

E-Learning in 21st Century Problems & Remedied is a book in which various articles opinions, case studies have been included. We hope each and every article will prove boon for readers.

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E-LEARNING IN 21ST CENTURY



Problems & Remedies

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Mom And Dad For You Are, Have Always Been And Will Always Be My Inspiration.

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Preface

ELearning in 21st century problems and remedied is a book in which various articles opinions, case studies have been included. ELearning is becoming popular day by day. During covid-19 crisis the world has shifted from physical to virtual learning. Technology is saving our time and protecting us from major loss. Virtual platforms like Google meet, zoom app, Microsoft team, Blue jeans, gotomeeting, webex meeting, GoTowebinar etc. are being used in high volume. Virtual platforms have saved our time but they have some major and minor problems like low connectivity, no voice, no signal, unclear sound, login error etc. are annoying users. Teachers and students need to increase their technical knowledge to handle these platforms smoothly. At university level students are well educated and hence they are able to handle such crisis quickly but there are huge problems for school level students. Some information is also floating in newspapers that students are feeling boring during online classes and many of them are facing mental disorder. Mischiefs by students are also causing teachers annoyed. I hope in coming days these types of problems will be handled. The style of teaching learning through online mode will increase in future. Various issues and their possible remedies have been discussed by our contributing authors in this book. I hope each and every article will prove boon for readers. I would like to thank all the contributing authors and editors of this book. They have equally contributed their best to make this book awesome,

Name: Wakil kumar Yadav

Date: 10th July 2021.

1. The Role Educators in Facilitating E-Learning: Ensuring Accessible Teaching-Learning for All in the 21st Century Educational Systems

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Abstract

The main goal of the current study is envisioned to launch concisely the role of educators in facilitating e-learning: ensuring accessible teaching-learning for all in the 21st century educational systems. An extensive range of purposes, including e-learning, computerized learning, virtual classrooms, and video conferencing, are served by it. Students who choose to proceed with online lesson information, audio recordings, movies, and DVDs are supplied. From the point of view of educators, the greatest opportunity presented by e-learning is that it gives rise to digital learning approaches, which make sure very important in educational systems over the previous several years. There is a wide range of feasible criteria, structures, and norms necessary for effective E-learning systems. However, for its relevance, the concept creates several challenges. Incapable to express e-learning creates an unlimited contract of uncertainty, which prevents educators who are engaged in e-learning from having their most critical concerns addressed. By illuminating the many ways in which success is defined, consumers are offered the chance to question and be encouraged by getting a suitable application for the idea of utility. E-learning has increasingly been used by educational systems in the developed countries. The presence of huge amounts of content on the topic provides everyone with the capacity to access any type of academic resource. Educators can interact with learners using the internet and training sessions in e-learning platforms. Educators may not respond to kids immediately when put in that position, and also some learners may even receive less than what they desire within the specified period. Some platforms offer free conversations, either in a classroom setting with learners, educators, as well as other individuals, and amongst people involved via conversations, teleconference, and collaboration platforms. It doesn't matter whether they're fully available or not, because they may make comments and get instant answers. In a recent teaching-learning method, students' interest throughout the class notes of the educator has declined, and the teacher's function and teaching-learning method have been altered. Even in today's world educational environment, e-learning has found use as a facilitator in the advancement of strategic planning. Particularly in the internet learning and management process, it allows for the spread of information. Therefore, in developing countries, e-learning is still not generally utilized. This study is on the e-learning options for impoverished nations. The author intended to enhance educators' comprehension of the many e-learning strategies, including web-based, blended, and flipped classroom practices, throughout all 21st century educational systems.

Key Words: Role of Educators, Facilitation, E-Learning, Accessibility, Teaching-Learning, 21st Century and, Education Systems.

Introduction

In an academic environment, e-learning is done by using technology such as Laptops and the internet to interact and collaborate. In addition to standard classroom instruction, this also incorporates the usage of new technology and internet elements and learning occasions that enhance a learning opportunity both in and out of the classrooms. This study focuses on whether or not e-learning works in higher education. Teaching-learning in educational institutions is greatly enhanced by the practice of current e-learning. The many programs in India, as well as the various demographics the e-learning targets, are addressed in this study is dedicated to teaching leaders of tomorrow about technological advances such as communication and information technology India's demand for e-learning is increasing at a similar rate as that of developed nations. For traditional distance learning programs, e-learning was only regarded as beneficial. This can be disputed, but everyone can't really deny that e-learning is among the most inventive advancement of the internet, and it has already had a significant impact worldwide and is doing very well in the classrooms right now. This study considered the notions of e-learning, referencing the work of numerous experts and institutions on the theme. By using this conception, individuals throughout the world can see how persons and establishments have had a balanced perspective on the usage of e-learning technology in learning, via a series of studies and other studies. It examines the definitions of e-learning that various academics have proposed and the numerous ways in which e-learning functions in connection to teaching-learning practices. In addition, it discusses the pros and cons of e-learning implementation. E-learning has introduced various benefits to the both educators and learners (Bhuasiri, Xaymoungkhoun, Zo, Rho, & Ciganek, 2012).. As far as academics are concerned, e-learning supports institutes save an important amount of money in the form of the expenses linked to building and using traditional teaching-learning facilities (Arbaugh, 2005). In addition, e-learning learning ” turns into more digitized, high-tech institutions that promote the establishment of a technological and knowledge-savvy society in which people can get all their learning and knowledge needs to be met whenever, anywhere through Web equipment (Taylor, 2007). The Internet has transformed into one of the most vital resources for teaching-learning who want to provide resources for study and learning and to exchange and collect knowledge (Richard and Haya 2009). The prevalence of technology-based e-learning, can include its use of the web and other vital technologies as well as providing resources and instruction to students (Fry, 2001). Positive effects in education, who have stronger human, moral, and social responsibilities, must guide the learner generations. To comprehend the role of technology, they should be more informed about it, and that they need to understand how to instruct leaders of tomorrow in the 21st century educational systems.

The Use of E-Learning in Education

The efficient life in a knowledge society is marked by an identification of the technology age. The goal of this study is to investigate whether e-learning influences learners. Numerous alternative methods of communication are available to help you and your educator collaborate. Only with online programs could e-learning be accomplished. Face-to-face interaction can be integrated into integrated e-learning where distances would not be a concern. E-learning that provides web engagement and in-person engagement is referred to as blending e-learning. The usage of multiple sounds and video now expands the concept of face-to-face encounters. A goal set by the Indian Ministry of Human Resource Development over the past several years has always been to expand the availability of learning to all parts of the nation. But even in these locations, many people don't know concerning e-learning (MALIK, 2009). E-learning was initially researched and then investigated on how it impacts learning. It is generally agreed that the advantages of e-learning involve better learning, autonomy, and much more personal fulfillment, together with flexibility in when and how one wants to know, capacity to study anyone at moment, from any surroundings, flexibility in the subject area, no prior subject necessary condition, velocity and learning experience, and environmental and sound pollution control. E-learning material is developed with multimedia can be viewed from consistent way personal computers, as well as other methods of Web-accessible technologies such as communicating LCD projectors, help the difference be removed. Studies have shown that e-learning can boost teaching-learning; therefore it

should be employed further in education, which necessitates developing the necessary foundations. When learners gain new knowledge as a result of the e-Learning effort that is recognized as a learning goal. Broadly speaking, higher learning scientific studies refer to different measures to make their descriptions more precise. In the summaries of these studies, the meaning may be explained by using measurements, such as "Which was before, performance task (post-test) or ultimate course grades" (Boghikian-Whitby and Mortagy, 2008). Using digital sets of data to improve the understanding, abilities, as well as other results of students is an innovative teaching method known as e-learning (Fazlollahtabar & Muhammadzadeh, 2012). Essentially, the phrase "e-learning" describes the application of modern ICT and the internet in tandem to supply teaching-learning resources (Beqiri, Chase, & Bishka, 2010). As a result, such a system is needed; and "e-learning" is the answer to it. Education provided or facilitated by technological advances is referred to as e-learning. While delivery systems can include over the Web, wireless connection, or web portal, via CD-ROM, television Broadcasting, or satellite transmission, each method has particular limitations that one must take into consideration before making a decision (WAGNER, 2008). Instead of taking over the classroom with chalkboards, e-learning appears to survive alongside the educational system. This approach aims to go too deep into rural areas, where learning is something that remains hidden in the shadows. This can be accomplished by offering inexpensive PCs with high-speed internet connectivity. An increase in the proportion of e-learning has the potential to boost the educational system in the 21st century.

Types of E-Learning

Algahtani (2011) classifies education involvement into four categories regardless of the level of involvement. In certain cases, categorization is dependent on when communication takes place. E-Learning was divided into two forms by Algahtani (2011), who defined computer-based and internet-based e-learning.

The Computer-based E-Learning

Computer-based e-learning (CBL) is used to describe every active learning that is done using computers. With CBL, you can incorporate the interactive components of computing devices, as well as access to a broad range of materials. The advantages of CBL include learning without all the requirements of an instructor being present, as well as the advantages of learners in learning at their own pace. CBL e-learning is an umbrella term that includes different technologies including software and hardware, in addition to their application in ICT. Laptops, in his eyes, serve as an extra resource when students are taking a class, as well as from outside lessons for personality. Laptops are used to improve the functionality of learning in computer-managed teaching, but they are also used to store information. The design of CBL procedures and is used in the study consists of organizing instructional material in the form of CBL styles.

The Internet-based E-Learning

Make use of the Internet for academic purposes and make benefit from the learning settings found in traditional classrooms and postal services. The web allows students to select their schedule and location for learning, while also having the ability to engage with educators in group discussions. As e-learning takes place over the internet, the advancement of continuous learning is considered as a future development globally because it encourages lifelong learning by allowing teachers to understand whenever, whenever, and at their schedule (N. Iahad, G. A. Dafoulas, E. Kalaizakis, and L. A. Macaulay, 2004). Educator-student contact can take place both in regular classroom spaces as well as mail network teaching methods. Strategy is very important to education. An internet-based includes detailed is founded on the concept of utilizing in-person training opportunities. In the initial usage of Internet-based education, there has been no connection among learners and lecturers. But, now, a lot of opportunities for student-teacher engagement have emerged.

