A Review Paper on Emerging Trends of E-Learning in India

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Abstract
E-learning plays a key role in an individual's mental growth and a nation's future in today's competitive world. Traditional learning is teacher-centered, and teaching the same subject well every time is tough. Traditional teaching approaches can't be used everywhere. By mitigating this flaw in traditional learning, E-learning becomes a potent weapon for intellectual progress and contributes to intellectual society. Traditional learning's high prices, set hours, and limited classroom access may be avoided through e-learning. People are India's major strength as the world's first and biggest democracy. E-Learning benefits these countries and plays a crucial role in establishing intellectual think tanks that can be utilised by the entire world for constant growth and an aggressive reaction to other nations' logical cultures. In this regard, a more focused approach has been considered on introducing new e-learning methodologies, priorities set for each methodology for easy e-learning, and upcoming technological trends in the field of e-learning such as Mobile learning, Microlearning, Beacon learning, Internet of Things(IoT), Cloud-based e-learning, Gamification, and others.
Keywords: Information Communication Technology, E-learning, Conventional Learning, Teacher, Neutralize, Intellectual Society, think tanks, Mobile learning, Online Education are some of the terms used in this paper.

1.INTRODUCTION

Online Teaching or E-learning helps students get a world-class education when traditional higher learning isn't practical owing to financial, personal, or other restrictions. In India, which has the world's second-highest population density, e-learning must assume full shape. India's 1.34 billion people are its strength. India uses these technologies well. India is home to several e-learning trends adopted by industrialized countries for a long time. India's learning trends include:
• Distance education
 • E-Learning
• OER • Cloud-based E-Learning
• Big Data in E-Learning
• Automated Course Authoring
 • Ubiquitous Learning
• MOOCs

2. E-learning

E-learning is learning using an electronic medium, such as a computer, in a classroom, as part of business training, or as a distance learning course. E-learning is sometimes called "online learning" or "virtual learning" E-learning is a gift to society and the public since all learning is provided at the learner's leisure utilizing electronic devices including computers, mobile phones, tablets, and smartphones. Computers connected to the internet have supplanted books and libraries as a source of knowledge. Overall, e-Learning provides world-class information resources for a student or novice's learning environment.

E-learning is the most popular way for learners to learn at their own pace. It's crucial to consider a learner's interests in today's climate. E-learning provides the learner with more choices. It doesn't limit the learner until adequate resources and content from someone who understands the learner's goals are available. E-learning uses computers, TVs, mobile phones, tablets, and smartphones.

In the 21st century, everyone knows that people's activities reveal altering learning patterns. Traditional learning was centered on the teacher-student relationship and the book-learner contact, whereas today's learning is based on the World Wide Web (World Wide Web). These continually updated e-learning tools are an advantage to e-learning. Per hour, 2000 websites are formed, 30 to 40 hours of video are uploaded every minute, and 2 to 2.5 billion YouTube videos are watched daily. All of this makes e-learning incredibly versatile.

3.SURVEY OF LITERATURE SECOND

In recent years, e-learning has grown so large that everyone may feel its influence. E-learning is changing the learning paradigm. The most famous publications produce print articles on e-learning, which is fascinating. Valentina Arkorful and Nelly Abaido's work on e-learning in higher education shows its worth. The author also tackles e-cons. learning's The author creates a high-quality e-learning paradigm. The author says collaborative online learning can be synchronous again. Jui-Feng Weng, Shian-Shyong Tseng, and Tsung-Ju Lee offer e-learning as a game using Boolean logics. This paper describes how to simulate Boolean logic. Even the most complicated computations may be broken down into simple stages, the author says. IEEE study by Maria-Blanca Ibanez, Angela DiSerio, and Carlos Delgado-Kloos demonstrates how gamification engages students in learning activities. The author utilised a gaming platform to teach C programming. This paper concludes that gamification engages students in learning activities and improves information acquisition. The author also feels gamification may teach students other programming skills. [5] This work by G. Pankaj Jain, Varadraj P. Gurupur, Jennifer L. Schroeder, and Eileen D. Faulkenberry explores AI in student learning. This work uses AI to evaluate student learning (AISLE). This technology aims to improve AI-based student assessment. The author employs AI as an e-learning tool to measure students' conceptual understanding. The author concludes that this technique saves time when assessing a student's comprehension of a topic and allows the instructor to compare student understanding.

