish to invest in modern forms of learning, therefore it may be seen that the growth of e-learning is expanding tremendously. The new outline of education through technology is attracting entrepreneurs around the world to invest and develop new forms of e-learning products.

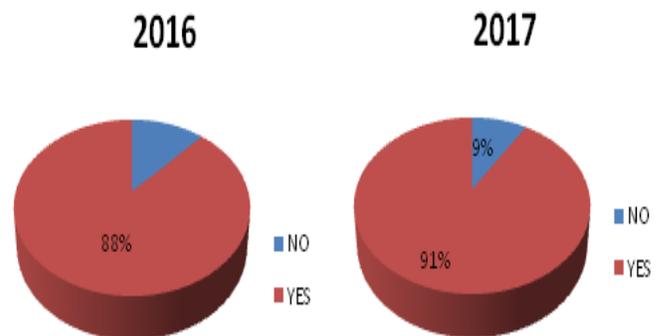


Fig 1:Pie-chart showing E-Learning gives positive impact on Students Experiences

Some facts about E-learning:

- The use of E-learning looks increasing in 2017. 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.

- According to Product & Users, the LMS market is expected to increase a growth between 2017 and 2018.
- In 2015-16, colleges enrolled 31,394 FTES (full time equivalent) in E-learning instruction, an increase of 1.6 percent from 2014-15.
- 4, 600,00 college students around have taken at least one of their classes online and by 2014 this number increased to 18,650,000. Now in 2017, half of ALL classes are been done online.
- According to New Ambient Insight Report, the Asian eLearning market is expected to reach \$11.5 billion by 2018. 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 personally behind these countries are Thailand, Philippines, India and China, with 30%-35% growth rate.
- When we consider by the Fall of 2018, nearly 48% of materials will be digital.
- E-learning is proven to increase knowledge retention by 30% to 70%.

The growth of E-Learning since 2011:

According to the data analysis from E-Learning Market Trends & Forecast 2014 - 2016 Report, A report by Docebo ,shows that 2011 5% of education system uses Elearning, in 2012 it increase to 10%, in 2013 it increase to 22%, in 2014 according to study it will reached to 40%. It means the future of e-learning is bright it is growing since 2011.

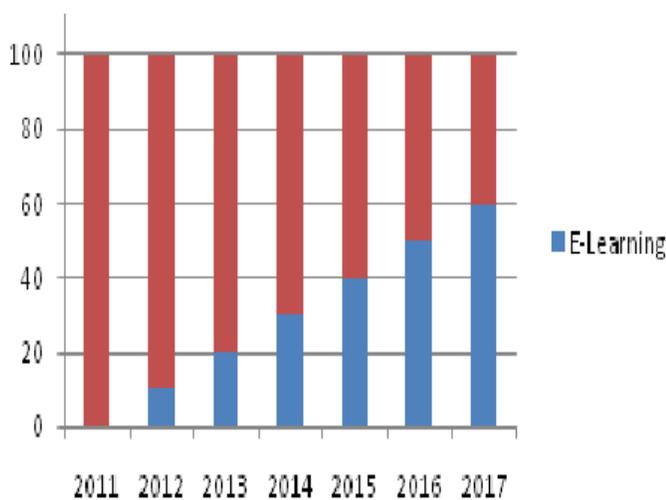


Fig 2:Bar graph showing the growth of E-Learning since 2011 Advantage of E-learning:

- 24x7 Easy accessibility any where any time.

- Stronger understanding because it includes multimedia, quizzes, training part can replayed if something is missed you can replay it.
- It saves time.
- Saves training cost

Disadvantages of E-learning :

- Unmotivated learners or those with poor study habits may fall behind .
- Lack of familiar structure and routine may take getting used to .
- Students may feel remote or miss social interaction.
- Teachers’ lack of knowledge and experience to manage virtual teacher-student interaction.

5) Limitations of E-learning

- **Computer literacy and access to equipment:**
 One of the major limitation of E-learning that a student should be computer literate he/she should know computer. If student doesn’t know computer he/she is unable to learn from E-learning method.
- **Some topics are not suitable for E-learning:**
 Topics which require physical exertion and practice, such as sports and public speaking, are covered in e-learning. On the other hand, 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 study on E-learning program should be self motivated and discipline because no one is there to say to be concentrated on your study.

VI.CONCLUSION & FUTURE WORKS

From this research paper we can conclude that E-learning is growing in training and education sector . The perception is that the world has become smaller as a result of the immense progress made in the field of information and communication technologies. More and more companies using E-learning in giving training to their employees , various Universities providing education through E-learning. It has more advantage than disadvantage like it is cost effective, saves time, 24x7 access, learn your own speed, quick answer of any problem etc. E-learning future is very bright it is growing since 1980 until now. All the student and trainer enjoy it and feel comfortable in using it. The usage of new technology must be encouraged in the current education system. This paper discusses about the formulation of the problem and their need and prospects in today’s education field.

Trends don't come up out of nowhere. It is the continuous innovation that brings about new methods that work better than the others. Thus, effective methods go viral and become trends. As an intelligent professional, we need to keep a close eye on every development in the training and development space and other areas. Connect those dots and use newer techniques even from outside the learning and development domain to make the strategies unique and innovative. Can use these trends as a starting point to develop a learning & development plan that is modern and best suited for the organization.

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BIOGRAPHIES



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