The Role of Educators in Facilitating E-Learning

Educators and students should become accustomed to the new system quickly for effective study in all areas of education in Nigeria. E-learning applications must be executed first with an intense workout process that includes installing the necessary infrastructure like steady energy, growth of the internet services, creation of subject-specific technology, and so on. Instruction should engage educators in an e-learning program's operational framework. Ultimately, with the execution of e-learning, we can expect to see considerable enhancements in the educational system as far as learners and content covered are concerned. Ultimately, the statistics demonstrate that e-learning environments educators facilitate to adapt their roles when teaching-learning in a virtual environment. A distinction needs to be made between an educator's position informal instruction and an educator's role in e-learning: as a facilitator or arbitrator. In the case of conventional teaching-learning, an educator's primary responsibility is involved with managing the educational atmosphere and the educator delivering knowledge via presenting style and instruction, both of which are centered on resources. As such, educators are most likely to change roles from either the powerful place of facilitating student learning to the posture of "steering on the edge", and are required to embrace educational methods that foster the learning process of digital education (Anderson et al, 2001). The educator is no longer required to take the lead in setting up the task, nor does he have to get the learners interested. Thus, "the educator manager position was diminished, with some of the professional functions associated with teacher-centered educational systems handed over to students" (Lam & Lawrence, 2002). Although this study seeks to identify potential hazards and potential to aid in the development of educators' roles in both virtual and face-to-face training, it's not designed to measure digital and conventional teaching to determine which is superior. The training program incorporated several topic modules from multiple training programs, including educators who addressed one set of learners in-person and another through online classes. Quoting experts, argue that the increased number of e-learning programs and degree programs is having a significant impact on the function of educators and on the way teaching-learning is done. Since practitioners and academics (Bennett & Lockyer, 2004) have so much difficulty identifying educators' roles, clarifying and inspecting those effects in different technological factors should not be overlooked. E-Learning, it was found that educators must keep a close eye on conversations and activities found online to help students (Donnelly, 2013). Using an online educator in the virtual classroom may assist lessen the distance between students and their educational setting (Harms et al, 2006). Experts and educators can expect technological advances to be presented, that will necessitate students' instructional adaption, reinforced by a study to identify whether these techniques are successful. Seeking hints for how e-learning technology might help promote progressive reform and also facilitate displays of the benefit is vital (Shroff & Vogel, 2009). It discovers the concepts and various results on e-learning, as well as the function it performs in educational institutions and regards to teaching-learning procedures. The mainstream view nowadays is that one's career in the 21st century will depend on how effective a student is in acquiring modern era information skills, including being creative and innovative.

E-Learning Ensuring Accessible Teaching-Learning for All

Through access to e-learning, students have the opportunity to have a well enough and assisted educational opportunity. In-class e-learning is a comprehensive learning lesson that can be packaged and supported across different times and locations, which uses small and big scale learning platforms, and which also advances a school's identity and reputation. The widespread adoption of e-learning is very useful and accurate for reducing expenses, saving time, and building technology challenges, as well as for helping students advance their post-secondary education. Technology and guidelines are required for e-learning accessibility. One of the most important aspects is that both the e-learning materials and the e-learning system ought to be accessible, which is a vital aspect for e-learning to be successful. Various accessibility measures have been adopted to make e-learning accessible. The objective of this website is to detail what standards, such as existing e-learning technologies and networks, are in place, how they meet these requirements, and what accessible functionalities they offer. This study elucidates the ideas

of e-learning and traces the various ways in which e-learning serves in educational institutions, including face-to-face, traditional, and public schooling. When it comes to e-learning, the aims of the educational format should be taken into consideration. This creates the groundwork for the writers to address various types of education from the perspective of e-learning. E-learning is an educational model where trainers and learners are located mainly, but because of the equipment and technologies they have access to, they are connected (Thiele JE, 2003). As an outcome of learning made possible by e-learning, the notion of teaching-learning has emerged that will allow students to learn in virtually any topic, at any moment, and anywhere they choose eternally (Walker T., 2010). E-learning is a type of educational platform based on structured instruction but uses resources. A major element of online learning is the use of technology and the Internet. The technological learning networks, often known as e-learning, enables persons to build up and expand their skills and practice. Training distribution is delivered to a wide audience, all of whom may be in various locations or at various times. Educational e-learning is beneficial as it can enhance the effectiveness of the learning process, and it also enables professors and instructors to reach a wider audience. It can aid in the removal of obstacles, by offering innovative and vibrant approaches to motivation and engagement for everyone, while also empowering and inspiring people to utilize their full potential in learning. Educational websites use technology in the classroom like learning environments that allow learners to work together with other models, leadership, the use of online technologies and techniques, or in partnership with the other educational institutions. Maintaining and supporting the accessibility of e-learning and education environments entails ensuring that all three components of the three-component model are included and supported. Text documents, powerpoint, as well as other paper works you deliver to the students are the most significant steps in creating accessible teaching-learning for all in the 21st century educational systems.

The Advantages and Benefits of E-Learning

- The major advantage of E-learning is that it gives learners the freedom and choice to study on their schedule, which gives them the freedom and flexibility or complete other activities.
- Class-based learning has a lower monitoring capacity than does e-learning because fewer sessions can be monitored at once.
- A new benefit of e-learning programs is that students have the option to engage with their professors, educators, and classmates via email. Learners could save time and resources by enrolling in e-learning programs, enabling schooling more widely accessible.
- In addition to educator engagement, this method offers greater academic and student engagement.
- Because e-learning programs provide students with greater flexibility and privacy, slow learners might spend more time reading and engaging in the program than in a classroom-based program.
- Benefits include greater freedom for learners and more profitable prospects for institutions.
- E-Learning can improve the quality of learning and certifications by making it much easier to find a large number of resources.
- Since no one needs to go, e-learning is reasonably priced. It also is economically useful because it gives several educational opportunities for as many students as possible even without a large number of structures.
- E-learning consistently takes the learner's specific characteristics into mind. In this case, some students choose to focus on particular topics in the program whereas others decide to go over the entire session.
- The utilization of e-Learning empowers self-paced instruction. In this approach, each learner can work at his and her tempo, either fast or slow.

Conclusion

The education pattern of the 21st century is dominated by e-learning. E-learning has added a new element to teaching-learning, as well as both inside and outside of the classroom, and it is continuously searching for fresh chances. It's possible to note with caution, but doing so here would be necessary, as e-learning is a replacement for an absent educator, and in this setting, making use of it should require a great deal of consideration. Both the educator and the student must adjust their teaching-learning methods. E-learning helps to enhance levels of education, literacy, and sustainable growth in undeveloped and emerging countries. In places where higher education is costly, plentiful possibilities are few, and gaps in wealth abound, a good understanding of technical subjects is critical. Implementing e-learning effectively can benefit both individuals and essentially a measure. Additionally, since a wide variety of studies has been done on the field of e-learning, only a fraction of the examined studies use participants who are enrolled in e-learning classes. Therefore, more studies can be conducted to better understand the effects of E-learning on the learners, with an emphasis on learning outcomes. Integrating discussions of common teaching-learning methods with applied examples of how these ideas have been put to use to improve accessibility difficulties examining and incorporating a description of best practice of accessibility in teaching-learning for all in the 21st century educational systems.

Reference

1. ALGAHTANI, A. (2011). Evaluating the effectiveness of the e-learning experience in some universities in Saudi Arabia from male students' perceptions (Doctoral dissertation, Durham University).
2. Andersson, A. (2008). Seven major challenges for e-learning in developing countries: Case study eBIT, Sri Lanka. *International journal of education and development using ICT*, 4(3), 45-62.
3. Bennett, S., & Lockyer, L. (2004). Becoming an online teacher: Adapting to a changed environment for teaching and learning in higher education. *Educational Media International*, 41(3), 231-248.
4. Beqiri, M. S., Chase, N. M., & Bishka, A. (2009). Online course delivery: An empirical investigation of factors affecting student satisfaction. *Journal of Education for Business*, 85(2), 95-100.
5. Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., & Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. *Computers & Education*, 58(2), 843-855.
6. Boghikian-Whitby, S., & Mortagy, Y. (2008). The effect of student background in e-learning—longitudinal study. *Issues in Informing Science and Information Technology*, 5(1), 107-126.
7. Donnelly, R. (2013). The role of the PBL tutor within blended academic development. *Innovations in Education and Teaching International*, 50(2), 133-143.
8. Fazlollahab, H., & Mohammadzadeh, A. (2012). A knowledge-based user interface to optimize curriculum utility in an e-learning system. *International Journal of Enterprise Information Systems (IJEIS)*, 8(3), 34-53.
9. Foster, G., Taylor, S. J., Eldridge, S., Ramsay, J., & Griffiths, C. J. (2007). Self- management education programmes by lay leaders for people with chronic conditions. *Cochrane database of systematic reviews*, (4).
10. Fry, T. J., Connick, E., Falloon, J., Lederman, M. M., Liewehr, D. J., Spritzler, J., ... & Mackall, C. L. (2001). A potential role for interleukin-7 in T-cell homeostasis. *Blood, The Journal of the American Society of Hematology*, 97(10), 2983-2990.
11. Harms, C. M., Niederhauser, D. S., Davis, N. E., Roblyer, M. D., & Gilbert, S. B. (2006). Educating educators for virtual schooling: Communicating roles and responsibilities. *Journal of Communication*, 16(1), 17-24.
12. Iahad, N., Dafoulas, G. A., Kalaitzakis, E., & Macaulay, L. A. (2004, January). Evaluation of online assessment: The role of feedback in learner-centered e-learning. In *37th Annual Hawaii International Conference on System Sciences*, 2004. Proceedings of the (pp. 10-pp). IEEE.

13. Lam, Y., & Lawrence, G. (2002). Teacher-student role redefinition during a computer-based second language project: Are computers catalysts for empowering change?. *Computer Assisted Language Learning*, 15(3), 295-315.
14. Malik, M. W., & Mubeen, G. (2009, November). Student satisfaction towards e-learning: influential role of key factors. In *Comsats international business research conference (CBRC)*, 2nd.
15. Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of management education*, 29(4), 531-563.
16. Richard, J., Singer, J. D., Willett, J. B., & Light, R. J. (2009). *By design: Planning research on higher education*. Harvard University Press.
17. Shroff, R. H., & Vogel, D. R. (2009). Assessing the factors deemed to support individual student intrinsic motivation in technology supported online and face-to-face discussions. *Journal of Information Technology Education: Research*, 8(1), 59-85.
18. Thiele, J. E. (2003). Learning patterns of online students.
19. Wagner, N., Hassanein, K., & Head, M. (2008). Who is responsible for e-learning success in higher education? A stakeholders' analysis. *Journal of Educational Technology & Society*, 11(3), 26-36.
20. Walker, S., Jameson, J., & Ryan, M. (2010). Skills and strategies for e-learning in a participatory culture. *Rethinking learning for a digital age: How learners are shaping their own experience*, 212-224.

2. How to make e-Learning Accessible to all? It's challenges and issues in the process of Teaching and Learning in Indian Higher Education System in the 21st Century

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Introduction: -

All sorts of communications and correspondence has become digitalized today in the global context. World becomes micro hamlet with the recommendation of digitalization. Human mind has created digital world. It is rightly known as virtual digital era. Rapid progress in science and technology encourages software system. Whole world is governed by software. Man today stands on digital devices. He depends on them for every activity. One cannot breathe himself without digital devices. Today man is in web from womb to tomb. At this juncture department of education is not free from this web. Hence, department of education itself probe into the digitalization of learning. In the 21st century implementing e-learning is under process that to in the pandemic situation.