4.METHODOLOGY

Emerging Trends of E-Learning in India has been chosen for this study because it will represent the existence of Emerging Trends of E-Learning in India. Because it will describe the detail perspective role, this study is descriptive in character. The primary goal of this research is to determine the rising trend of E-Learning, with a secondary goal of describing the role and sources

of E-Learning. Primary and secondary data are the two basic types of data. Secondary data is employed in this study, and existing literature is studied to learn about various forms of e-learning trends.

5. E-LEARNING'S DIFFERENT TECHNOLOGICAL TRENDS

Today's e-learning technical trends are vast and expanding at a breakneck pace. Every day, new trends emerge in this competitive environment to provide learners with effective learning strategies; some of the most prominent technology e-learning trends are given below:

5.1 Mobile Learning: With the use of Smartphones and cellular phones, an individual can now get instructional content in his or her pocket. These devices prove to be a fantastic source of e-learning due to the availability of the internet or the resources themselves. Every person in the twenty-first century has a cellular phone with a large memory and faster internet availability, allowing them to study everything they want at any time and in any location. These devices are lightweight and easy to carry when walking, and they never get in the way of getting from one location to another. This type of learning can also be found in mobile learning apps. Mobile learning has played a significant role in the success of e-learning in many developing countries around the world, including India. Mobile phones are regarded as the ideal platform for e-learning for the following reasons: • Ability to reach out to a large number of people.. • Ability to carry it with you at all times.
• They're the simplest to use, and they're inexpensive.

• **Learning in a short period of time.**

5.2 Micro-Learning: Microlearning is a type of learning that involves delivering knowledge in extremely small, focused spurts. The learner has complete control over what they learn and when they learn it. It's a leaner training strategy that's planned and delivered in rich media formats at the right moment. All of these features ensure that the learners will find it simple to use, finish, and apply. The following are the primary advantages of this type of learning: • It is easily accessible.
• Take up less time.
• Aim for just-in-time delivery.
• A student-centered approach.
Microlearning also has a lot of advantages in the business world, such as being both affordable and agile.
• Development time is cut in half.
• It's simple to update.
• A broader range of applications
• Full of high-impact.

5.3 IoT (Internet of Things): The IP address for internet connectivity is held by a growing network of actual things or items near us, and communication occurs between these linked objects and other internet-enabled devices and systems. Other devices that use surrounding technology to communicate and interact with the external environment via the internet include

desktops, laptops, and smartphones, among other things. As a result, the Internet of Things is an excellent instrument for learners' instant learning, such as daily study exercises, daily news, or any other information study that the learner can plan to learn right away. In this type of technology, the learner will be treated as a whole system or object, with the system linked detecting the new updated and specific learner IP and providing him with all the updates he requires from the entire network of physical devices or objects to which he is connected. The following are some of the primary advantages of IoT in the context of e-learning:
• As an entity, the learner is a member of the learning system.
• The system keeps track of the student at all times.
• Learners are kept up to date on a regular basis.

5.4 Cloud-based E-Learning: E-learning is causing waves in the fields of education and business. These e-learning systems are simple to use and can be accessible simply logging into a service provider's website. Instead of installing all of the software, the instructional designer will use the courses or the learner's computer. This will allow browsers to post course content, build new courses, and exchange a few words with learners and users immediately. Designers may now keep all of their data on the cloud, thanks to the learner management system. Approved users and others can have remote access to this information.

5.5 Adaptive E-Learning: Adaptive e-learning allows computers to employ an interactive teaching device. These techniques position the allotment of human and mediated resources based on the specific learning needs of each student. Because it is based on artificial intelligence, it is also known as intelligent tutoring and has gained popularity in recent decades. This adaptive learning system can be used on the internet for remote learning and group collaboration. The characteristics of adaptive learning are heavily incorporated into the characteristics of distance learning. Adaptive learning can be implemented in a variety of ways, including adaptive hypermedia, intelligent tutoring systems, computerized adaptive assessment, and computer-based pedagogical agents.
The following are some of the advantages of these adaptive e-learning trends:
• Tutor tracking through learner or by human assigned. • Saves a lot of time for learners.