Nature of e-Learning: -

E- learning is possible with e-Content. Content is first and learning is next in e-learning. They are interdependent and inter related each other. What is content then? How can content be developed? Who can develop it? Is developed all sorts of content worth? How can it be measured? Who can measure it? Are there any criteria for its assessment? Thus, there are series of questions arisen relating to content and its development.

Content is created usually by the creative writer in various disciplines. It is considered as a work or work of art, depending upon area of knowledge. But when we think of content, it is specially developed by the experts/experienced teachers/tutors/research scholars and the several. It is also particularly related to Academic learning. Most probably in the formal mode of learning at different levels in various institutions content is different. At school learning, it is prepared and developed by the subject experts whereas at college level in higher learning, there shall be Board of Studies. It is set and appointed by the university. The seniors in each discipline are recommended and appointed for the period of three or five years. It depends on the university. The Board of Study conducts workshops and seminars to discuss about the content for academic syllabus. It is followed by reviews and edited and got approval of Academic Registrar and the vice chancellor and finally approved by the Chancellor of the state. Then it is recommended and prescribed and published for academic learning as syllabus for teaching and learning process in affiliated colleges under the university. It is the formality taken for granted in each universities. But it is just setting the content in syllabus at university level both in UG and PG. It is a regular practice in the teaching and learning process.

Digitalization of Education System: - In the context of globalization the trade and commerce, it's correspondence, transactions, advertisements, mode of launching the new product and its marketing

and the entire process is digitalized. Hence the impact of digital communications is on all fields. Particularly the education department is being digitalized but class room teaching and learning is not completely digitalized. It has become inevitable in the present pandemic situation. So, the department of education has begun temporarily e-learning in online teaching with all practical challenges and issues.

In the context of e-learning, **content** takes different sense. It is considered and understood as Learning Material. Then it is prepared as a hand guide and made it access to the related students. It is made easy to read and understand. Hoping that it helps to understand the concept and gist of the syllabus. It is purely examination oriented content usually made by private tutors. But now it is recommended to develop by all teachers. It is a routine task of every teacher whether it off line teaching or on line teaching. The e-content developer is playing a significant role in preparing for examination and get good result.

E-Content in Education: -

The word *Content* has become talk of the town in backdrop of pandemic –Covid-19. When schools and colleges are physically closed, the government has implemented e-learning. It has got a wide scope during pandemic. So far, the term content was limited to BOS and subject experts but now it is spelled on every tongue. An era of e-learning is existed and it has become mandatory and inevitable. The phrases *on line* and *off line* have become most popular today. In order to teach in online mode e-content has become significant. It is promoted to develop content into e-content. Preparing content has become a profession for the class room teachers at any level. But transforming the written text on the paper into e-content is a challenge today. It a challenge for some first generation literates. Most of the senior faculty are not well versed in computer application. A Software expert can be better in monitoring the computer application and he can transfer text content into e-content. He can do what not with skills in handling the software. But it is challenge for him to create first content. He can develop second content into any digital forms. But the problem lies wat the two. E-content can be reached/ accessible by the computer experts only with the equipped digital devices.

Challenges in e-learning: -

It is all tools related learning. Here, both the teacher and learner should have the knowledge of technology and they should also have either computer or laptop/smart phone with sufficient internet facility and network. On the contrary most of the rural students are not having them. Hence, there is no coordination between teacher and the learner in the teaching, learning and evaluation process. It is obvious that e-content can be accessible but it is not taught and learnt effectively. Because there is no one to one contact and no eye contact. There is no room for motivation and interaction and facilitation. It is only one-way presentation. There is no doubt that it is mechanical way of presentation. It is purely artificial. There are hundreds of reasons for these challenges. There is no conducive atmosphere not only for learning but also for teaching too. The teacher is not free enough to teach naturally. There is no desirable involvement between them. It is providing materials and pouring information. There is no impact and influence on either side. It is too worst in technical courses. Because it is practical oriented and experiment oriented. However, somehow an attempt is being made to fill the loss of learning during the pandemic. It is true that ‘something is better than nothing’. But nothing can replace living class room teaching and there is alternative for off line teaching. But we should give some justice during such a crucial time by teaching in online mode.

There various e- learning platforms and their uses: -

e-learning platforms are created today. During Covid pandemic when there is lockdown, e-learning platforms become inevitable and useful too. Since December 2019 Education department has been conducting meetings through different platforms like zoom, google meet

and OBS and many. Even HRDC/UGC is conducted Short Term Course's, Faculty Development Programme and Refresher Courses through Zoom. Swayam is the popular and most useful and effective platform for e-learning.

As online Classes are recommended by the government, teachers at various level are using these platforms for their teaching and learning. But there are many challenges that the teachers are being faced today. E-learning platform is indispensable and inevitable. But the students are not aware of it. And e-learning atmosphere is not good enough for learners even both in rural and urban areas. They have no well-equipped tools to access e-learning. Sitting before continuously before the Smart Phone/Computer/Laptop is fair enough for the learners. They cannot interact and share their as freely as in the off line class. It is stereotype imposing. They cannot relax themselves. It is not the right platform for discussion. Many cannot involve in learning. The advanced students who are having all kinds of facilities may make use of it. Many may join to link and left class in the middle for many more reasons. They just join for attendance and left. The attitude for e-learning should be changed. It takes time. But students become blind and inactive by just sitting before screens the whole day.

In the formal learning, examination and Evaluation completes the course. But conducting examination for all the students who are in different places and in different atmosphere is another serious problem. Sustaining uniformity, fair and just, and transparency in conducting common examination is not possible. Mode of valuation is another serious problem at hand. Because Indian education system is not changed and not yet up to the mark with the technical background. Somehow, developing e-content and e-learning can be possible but the following stages are to be updated in Indian education system.

There is no hard and fast solution for it. Off line is only the alternative for this. However, by providing required facilities for the learners, by limiting the syllabus and hours of learning and by giving awareness both to the parents and students, we can do some justice only during the pandemic situation. But it should not be universal at all times.

Learning is taken place when there is teaching taken place. Teaching and learning are interdependent and interrelated each other. If the teaching is completed, learning must be taken place. If learning is completed, teaching must be followed. So the concept of e-learning is complicated. It is expected to be learnt. But it is not possible. Because, e-learning is not direct learning. It is just hoping to be learnt. Even in the living off line class itself, it difficult to give justice in effective teaching and learning. Then it is so difficult to make effective e-learning possible.

Process of learning and its challenges: -

Learning is a process in the formal system between the teacher and student. It is not always a process between teacher and learner. The term *Learner* implies that a student is prepared and self-motivated and there is an eager thirst in him/her. Then, the positive mind set enables learning is possible. The task of the teacher is not quite easy to make learning be made easy and effective. The major challenge in online e-learning is to create ground for the student. Just by external force sometimes he /she sits before e-learning display tool mechanically. It is not easy task for the online teacher to motivate him/her to involve in the learning. *Because teaching and learning is certainly a process but not product.* E-Content itself is product and naturally e-learning is too the same. Creating a learning atmosphere in online is not hopefully expected always. Because it is expected to furnish learning materials/study materials just by uploading and down loading aligned assignment. Acquiring and attaining knowledge is promoted by the teacher with his unique skills and methods. Because learning mind is common in every student. It is different from student to student. But in the e-content and e-learning the online teacher is expecting the common mindset, he goes on discharging the created content.

Content is ready made either sometimes by the teacher himself or by others. Most of the time content is downloaded and explained. Sometimes it is just inserted in the power point and read out by practice. It is just corresponding the e-content through the e-tools.

In the off line learning there is possibility of creating required content there itself and he can modify and simplify and explain or describe with living and relevant illustrations to the students. There is a flexibility in teaching and learning process. The teacher and learner can enjoy in learning class room content. There is certainly a delight in discussion and interaction. The personality of the teacher and learner is developed. Emotional attitudes and behavior can be changed. The student not only learns content which is taught in the class but also develops his desirable personality. Creating desirable learning atmosphere is not fruitful in online e-learning. With his personality the off line teacher can inspire the student and sometimes the teacher himself can be inspired. Teaching and learning is a correspondence between living minds but like material products. Content of the class room can be forgotten after many years of learning but the influenced personality of his teacher at any level can be living with him.

However, e-content and e-learning supplements and it is a e- source for his reference and extending his extension of knowledge. It is useful a secondary source for reference to strengthen his acquired content. Hence, e-learning can be useful for higher learning and research scholars for reference to justify the objectivity of his research. Specially for review of literature, e-content and e-source is most useful. Because, sometimes a research scholar cannot get sufficient primary and secondary source directly. But after downloading the related materials and getting print as a hard copy, he studies and do some reference. Thus, nothing is useless. It is useful to the volunteer and self-motivated student at higher level. Anyhow, e-learning with e-content is recommended by the government and as it is policy issue it should be followed but not so effective mode of learning.

LMS KARNATAKA is an attempt and experiment for promoting e- learning launched by Government of Karnataka in the year 2019-2020. It is implemented in 2020-2021. It is recommended to introduce in the Department of Colligate Education and Technical Education in Karnataka. The idea of LMS is to fill the blank of learning during pandemic situation at under graduation level. LMS implies LEARNING MANAGEMENT SYSTEM. It is monitored by the Commissioner for Higher Education in Karnataka. The action plan of LMS is different from University to university. According to the syllabus of universities the nodal officer/ coordinator at District level from Government First Grade College is appointed. He is to work according to the guidance of commissioner and the immediate officer at division coordinate the content developers. In the beginning the task of LMS designed at university head. Board of studies in the university at under graduate level selected the Moderators, subject experts and content developers from the government colleges and got approval of the commissioner. The teams in different disciples develop the e-content and upload it to the LMS link and log in id is created and provided to each students across Karnataka through the colleges for each papers. Then, it is guided to the students by college level LMS coordinator. Thus, developed e-content would be accessible to all students. It is made to access but it depends on available Net and Data of the students. Here, the moderator is the head of the team for a particular assigned paper of the particular university and there is sub-expert and four other content developers. Thus team works according to guidelines given by the department by conducting frequent zoom meeting.

The process of developing e-content by the team is monitored by the university level coordinator/nodal officer. As the Moderator is head of the team of the particular paper. He and subject expert prepare the course plan of the paper. It is being made according to the prescribed syllabus of the university. As per the allotment of class hours distributed by the Board of Studies, the Moderator prepare the course plan. And he calls the online meeting to his team and discuss the action plan. He also allotted the sessions to

each content developers and supervised the assigned task in the team and update google form and dash board every day. It is again observed and supervised by the university level coordinator.

For each session of the unit of the syllabus should have a Study Material, PPT, Video and Multiple Choice Questions. So the content developer first prepares study material. It is followed by mcqs. And on the same content PPT is prepared and finally video recorded on the PPT. and it is edited by the Moderator and subject expert and it is uploaded to You Tube and get the link for each session. According to the serial number of each session MS, PPT, VIDEO LINKS AND MCQs are organized and the set is saved in a particular folder and finally with log in id upload to the LMS Karnataka link. This is how Department of Collegiate Education and Technical Education has made an attempt in the light of e-learning accessible to all at under graduate level during pandemic.

For the year 2020-2021 the department has modified LMS task force as Central Level team and college lever team. In the central e-content development there are only two experts work for a paper. It an individual team. It is designated as Central e-content developer and an associate e-content developer. They only prepare the content, update and upload SM, PPT, VIDEO and MCQs accordingly. The content can be shared to other universities. Because it is integrated e-content developed to access all students of the state only if it is related syllabus or for extensive reference. At college level there is Teacher E-content. It is developed by each teacher according to syllabus and time table allotted in the college by the individual department. It is supervised by the principal and he should update progress report to the department and to the concerned university. Thus LMS-KARNATAKA has certainly made an attempt to access the e-content for e-learning. In order to equip the e-learners Government of Karnataka has provided Tabs for each students through the colleges. It is supervised in each college by the LMS coordinator at college level. In the interest of students particularly during pandemic situations Higher Education Department has stepped into the threshold of e-learning.

Conclusion: -

By observing the above long cited analytical discussion on e-content in e-learning and as I am being a college teacher and learner, I prefer offline teaching by using e-content as supplement for learning. It is popularly known as **Blended Learning**. Nothing can alternate class room teaching. But it is the need of the hour in 21st century to promote e-learning and facilitate mainstream learning. The teachers today have to update themselves to present mode of e-learning. But it is not always relevant and teaching and learning cannot be completed. There is certainly a frustration both for the teachers and students. Because, corresponding always with the e-tools is harmful to the natural delightful learning. Real learning delights. Any kind of work without delight is meaningless and not more effective. *In the true sense an act of teaching should unfold instructions, delight and wisdom to the learners.* There is a kind of transformation in the behavior and attitude of the students. It is possible in the natural learning in the living class room. There is a lively interaction between the teacher and students. There is also a human bond is created between them. The culture of teacher is to cultivate certain healthy qualities and make him good citizen of the country. Therefore, in the light of this there is a social responsibility on the shoulder of the teacher. It is possible in the physical class room. The teacher as a mentor he is enable to mould one's personality. Mere mechanical mode of developing e-content only for the sake of e-learning is not effective enough. But today one cannot completely keep away from e-learning. If the system will alternate offline teaching and if e-learning is imposed and set-aside directing class room teaching, there is harmful future ahead. The student in future days will become blind, psych and physically deformed. Creativity dies in both the teacher and student....

The article is basically developed by the close observations of experienced class room teachers. The opinions are collected by the short interviews conducted for both teachers and students at different levels in Karnataka. It is in the form of analytical mode. Cause and effect technique is followed and

discussions are logically developed and possible solutions are found in findings and it has an implications of new mode of e-learning.

3. E-learning an Overview

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Abstract:

The Covid-19 pandemic has dramatically changed the medical education environment and made the shift to online learning inevitable. Close human contact that was the essence of clinical teaching now looks so distant. The current coronavirus pandemic has forced us to explore non-conventional ways of teaching-learning and assessment. Medical schools will now need to be prepared to train the next generation of digital learners using virtual learning environments. This does not mean that traditional classroom teaching will become obsolete, but there is now an opportunity to use both methods efficiently in a hybrid manner, to make the process of learning efficient and effective. Though online learning has been in vogue for many years now, its application in medical education, especially in India, is rather new. Some teachers have had the experience of online learning – some as facilitators, and others as ‘students’ – during earlier faculty development intervention ; but its use for undergraduate education is a relatively new phenomenon. The ‘theory’ of online learning is more or less the same when compared to face-to-face (f2f) instruction, but there are subtle differences and similarities. The educational cycle, the learning processes, need for interactivity, integration, assessment and feedback are similar in both formats. The use of technology, the spatial distance between the teacher and students, and learner isolation stand out as prominent differences.

Keywords: **Covid -19, Learning goals, Technology utilization**

INTRODUCTION

The Internet as the backbone of e-learning was originally developed in 1969 by the Advanced Research Project Agency of the Department of Defense, United States. Since then the Internet has grown exponentially with the emergence of the World Wide Web (WWW) in 1991. According to one estimate, the Internet reached 50 million people in just four years. In comparison it took 38 years for Radio and 14 years for TV to reach the same number of target audience (Huber, 1997). The Internet and its WWW have simultaneously captured the imagination and interests of so many educators around the world leading to use of terms such as web-based learning, online learning, etc. The interests in the educational use of the web has been driven by higher demands for education and training, shift in the societal economy from labour intensive work to knowledge intensive work, and need for earning while learning.

E-LEARNING: DEFINITIONS

- Web-Based Instruction: It is a “hypermedia based instructional programme which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported”.
- Virtual Learning: “The educational process of learning over the Internet without having face-to-face contact is known as Virtual Learning” (French, et al., 1999). However for some, virtual learning may also include telelearning.
- Online Learning: It is synonymous to web-based learning where learning is fostered via hypertext transfer protocol (http) in Internet or Intranet.
- E-Learning: “The term e-learning covers a wide set of applications and processes including computer-based learning, web-based learning, virtual classrooms, and digital collaboration” (WR Hambraecht+Co., 2000: p.8). However, the term e-learning is becoming more and more accepted

as substitute for web-based learning or online learning, falling in line with ecommerce and e-business.

Advantages and Disadvantages of E-learning

The web-based learning environment provides tremendous advantages over traditional distance learning or classroom-based teaching. Some of these advantages are:

- i) Quick production, alteration and up-dating of course materials;
- ii) Interaction with tutors, course writers, and students to enrich learning;
- iii) location and time independent delivery of course materials;
- iv) Ability to serve a large number of students at a potentially reduced cost;\
- v) Interactive and dynamic learning experience through online assessment tools, simulations and animated learning objects;
- vi) Platform independent delivery, accessible through any computer with a E-Learning simple browser interface;
- vii) Increased learner control through hypertext based presentation of information; and
- viii) Seamless integration of multimedia, enabling instruction designers to prepare quality materials and learners to get a rich learning environment.

Characteristics of a Typical E-learning Solution.

While you will learn about the various components of e-learning and technologies used in this unit, it is important to give a brief outline of the typical characteristics of e-learning solutions available in the market. The web-based technologies available in the market provides an integrated solution for various task of teaching and learning that can be performed on the web.

These systems provide::

- a standard way to organize course material
- have prior evidence of the environment's effectiveness in instructional uses;
- use tools to support basic instructional activities, such as course design, organization of group spaces and personal space, grading and easy integration of multiple media files; and
- models to support learning strategies that involve collaborative learning, knowledge building and multiple representations of ideas and knowledge structures.

INSTRUCTIONAL DESIGN FOR E-LEARNING

E-learning can be delivered in three modes:

- (i) using the web as a supplement to face-to-face instruction,
- (ii) using the web in a mixed mode with face-to-face instruction or distance learning scenario, and
- (iii) using web-based instruction as completely online with no face-to-face student or student-teacher interaction.

It is the last category that is more challenging to educators and instructional designers. It allows training and learning opportunities to reach the learners just in time. The environment is beneficial for both learners and teachers, as it can facilitate shift from instructivist to constructivist learning paradigm that represent "studentdirected learning" rather than "teacher-directed learning".

The constructivist-learning paradigm believes.

- Objectives are written with student collaboration based on the learner's needs.
- All the learners are unique and bring their own social understanding to learning context;
- Problems are solved when they have personal relevance to learners
- Knowledge is individually and socially constructed;
- Learning can only be measured through direct observation and dialogue.

Constructivist learning encourages learners to express their conception of an idea, to reflect on the opinions of others or on feedback provided about their ideas, and to revise their initial conception to

account for new opinions and feedback. All these three activities work in cyclic fashion – expression, reflection and revision..

Instructional Strategies:

In fact, a suitable instructional strategy on the web is integration of the best components of all the different learning paradigms, which will include information presentation, guidance, collaboration, drill and practice, reflection, feedback, articulation and creation, discovery, decision-making, and assessment. The following are some of the instructional strategies that can be used in e-learning.

- i) Information presentation
- ii) Decision-making
- iii) Guidance and Collaboration
- iv) Drill and Practice
- v) Feedback
- vi) Reflection
- vii) Articulation and Creation
- viii) Discovery
- ix) Assessment

MEDIA AND TECHNOLOGIES IN E-LEARNING

The Internet, the backbone of online learning, is an interlinked network of networks that allows computers worldwide to connect to it, and to communicate or exchange data with each other. The Internet is based on Transmission Control Protocol - Internet Protocol (TCP/IP); information is routed in “packets” according to TCP/IP specifications. The WWW works on the Internet through its own HyperText Transfer Protocol (HTTP), an interactive platform that uses the following media:

- Text, plain or formatted
- Hybrid text/graphics documents, such as Adobe Acrobat
- Colour images, still and animated or videos
- Sound • 3-D models
- Interaction or simulation using JavaScript, VB Script, ActiveX

The WWW also supports real time, text-based chat and audio/video communication. The basic unit of the WWW is a web page, consisting of one or more of the media types above. A set of connected pages constitutes a website. Clicking on links in each page accesses other pages on a site.

Online Media Creation Tools

1. Text: Preparing text-based learning material is relatively easy and can be done with only computer keyboarding skills. Text-based materials are also easily accessed and understood by learners. A typical web page is prepared using HyperText Markup Language (HTML) instructions; HTML files can be created using common word processing software, such as Microsoft Word. The WWW also supports other text formats, such as Rich Text Format (.RTF) or Adobe Acrobat’s Portable Document Format (.PDF), which can be embedded within HTML-coded pages.
2. Graphics and images: Graphics and images are useful to clarify or illustrate concepts in an online learning programme. Graphics and images can be created, or digitised using a scanner and imported into a computer using specific image manipulation software, such as Adobe PhotoShop or Adobe Illustrator. Images are then imported into an HTML web page.
3. Audio and video: Audio and video are useful to show practical and real life activities. Hazardous and costly experiments can be captured using video for presentation on the WWW, for repeated use. With new digital audio and video progressive download and streaming capabilities, audio and video can be transmitted directly over the Internet although transmission quality still depends on the learner’s network connection and available bandwidth.
4. Animation and 3D-models: Animations and 3-D models can be very powerful in teaching and learning spatial applications, but need high bandwidth to display well. The WWW animation

standard is animated GIF files, although Java, Shockwave and Macromedia Flash are also used. The standard for 3-D modelling is Virtual Reality Modelling Language (VRML). A web browser needs a VRML plug-in to display 3-D models properly. Designing quality animation and 3-D models also requires a high degree of skills and experience in the appropriate software.