5.6 Video E-Learning- This type of learning assists the learner in grasping the subject by allowing them to watch videos. When a student wants to study more about a given issue, he will undoubtedly go to youtube.com. E-learning provides a quick overview and aids in the recognition of objects through multimedia effects. Youtube.com is a rich source of video e-learning content, just as TV, CDs, and storage devices with educational videos paved the way for this type of e-learning. These days, this type of learning is in full swing because it saves the learner a lot of time compared to reading line by line full stuff on any electronic device, computer, or other electronic device, and it also requires less attentiveness than reading.

5.7 Beacon E-Learning: Another beneficial technology advancement in e-learning is beacon e-learning. This beacon e-learning or beacon technology is a wireless gadget that uses low-energy Bluetooth connections to send signals to other adjacent devices. This is used as a positioning system for indoors (IPS). These IPS beacons can wirelessly find persons and items within a

certain range and then activate a nearby wireless device. Most importantly, it's safe and secure, available only through associated apps, and simple to install and use. In the twenty-first century, 99 percent of college students own a smartphone, which they can utilise for successful e-learning. The following are some of the advantages of this technical trend:

• Improved In-Class Experiences. • Easier Campus Navigation. • Better Accessibility. • More Powerful Communication. • Increased Intellectual Discovery. • Insightful Data.

5.8 Artificial Intelligence: Artificial intelligence technology has shown to be highly useful in creating the e-learning world. Robots and artificial intelligence are not the same things. It's similar to intelligent software in that it's designed to execute intelligent actions based on the environment it's in. This will result in professors who will assist each student in becoming a better specialist in his or her particular specialty. SIRI and VIV are two of the most recent artificial intelligence results; these are software that can answer simply to difficult questions from learners. The use of artificial intelligence in e-learning allows students to make more informed decisions and access higher-quality resources, allowing them to excel and reach their goals faster. The following are some of the most significant advantages of AI in the context of e-learning:

• Offers specialized tutoring to students.

• Computer-assisted instruction.

• A lot of useful information.

6.E-LEARNING TECHNOLOGICAL TRENDS ANALYSIS

Computers signaled a major change in electronic gadgets and the advent of soft copies in education. Some disciplines were taught via distance learning. Isaac Pitman taught the first correspondence course in the 1840s. Shorthand was popular among secretaries and other note-takers and writers to enhance writing speed. Students utilized the first self-testing machine in 1924. In 1954, Harvard Professor BF Skinner invented the "teaching machine" to help program student instructions. First computer-based training program established in 1960. Then there's PLATO, an online training program (or CBT program). The PLATO was created for University of Illinois students but used at regional schools. Late 20th-century computer and internet growth led to e-learning technology and delivery methodologies. In the 1980s, the first MAC let individuals to use computers at home, allowing them to learn and improve at home. Next, virtual learning environments developed, giving people access to online knowledge and e-learning possibilities. Businesses increasingly teach employees online. New and seasoned workers can develop their knowledge and skills. People who work from home can earn online degrees and develop their competence in any field. E-learning is more popular than ever in the 21st century, as more individuals discover its benefits.

E-learning offers online degrees based on the learner's abilities and comprehension. For e-learning, several devices are used, depending on their public accessibility and e-learning use.

CONCLUSIONS

The following are some of the primary conclusions drawn from this review article on emerging e-learning trends:

E-learning is a gift to society since it can reach any area of the globe and provide optimum benefits to everybody, at any time. E-learning will save learners and users a lot of time and

money in the future. Governments of specific countries should own e-learning portals and websites to provide people who want to study and equip themselves easy and free access to these learning resources. E-learning is also beneficial to academic professors, as it allows them to save time and avoid the hectic environment of repetitious classes, allowing them to focus more on student equipment in their relevant topic. Learning at their own pace, phase completed with the aid of E-Learning, and the entire future of education will be based on it.

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