Communication Tools

Internet communication is either asynchronous (email, mailing lists, bulletin boards) or synchronous (text-based chat, audio chat, videoconferencing). Web-based communication for teaching and learning has been popularised by the constructivist-learning paradigm.

Electronic mail, Mailing lists, Discussion boards, Cha.

TOWARDS VIRTUAL EDUCATION

As the e-learning practices in educational institutions and in the business and industry grew, virtual institutions started emerging to provide education and training opportunities. While analyzing the developments of Virtual Education, identified the forces driving and opposing the development of virtual education in the world. These are:

Driving Forces

- The increasing capacity, flexibility, and suitability of information and communication technologies to educational applications
- The growth of knowledge and obsolescence of much of what was previously learned places an ever-increasing pressure for lifelong learning, and with diverse personal circumstances, they require flexible access-to-learning opportunities and venues such as the home, the work place, the community learning centre, etc.
- Many institutions, particularly in Europe and North America, perceive that the application of information and communication technologies will enable them to increase their market share in an environment that is increasingly competitive.
- There is also a tendency amongst institutions to be seen as doing the “right thing” by starting virtual initiatives to be in the news.
- Policy makers and administrators believe that the development of virtual delivery models will reduce costs, increase productivity, and enable expansion without cost increases.

Opposing Forces

- No access or prohibitive access to information and communication technology.
- Copyright restrictions on the use of instructional products and materials do not promote sharing through collaborative inter-institutional arrangements or through broad international delivery models
- The cost of initial hardware, operating software, and instructional material development typically require capitalisation funds that far exceed the resources of most institutions. In some cases the problem is dealt with through internal reallocation of funds (e.g., from library acquisitions to technology support).
- There is also a widespread practice of passing these costs on to the student through tuition fee increases or special levies.
- Faculty unwillingness to adopt new information and communication technology due to lack of training and adequate technology resources.
- Transfer and accumulation of credit from amongst many institutions do not yet have a formal structure in many countries.

Virtual Education in India

The National Programme on Technology Enhanced Learning (NPTEL) started in 2007 is an initiative of the Ministry of Human Resource Development, Government of India and a joint venture of the Indian Institute of Technology and Indian Institute of Science. The main objective of the program is to improve the quality of engineering education in the country by developing curriculum based video and Web-

courses. In the first phase of the project, 129 Web courses and 110 video courses have been developed. Each of these courses consists of contents equivalent to 40 lecture hours in text, graphics, animation, and video. The video programs developed are available through YouTube (<http://in.youtube.com/iit>). Consequently, they are available as e-learning resource not just for the people of India, but for the world. Under the Eleventh Five Year Plan, the Ministry of Human Resource Development, Government of India has initiated the National Mission on Education through Information and Communication Technology (NMEICT). Some of the major mission objectives related to e-learning are:

- Any-time availability of desired knowledge at appropriate levels of comprehension to all for self paced learning
- Extensive leveraging of the advancements in the field of ICT for taking the knowledge resources to the door steps of the learner
- Use e-learning as an effort multiplier for providing access, quality and equality in the sphere of providing education to every learner in the country
- Provide for Connectivity & access devices, content generation, personalization & mentoring, testing & certification and encouragement of talent
- Bringing efforts of different interested agencies working in the field of elearning under one umbrella and establishing logical linkages between various activities
- Spreading Digital Literacy for teacher empowerment and encouraging teachers to be available on the net to guide the learners
- Conversion of existing educational tapes into indexed formats compliant with the internationally accepted standards such as SCORM (Sharable Content Object Reference Model)
- Creating a clearinghouse cum rating agency for various web based learning contents for guiding Indian learners • Development of pedagogical techniques based on edu-entertainment.
- Customisation of Open Source Tools etc.
- Providing e-Learning support to every higher education institution for technology assisted learning
- Setting up virtual labs and lab centers and finishing schools for quality enhancement.
- Standardisation & Quality Assurance of e-Content.

CONCLUSION

E-Learning is developing fast, and refers to the use of networked information and communication technologies for the delivery of teaching and learning. There are interchangeable terminologies used in describing e-learning. Because of the numerous advantages, elearning is being widely used by educationists world over. There are various advantages, but the limitations of elearning due to poor access to technology, bandwidth, cost, faculty time and security related issues are more important and hinder the overall process.

References :

1. Byun, Hoseung, Paul; Hallett, Karen and Essex, Christopher (2000) Supporting Instructors in the creation of online distance education courses: Lessons Learned, *Educational Technology*, 40(5): 57-60 Collis,
2. B. and Moonen, J. (2001) *Flexible learning in the digital world: Experiences and expectations*, London: Kogan Page Farrell, G. M. (1999). *The Development of Virtual Education: A Global Perspectives*, Vancouver: The Commonwealth of Learning. French,
3. Deanie; Hale, Charles; Johnson, Charles and Farr, Gerald (Eds.) (1999) *Internet-based Learning: An introduction and framework for higher education and business*, London: Kogan Page Goldberg, Murray W.; Salari, Sasan and Swoboda, Paul (1996)
4. Harasim, Linda (1999) *A Framework for Online Learning: The Virtual-U*, *Computer*, 32(9): 44-49. Huber, P (1997) *The rise of the Internet*, *Inside Multimedia*, 167, 11 May. p.12

5. Hung, D. and Nichani, M. (2001) Constructivism and e-learning: Balancing between the individual and social levels of cognition, *Educational Technology*, 41 (2), 40-44 Jolliffe, A., Ritter, J. and Stevens, D. (2001) *The Online Learning Handbook: Developing and Using Web-Based Learning*, London: Kogan Page.
6. Khan, Badrul H. (1997) 'Web-based instruction (WBI): what is it and why is it?' In Khan, Badrul H.(Ed). *Web-based instruction*, Eaglewood Cliffs, NJ: Educational Technology Publication, p5-18
7. McCormack, Colin and Jones, David (1998) *Building a web-based education system*, New York: Wiley Computer Publishing. Mishra, Sanjaya (2002). A design framework for online learning environments, *British Journal of Educational Technology*, 33(4), 493-496.
8. Mishra, Sanjaya (2009). E-Learning in India, *International Journal on E-Learning*, 8 (4), 549-560. Moore, M. G. (1989) Editorial: Three types of interaction, *American Journal of Distance Education*, 3 (2): 1-16. Oliver, Kevin M. (2000) Methods for developing constructivist learning on the web, *Educational Technology*, 40(6): 5-18
9. Paulsen, M.F. (1997) 'Teaching method and techniques for computer mediated communication', Paper presented at the 18th ICDE World Conference: The New Learning Environment, A Global Perspectives, ICDE, Pennsylvania State University.
10. Piskurich, G.M. (2006). Online learning: E-learning. Fast, cheap, and good, *Performance Improvement*, 45 (1), 18-24. Ryan, Steve; Scott, Bernard; Freeman, Howard and Patel, Daxa (2000) *The Virtual University: The Internet and resource-based learning*, London: Kogan Page. Starr.
11. Robin M. (1997) *Delivery instruction on the World Wide Web: Overview and Basic Design Principles*. *Educational Technology*, 37(3): 7-15 Swartz, Richard (2001) New technologies for automated essay test scoring, *Techknowlogia*, January/February: 26-29.
12. WR Hambercht&Co (2000) *Corporate E-Learning: Exploring a New Frontier*, Retrieved on [03/19/2001] from WWW: http://www.wrhambrecht.com/research/coverage/elearning/ir/ir_explore.html

4. ROLES OF E-LEARNING IN HIGHER EDUCATION

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ABSTRACT

The vast uses of the Internet and the increasingly widespread access to the latest technologies have become the main reason for the development of remote teaching services. In an effort to modernize the educational offer, higher education institutions placed, in their programs of studies, different possibilities of teaching using distance learning. This trend is already very common in the world's largest universities. The Polish higher education system, keeping the pace with current trends, has created a legal foundation for the use of modern forms of teaching. The current approach to teaching is also a response to the offer of leading universities of the world and thus the search for competitive advantage in the international educational market. The aim of the article is to present main objectives of the teaching method of e-learning, and at the same time, to present the legal status and the rules for the use of e-learning in Polish higher education. The Internet is a technological development that has the potential to change not only the way society retains and accesses knowledge but also to transform and restructure traditional models of higher education, particularly the delivery and interaction in and with course materials and associated resources. Utilizing the Internet to deliver eLearning initiatives has created expectations both in the business market and in higher education institutions. Indeed, e-learning has enabled universities to expand on their current geographical reach, to capitalize on new prospective students and to establish themselves as global educational providers. This paper examines the issues surrounding the implementation of e-learning into higher education, including the structure and delivery of higher education, the implications to both students and lecturers and the global impact on society.

KEYWORDS: e-learning, remote teaching, Moodle, learning platform, online teaching

1. INTRODUCTION:

E-learning is being introduced as a fundamental part of the student learning experience in higher education. It is no longer core business only for those universities with a mission for distance education; its affordances are being systematically integrated into the student learning experience by predominately campus-based universities. Evidence of this widespread uptake can be seen in reputable research journals and on the websites of national bodies responsible for leading learning and teaching in higher education. Examples of these include the websites of the Higher Education Academy in the UK, USA and the Australian Learning and Teaching Council in Australia. While we can recognize sustained research interest into e-learning in the student experience in higher education over the last two decades (Goodyear, 1984) more focused explorations into how key aspects of e-learning are associated with the students' face-to-face experience of learning are relatively sparse.

There is comparatively little research into how both online and face-to-face contexts play a relational role in helping students achieve their learning outcomes. A growing use of e-learning to support face-to-face experiences presupposes there is an understanding of what the key aspects of e-learning are, how they are internally constituted and externally associated with each other and how they are related to key aspects of the face-to-face experience. Without these fundamental understandings, the quality of the

student experience of learning comprising online and face-to-face experiences is likely to be put at risk. There is a need for more evidence-based research to inform the ways we think about creating and designing such experiences so that the quality of learning is likely to be enhanced.

E-Learning is construed in a variety of contexts, such as distance learning, online learning and networked learning (Wilson 2001). In the context of this paper all of these instances will be considered to describe learning that utilizes information communications technology (ICT) to promote educational interaction between students, lecturers and learning communities (Holley 2002). Volery (2000) argues that the fast expansion of the Internet and related technological advancements, in conjunction with limited budgets and social demands for improved access to higher education, has produced a substantial incentive for universities to introduce eLearning courses. Continues that if universities do not embrace eLearning technology that is readily available, they will be left behind in the pursuit for globalization. Ribiero (2002) argues that if universities are to maximize the potential of eLearning as a means of delivering higher education, they must be fully aware of the critical success factors concerned with introducing online models of education.

2. DEFINATIONS OF E- LEARNING:

E-learning is a multidimensional concept that receives attention from different perspectives [1, 2]. Conceptual ambiguity can result in biased in-depth studies and policy failures. This section gives a comprehensive view of the definitions of e-learning derived from past studies, so as to establish a scope of the concept of e-learning, which would be suitable for proposing policies on e-learning development in Vietnam. E-learning is the abbreviation for electronic learning, which refers to the learning and training based on information technology and communication [2, 3]. The very rapid development of e-learning over the past four decades along with the interference of technology and education has entailed a variety of e-learning definitions. While in a very broad sense some see that “e-learning is simply understood as digitized teaching and learning” [4]. Other definitions narrow down or emphasize certain aspects, for instance e-learning are taking an online course through using a modem, wired or wireless connection to access learning materials from computers, phones, or handheld devices [5]. Warnings about the diversity and possibility of confusion and consequences came early. “Many educational institutions are not sure what e-learning is... E-learning-related terms and definitions can be confused... Discussion on e-learning strategies would be unfeasible in default of a common definition.” [6]. Therefore, it is necessary to shed light on e-learning definitions and to gain a quite broad sense of e-learning, in order to: (i) Avoid unnecessary arguments as ones start out on different conceptual basis; (ii) Ensure that further studies cover relatively comprehensive aspects of the subject matter; and (iii) Lay the foundation for developing and accomplishing policies related to e-learning. Sangrà, et al. [7] identified categories of e-learning definitions as follows:

2.1 Technology-driven definitions:

This category emphasizes the importance of technology application over other factors [8]. For example: (i) E-learning is the use of electronic means for various learning purposes. It varies from an auxiliary function in conventional classrooms and replaces completely face-to-face learning by online contact [9]; (ii) E-learning is an online course empowered by a modem, wired or wireless connection that allows access to learning materials from a computer, phone, or handheld device [10]; (iii) E-learning is distance learning based on remote access to learning resources [11]; and (iv) E-learning is the use of technology in delivering training and coaching programs.

2.2 Delivery-system-oriented definitions:

These definitions present e-learning as a means of accessing knowledge (through learning or teaching) and focus on the accessibility of resources rather than results [12]. For example: (i) E-learning is the provision of education (all educational activities associated with instruction, teaching and learning) via diverse electronic means [12]; (ii) E-learning is a form of online education defined as the delivery of education and training (self-study or real-time) via the internet and end-user devices [13]; and (iii) E-

learning is the provision of educational, training or learning programs via electronic means [14]. It is defined as the education or learning delivered or carried out via web technology [15].

2.3 Communication-oriented definitions:

Communication-oriented definitions see e-learning as a tool of communication, interaction, and collaboration. For example: (i) E-learning is an educational method that uses computer-aided communication systems as a medium for communication, information exchange, and interaction between learners and instructors [16]; (ii) E-learning is learning based on information technology and communication that exists in the educational interaction between learners and content, between students and instructors as well as among students via web [17]; and (iii) E-learning is learning supported by technology and digital content, which contains various patterns of interaction including online interaction between learners and teachers or among learners.

2.4 Educational-paradigm-oriented definitions:

Educational-paradigm-oriented definitions typically underline e-learning as a new method of education or improvement of the existing educational model [10]. For example: (i) E-learning is the use of new multimedia technologies and the Internet to enhance learning quality by supporting access to resources and services, as well as distance exchange and cooperation [18]; (ii) E-learning refers to the broad combination of processes, contents, and infrastructure using computers and networks in scaling up and/or improving partly or substantially the learning value chain, including management and delivery [19]; (iii) E-learning is defined as the application of information technology and communication to help learners improve their learning [20]; Sangria, et al. [7] argued that all four of these definitions were important and arranged them in order of descending importance as follows: educational paradigm, communication, delivery system, and technology.

Thus, an inclusive definition of e-learning is: E-learning is a method of teaching and learning that represents the whole or part of the applied educational paradigm, based on the use of electronic means and devices as tools for improvement of access to teaching, communication, and interaction, while facilitating a new way of understanding and developing learning [21].

3. ROLE OF E-LEARNING IN HIGHER EDUCATION:

This section delves into the roles of e-learning, including distance, formal, and open education, in higher education.

3.1 E-Learning in distance higher education:

Distance education is an education process where most of the teaching is done indirectly, which means that the communication between teachers and learners is primarily enabled by artificial means such as printed materials or electronic means [1, 22]. Distance education has experienced four stages of technological development: (1) Printing (paper materials), (2) Broadcasting and television, (3) Multimedia; and (4) the Internet. E-learning is the most recent and developed stage technology development in distance education. The application of information technology and communications at this level advances remote higher education as follows: (i) E-learning facilitates a significant improvement of distance education through interactive and collaborative activities in learning as well as learner personalization [23]; (ii) Thanks to a powerful information technology infrastructure, the advantages of e-learning-based distance education can be provided on a mass scale, cut down costs, and facilitate learners better compared to the earlier stages of distance education; (iii) Government confidence has increased, which has led to more incentive policies on distance education, in general, and distance higher education, in particular [24].

However, many challenges have been recorded in the implementation of e-learning-based distance education, among them: [25]: (i) Many teachers are not willing to participate in e-learning because they lack digital competence and foreign language proficiency [26-28]. Moreover, they are concerned about intellectual property and are anxious about trying new things. In addition, the lack of training in teaching

design skills and study instruction in the e-learning environment may result in sub-quality courses which discourage distance learners; (ii) For learners, difficulties stem from the information technology application ability of remote learners, limited language capability with incompletely translated systems as well as poor skills in information exploration via the internet, leading to poor performance in the courses [29]. Students may drop out halfway without the proper support from universities and teachers. (iii) Universities face several challenges, too:

- E-learning strategies and policies must be adapted to new contexts, which creates financial and personnel pressure [30].
- Infrastructure investment requires generous sources of funding both publicly and privately. State financial support has often been limited, while cooperation with private businesses requires difficult to negotiate win-win agreements.
- Actions must be taken to convince teachers and incentivize them to participate in setting up courses and guiding learners through the e-learning process.
- The lack of regulations on e-learning leads to difficulty in quality control [31].
- Getting social acceptance of distance education quality and qualifications in Vietnam.

3.2 E-Learning in formal higher education

Formal higher education is the principal task of most universities in the world. Universities have the duty to train national and international human resources, to bring about new knowledge through scientific and technological activities, and have international cooperation and community association [32]. The world's advances in the fields of technology, economy, and society in the 21st century have created important tasks for universities. E-learning is an important solution for the achievement of new higher education goals [33]: (i) First, it enables the flexibility in training by removing the spatial and temporal obstacles while decreasing costs. This reinforces the need for universities to ensure equal access to higher education and diversification of training forms. (ii) Second, an advantage of e-learning is that training programs can enhance professional competence or assist in the transformation of jobs [34]. These programs can keep learners current in a dynamic economic context, thus meeting the world's ever-changing demands. (iii) E-Learning helps learners build their digital competence, and lifelong learning skills, as well as the ability to grasp rapid changes in technology and society while adapting to the dynamic of globalization and technological changes [35].

3.3 E-learning benefits universities in several ways, including:

(i) It optimizes management methods: E-learning makes examinations and assessment of teachers, learners, and training institutions' competence fair and transparent [36]. This facilitates the educational institution to make timely support measures and promote and improve quality and effectiveness. (ii) Learning resource management is strengthened: The application of learning management systems provides new chances to manage courses and provide learning materials as well as learning instruction in a quick and effective manner [4]. (iii) Increases enrollment: A sharp increase in enrollment is one of the first benefits that educational institutions gain from online training or e-learning, thanks to its openness. Online courses and programs target all students and overcome all geographic barriers. The implementation of online training programs has been drawing attention from new students of all ages and in all parts of society [37]. (iv) Promotes the reputation of universities: Online training deployment promotes the reputation of educational institutions at a local, regional, and on a global scale [38]. Many major universities around the world have become a symbol of the online training era when their online courses or programs, infrastructure, policies, etc., are consulted and applied by many other universities. This escalation of reputation can be attributed to the efforts to build partnerships among educational institutions, companies, and groups. For teachers, the application of e-learning in teaching and setting up

learning management systems has aided their teaching and improved their planning and lesson preparation [39]. In addition, it has stimulated teachers to have a more positive attitude about work and improves the effectiveness of the management of the student learning process [40].

In particular: (i) Productivity increases. Teachers' performance is enhanced by the use of e-learning in teaching as well as learning management systems for training. Martín-Blas and Serrano-Fernández [41] found that about 56% of teachers said their classes were better organized when they combined training methods. (ii) Access to endless and open resources of knowledge. The job market has become fiercely competitive in the modern globalized society, hence the need for lifelong learning. This prompts individuals not only to improve their competitiveness to meet their work needs but also to broaden cultural and social knowledge. Therefore, the need for knowledge improvement is not only for students but teachers, too. E-learning allows teachers to access and tap a new knowledge-sharing model that emphasizes innovative learner-centered teaching methods [42]. (iii) Improve and innovate teaching methods. The transformation from traditional teaching to online teaching usually requires a change in the course content and teaching methods [4]. That is why teachers and course guidance designers need to spend more time researching the course structure and knowledge delivery methods that promote interactivity, and learner-centeredness. E-learning adoption in teaching enables the teachers to improve their professional qualifications and their technical knowledge and skills. (iv) E-learning is a time-saver [43].

E-learning's meaningful benefits for teachers can be measured by the reduction of time consumption and workload. For example, using a learning management system allows teachers to compile tests and questions quickly by using the banks of preset or continuously expanded questions or situations. The learning management system also enables the automation of electronic lecture preparation and delivery to students. E-learning's practical benefits also include the automatic and speedy students' learning process supervision, scoring and evaluation, and reuse or production of new courses based on available data. (v) Access to new training methods: E-learning-based teaching is seen as a means to refresh and sharpen one's expertise, thereby turning professional development into a daily habit [44]. Moreover, the biggest benefit of e-learning is that teachers can fully concentrate their capabilities on pedagogical functions. The preparation of electronic lectures and oversight of students' academic progress with the help of information technology makes education an innovative and contemporary industry. While its significance has been admitted by most educators, e-learning faces many challenges of challenges. For example, predicaments still incur during e-learning applications; and, often there is a gap between the perception, theory, and practice of policymakers, education managers, teachers, and students [45].

Noteworthy issues include: (i) Low participation rate: E-learning has shortcomings in activities that require specific interactions that can only be done in traditional classes, for example, training soft skills, communication skills, or presentation skills. In these courses, body language, facial expressions, face-to-face conversations, and experience sharing are vital to the success of the learning process and help students reach their goals [46]. (ii) Student attitudes: A certain percentage of students have learning styles that do not fit e-learning. These are students who need direct experience and interaction with the teacher rather than a computer [47]. Moreover, e-learning requires high self-study awareness. Further, the influence of traditional learning in e-learning, are among the most challenging barriers. (iii) Issues with thinking: Attitudes and awareness of teachers and students in the application of e-learning affect the success of training programs [48].

In fact, quite a few researches revealed one of the biggest threats to information technology application and e-learning projects in training was the ability to stand the changes of stakeholders. Both teachers and students are reluctant to integrate information technology into their daily academic activities, and this has remained for many years. Therefore, a change in the approach used by e-learning poses some discomfiture among students [49]. (iv) Technical issues: Technical difficulty is an important

aspect of the implementation and integration of information technology and e-learning in education. Today, as everyone uses electronic devices such as computers, I Pads, and smartphones, their knowledge about electronic devices is defined as the understanding of their characteristics, capabilities, and ability to apply them cleverly and effectively. Confidence in the skills and capabilities to use e-learning training will significantly escalate the use of technology. The more experience with using the Internet and computers users have, the more likely they are to accept and use e-learning [50]. (v) Recognition: One of the most interesting issues in e-learning is the quality achieved. According to accreditation bodies, the standards for assessing online course quality are no different from those applied to conventional programs. However, the biggest challenge is to raise the awareness of educational institutions about the variety of quality standards and to ensure the application in their programs. Further, e-learning programs have not gained recognition and social acceptance in many countries, which poses a great challenge for e-learning deployment [51].

3.4 E-Learning in Sharing Knowledge from Universities to the Community:

Following the vogue of open education and sharing learning resources, several training institutions and universities have uploaded their courses and learning resources online for everyone to use free of charge. This triggered the birth of open educational resource banks. Some for-profit or non-profit organizations built platforms to gather and deliver free online courses via the Internet, forming the concept of massive open online courses (MOOC). MOOC became a world phenomenon in 2013 [52]. MOOCs can be considered as a branch of e-learning that serves the community. They are free online courses and learners can access and learn from anywhere on the learning management system of the MOOCs provider, as long as they have an internet connection. E-learning delivers knowledge from universities to the community through MOOCs: (i) These courses satisfy the learning needs and can increase the welfare of workers in all social sectors. Indeed, technology is driving the movement of workforces across countries and organizations; companies tend to recruit those having global skills and knowledge [53]. Higher demands for skills and knowledge mean higher needs for education. Thanks to MOOCs, learners of all social backgrounds have chances to access knowledge, improve their competence, and increase the ability to find jobs, bridging the gap between and within countries, especially between rural and urban areas, women and men, the poor and the rich, while overcoming the limitations of traditional education. (ii) MOOCs are appraised as able to take a bridging role in society [54].

In particular:

- Breaking the knowledge barrier, building knowledge communities towards lifelong learning: MOOCs can be used to assist people in acquiring basic skills. E-learning empowers those living in remote areas to build connections to other people locally or nationwide and to form learning communities that uphold the awareness of value and knowledge [55].
- Creating opportunities for the unemployed: Another great potential of MOOCs is the ability to retrain and sharpen occupational skills for most workers [56]. As such, they have more employment opportunities and improve their performance, experience new concepts, develop new skills, and find new job opportunities.
- Eliminating the “brain drain.” In developing countries, well-trained, highly-skilled and highly-qualified people often look for jobs in high-income and economically better-off countries. E-learning with a well-developed and globally connected infrastructure can solve this problem and improve domestic knowledge [57].

The things that make MOOCs distinct are the number of subscribers, which can reach millions of learners, and the unlimited participation as well as lack of a registration fee [58]. In addition to providing knowledge, MOOC providers receive support and cooperation of universities as well as

academicians and partners from major companies and organizations. Such partnerships aim to optimize MOOC models by reaching out to more learners, thus considerably reducing the training costs compared to traditional training programs. MOOC providers, however, encounter many challenges on their way to accomplishing their missions [59]. One is the diverse capacity and conditions of e-learning access. Quite a few people are not knowledgeable and skilled enough to use computers or the Internet, while others are without an Internet connection. The quality assurance of MOOCs remains unstandardized. Thus, there has been a narrow social acceptance of MOOCs. The unstable and risky economic model of MOOCs makes them have difficulties in getting investments.

3.5 Effectiveness, Benefits and Downsides of E-Learning:

Through its complex characteristics and diverse features, E-learning can enhance the educational process. However, in order to positively influence collaboration and performance, teachers and students must know how to effectively integrate it into the teaching and learning process. The effectiveness of E-learning is determined, according to Tham and Werner, by three elements: institution—which refers to teachers knowing how to use the tools in order to enhance learning, how to interact with students and create a comfortable learning environment and how to creatively bring students closer and capture their attention, students—that may feel isolated because of the absence of physical colleagues, a case in which teachers should know how to establish connections and relationships with them, and technology [60].

Regarding online learning, comparative studies of face to face and online learning provided results that support its effectiveness in the educational field. Studies showed that when E-learning was applied, students were able to assimilate information as well as, or even better than students studying in the traditional way [61] and that online learning proved to be effective especially in the case of shy, easily intimidated, and slow learning students who usually do not have the courage to speak up and express themselves in the classroom [62]. Different from face-to-face learning, E-learning gained popularity mainly because of its flexibility in delivering education and accessing content and resources [63]. Thus, E-learning has great importance in the E-learning process for it has the ability to improve its quality, offering the possibility to personalize and adapt courses to the needs of the learners. Due to its flexibility, E-learning eliminates barriers of space and time, the user can have access to a wide range of information, it facilitates collaboration, allows students to learn in their own rhythm, it motivates them to interact with their peers, discuss and exchange points of view and ideas [64].

Other studies mention as benefits the fact that online learning is faster, it saves time and money because it does not involve traveling [65], and the uploaded content is consistent and can be easily updated [66]. Furthermore, while studying the perception of students and teachers about E-learning, Al-Dosari found that from benefits such as accessibility, focus on the students, flexibility, and collaboration, participants considered accessibility to be the most significant benefit of online learning [67]. Undoubtedly E-learning has many benefits, but some downsides of it can also be identified. Online learners may easily get distracted, lose focus, or miss deadlines, E-learning is dependent on technology: the internet and computers, which students may not have access to, and interruptions or other system errors may appear during courses [68]. For students, the ability to organize how they study and the amount of time spent on learning can sometimes result in decreased motivation, and the lack of physical interaction and presence of colleagues may determine students to feel isolated. Drawbacks of E-learning can be seen in terms of physical health too. Because they spend many hours seated and in front of a screen, online learners and teachers may develop sight or back problems, and their outdoor activity may be reduced [69].

4. CONCLUSION:

E-Learning is a modern training method based on information technology. It is understood as a learning environment in which the interaction between teachers and learners is supported by information and

communication technology. E-Learning is also an effective and feasible method and helps learners to reduce costs, save time, and are proactive in higher education. In higher education, e-learning has its own problems stemming from its role. This paper points out opportunities and challenges of e-learning in the specific context of many educational forms (i.e. formal, distance higher education, and community), an understanding of which education policymakers need to consider in e-learning development policy in higher education.

REFERENCES:

1. Vuth D, Chan Than C, Phanousith S, Phissamay P, Thi Tai T. Distance Education Policy and Public Awareness in Cambodia, Laos, and Viet Nam. Distance Education [Internet]. Informa UK Limited; 2007 Aug;28(2):163–77. Available from: <http://dx.doi.org/10.1080/01587910701439225>
2. Cantoni V, Cellario M, Porta M. Perspectives and challenges in e-learning: towards natural interaction paradigms. Journal of Visual Languages & Computing [Internet]. Elsevier BV; 2004 Oct;15(5):333–45. Available from: <http://dx.doi.org/10.1016/j.jvlc.2003.10.002>.
3. Rodrigues H, Almeida F, Figueiredo V, Lopes S. Mapping key concepts of e-learning and educational-systematic review through published papers. ICERI2018 Proceedings [Internet]. IATED; 2018 Nov; Available from: <http://dx.doi.org/10.21125/iceri.2018.0649>
4. Govindasamy T. Successful implementation of e-Learning. The Internet and Higher Education [Internet]. Elsevier BV; 2001 Jan;4(3-4):287–99. Available from: [http://dx.doi.org/10.1016/s1096-7516\(01\)00071-9](http://dx.doi.org/10.1016/s1096-7516(01)00071-9)
5. R. McGreal and M. Elliott, "Technologies of online learning (e-learning)," Theory and practice of online learning, p. 115, 2008.
6. D. G. Oblinger and B. L. Hawkins, "The myth about e-learning," Educause Review, vol. 40, no. 4, pp. 14-15, 2005.
7. Vlachopoulos D, Sangrà A, Cabrera N. The Conceptual Framework of e-Learning: A View from Inside. The International Journal of Learning: Annual Review [Internet]. Common Ground Research Networks; 2012;18(4):93–104. Available from: <http://dx.doi.org/10.18848/1447-9494/cgp/v18i04/47573>.
8. Guri-Rosenblit S. "Distance education" and "e-learning": Not the same thing. Higher Education [Internet]. Springer Science and Business Media LLC; 2005 Jun;49(4):467–93. Available from: <http://dx.doi.org/10.1007/s10734-004-0040-0>
9. Markopoulos AP, Dossis MF, Fragkou A, Kasidiaris PD. Gamifying e-learning as a Means of Overcoming Its Deficiencies. Proceedings of the SouthEast European Design Automation, Computer Engineering, Computer Networks and Social Media Conference on - SEEDA-CECNSM '16 [Internet]. ACM Press; 2016; Available from: <http://dx.doi.org/10.1145/2984393.2984394>
10. Cechella CD, Generali da Costa S, Colomby RK. The Evolution of E-Learning in the Global Context and the Influence of Motivational Factors. Advances in Electronic Commerce [Internet]. IGI Global; 132–52. Available from: <http://dx.doi.org/10.4018/978-1-5225-2826-5.ch007>
11. Maselena A, Ayshwarya B, Hashim W, Thanh Nguyen P, Shankar K, Prabowo E, et al. School Now, Pay Later. Revista San Gregorio [Internet]. Universidad San Gregorio de Portoviejo; 2019 Aug 9;1(32):196. Available from: <http://dx.doi.org/10.36097/rsan.v1i32.1075>
12. Moubayed A, Injadat M, Nassif AB, Lutfiyya H, Shami A. E-Learning: Challenges and Research Opportunities Using Machine Learning & Data Analytics. IEEE Access [Internet]. Institute of Electrical and Electronics Engineers (IEEE); 2018;6:39117–38. Available from: <http://dx.doi.org/10.1109/access.2018.2851790>
13. Lee T, Lee J. Quality assurance of web based e-Learning for statistical education. Compstat 2006 - Proceedings in Computational Statistics [Internet]. Physica-Verlag HD; 429–38. Available from: http://dx.doi.org/10.1007/978-3-7908-1709-6_34

14. Li FWB, Lau RWH, Dharmendran P. A Three-Tier Profiling Framework for Adaptive e-Learning. *Lecture Notes in Computer Science* [Internet]. Springer Berlin Heidelberg; 2009;235–44. Available from: http://dx.doi.org/10.1007/978-3-642-03426-8_30
15. Liao H-L, Lu H-P. The role of experience and innovation characteristics in the adoption and continued use of e-learning websites. *Computers & Education* [Internet]. Elsevier BV; 2008 Dec;51(4):1405–16. Available from: <http://dx.doi.org/10.1016/j.compedu.2007.11.006>
16. Bermejo S. Cooperative Electronic Learning in Virtual Laboratories Through Forums. *IEEE Transactions on Education* [Internet]. Institute of Electrical and Electronics Engineers (IEEE); 2005 Feb;48(1):140–9. Available from: <http://dx.doi.org/10.1109/te.2004.837045>
17. M. C. Gonzalez-Videgaray, "Assessment of Student and Teacher's Reaction in a Blended Learning Model for Higher Education," *relieve-revista electronica de investigacion y evaluacion educativa*, vol. 13, no. 1, pp. 83-103, 2007.
18. Chen Y, Xinghong K, Junjun L, Yanxiang W. A Blending E-Learning Model for Digital Electronic Technology Teaching. 2010 International Conference on E-Business and E-Government [Internet]. IEEE; 2010 May; Available from: <http://dx.doi.org/10.1109/icee.2010.1340>
19. C. Aldrich, *Simulations and the future of learning: An innovative (and perhaps revolutionary) approach to e-learning*. John Wiley & Sons, 2003.
20. Ellis RA, Ginns P, Piggott L. E-learning in higher education: some key aspects and their relationship to approaches to study. *Higher Education Research & Development* [Internet]. Informa UK Limited; 2009 Jun;28(3):303 – 18. Available from: <http://dx.doi.org/10.1080/07294360902839909>
21. Dahdouh K, Dakkak A, Oughdir L, Messaoudi F. Big data for online learning systems. *Education and Information Technologies* [Internet]. Springer Science and Business Media LLC; 2018 May 30;23(6):2783–800. Available from: <http://dx.doi.org/10.1007/s10639-018-9741-3>
22. Maselena A. General theoretical and philosophical aspects of modern education. *Revista San Gregorio* [Internet]. Universidad San Gregorio de Portoviejo; 2019 Aug 9;1(32):212. Available from: <http://dx.doi.org/10.36097/rsan.v1i32.1079>
23. Abrami PC, Bernard RM, Bures EM, Borokhovski E, Tamim RM. Interaction in distance education and online learning: using evidence and theory to improve practice. *Journal of Computing in Higher Education* [Internet]. Springer Science and Business Media LLC; 2011 Mar 2;23(2-3):82–103. Available from: <http://dx.doi.org/10.1007/s12528-011-9043-x>
24. KICKERT W. *Steering at a Distance: A New Paradigm of Public Governance in Dutch Higher Education*. Governance [Internet]. Wiley; 1995 Jan;8(1):135–57. Available from: <http://dx.doi.org/10.1111/j.1468-0491.1995.tb00202.x>
25. Mahlangu VP. The Good, the Bad, and the Ugly of Distance Learning in Higher Education. *Trends in E-learning* [Internet]. InTech; 2018 Aug 1; Available from: <http://dx.doi.org/10.5772/intechopen.75702>
26. Wastiau P, Blamire R, Kearney C, Quittre V, Van de Gaer E, Monseur C. The Use of ICT in Education: a survey of schools in Europe. *European Journal of Education* [Internet]. Wiley; 2013 Feb 17;48(1):11–27. Available from: <http://dx.doi.org/10.1111/ejed.12020>
27. Maselena A, Ayshwarya B, Hashim W, Thanh Nguyen P, Shankar K, Prabowo E, et al. School Now, Pay Later. *Revista San Gregorio* [Internet]. Universidad San Gregorio de Portoviejo; 2019 Aug 9;1(32):196. Available from: <http://dx.doi.org/10.36097/rsan.v1i32.1075>
28. Waheed, H.J., Abduljalil, M., Alkuraishy, H. Estimation of apolipoprotein A, apo B, apo E and some biochemical markers in type 2 diabetic patients in Iraq(2018) *International Journal of Pharmaceutical Research*, 10 (3), pp. 493-498.
29. Alexander S. E-learning developments and experiences. *Education + Training* [Internet]. Emerald; 2001 Jun;43(4/5):240–8. Available from: <http://dx.doi.org/10.1108/00400910110399247>
30. De Freitas S, Oliver M. Does E-learning Policy Drive Change in Higher Education?: A case study relating models of organisational change to e-learning implementation. *Journal of Higher Education*

- Policy and Management [Internet]. Informa UK Limited; 2005 Mar;27(1):81–96. Available from: <http://dx.doi.org/10.1080/13600800500046255>
31. Bouhnik D, Marcus T. Interaction in distance-learning courses. *Journal of the American Society for Information Science and Technology* [Internet]. Wiley; 2006;57(3):299–305. Available from: <http://dx.doi.org/10.1002/asi.20277>
 32. A. Sursock, H. Smidt, and H. Davies, *Trends 2010: A decade of change in European Higher Education*. European University Association Brussels, 2010.
 33. P. Boezerooij, M. v. d. Wende, and J. Huisman, "The need for e- learning strategies: higher education institutions and their responses to a changing environment," *Tertiary Education and Management*, vol. 13, no. 4, pp. 313-330, 2007.
 34. Svensson L, Ellström P, Åberg C. Integrating formal and informal learning at work. *Journal of Workplace Learning* [Internet]. Emerald; 2004 Dec;16(8):479–91. Available from: <http://dx.doi.org/10.1108/13665620410566441>
 35. A. Kukulska-Hulme, "Learning Cultures on the Move: Where are we heading?," *Journal of Educational Technology & Society*, vol. 13, no. 4, pp. 4-14, 2010.
 36. Salmon G. *E-Tivities*. Routledge; 2004 Aug 2; Available from: <http://dx.doi.org/10.4324/9780203646380>
 37. Anshari M, Alas Y, Guan LS. Developing online learning resources: Big data, social networks, and cloud computing to support pervasive knowledge. *Education and Information Technologies* [Internet]. Springer Science and Business Media LLC; 2015 May 21;21(6):1663–77. Available from: <http://dx.doi.org/10.1007/s10639-015-9407-3>
 38. S. S. Adkins, "The 2016-2021 worldwide self-paced eLearning market: The global eLearning market is in steep decline," *Ambient Insight*, 2016.
 39. Rodrigues H, Almeida F, Figueiredo V, Lopes SL. Tracking e-learning through published papers: A systematic review. *Computers & Education* [Internet]. Elsevier BV; 2019 Jul;136:87–98. Available from: <http://dx.doi.org/10.1016/j.compedu.2019.03.007>
 40. B. Abdon, R. Raab, and S. Ninomiya, "eLearning for international agriculture development: Dealing with challenges," *International Journal of Education and Development using ICT*, vol. 4, no. 1, pp. 80-94, 2008.
 41. T. Martín-Blas and A. Serrano-Fernández, "The role of new technologies in the learning process: Moodle as a teaching tool in Physics," *Computers & Education*, vol. 52, no. 1, pp. 35-44, 2009.
 42. Wang Y-M. When Technology Meets Beliefs. *Journal of Research on Technology in Education* [Internet]. Informa UK Limited; 2002 Sep;35(1):150–61. Available from: <http://dx.doi.org/10.1080/15391523.2002.10782376>
 43. Conole G, Fill K. A learning design toolkit to create pedagogically effective learning activities. *Journal of Interactive Media in Education* [Internet]. Ubiquity Press, Ltd.; 2005 Sep 26;2005(1):9. Available from: <http://dx.doi.org/10.5334/2005-8>
 44. Talebian S, Mohammadi HM, Rezvanfar A. Information and Communication Technology (ICT) in Higher Education: Advantages, Disadvantages, Conveniences and Limitations of Applying E-learning to Agricultural Students in Iran. *Procedia - Social and Behavioral Sciences* [Internet]. Elsevier BV; 2014 Oct;152:300–5. Available from: <http://dx.doi.org/10.1016/j.sbspro.2014.09.199>
 45. Roca JC, Gagné M. Understanding e-learning continuance intention in the workplace: A self-determination theory perspective. *Computers in Human Behavior* [Internet]. Elsevier BV; 2008 Jul;24(4):1585–604. Available from: <http://dx.doi.org/10.1016/j.chb.2007.06.001>
 46. A. Kirkwood, "E-learning: you don't always get what you hope for," *Technology, Pedagogy and Education*, vol. 18, no. 2, pp. 107-121, 2009.
 47. A. Richardson, "An ecology of learning and the role of elearning in the learning environment," *Global Summit of Online Knowledge Networks*, pp. 47-51, 2002.

48. O'Neill K, Singh G, O'Donoghue J. Implementing eLearning Programmes for Higher Education: A Review of the Literature. *Journal of Information Technology Education: Research* [Internet]. Informing Science Institute; 2004;3:313–23. Available from: <http://dx.doi.org/10.28945/304>
49. F. Mödritscher, V. M. Garcia-Barrios, and C. Gütl, "The Past, the Present and the Future of adaptive E-Learning," *Proceedings of ICL 2004*, 2004.
50. M. Lister, "Trends in the design of e-learning and online learning," *Journal of Online Learning and Teaching*, vol. 10, no. 4, p. 671, 2014.
51. Al-Asmari AM, Rabb Khan MS. E-learning in Saudi Arabia: Past, present and future. *Near and Middle Eastern Journal of Research in Education* [Internet]. Hamad bin Khalifa University Press (HBKU Press); 2014 Jan;(2014):2. Available from: <http://dx.doi.org/10.5339/nmejre.2014.2>
52. Bari M, Djouab R, Phu Hoa C. E-learning current situation and emerging challenges. *People: International Journal of Social Sciences* [Internet]. Global Research & Development Services; 2018 Jul 18;4(2):97–109. Available from: <http://dx.doi.org/10.20319/pijss.2018.42.97109>
53. Chen P-SD, Lambert AD, Guidry KR. Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education* [Internet]. Elsevier BV; 2010 May;54(4):1222–32. Available from: <http://dx.doi.org/10.1016/j.compedu.2009.11.008>
54. Slevin J. E-learning and the transformation of social interaction in higher education. *Learning, Media and Technology* [Internet]. Informa UK Limited; 2008 May 21;33(2):115–26. Available from: <http://dx.doi.org/10.1080/17439880802097659>
55. Kay J, Reimann P, Diebold E, Kummerfeld B. MOOCs: So Many Learners, So Much Potential ... *IEEE Intelligent Systems* [Internet]. Institute of Electrical and Electronics Engineers (IEEE); 2013 May;28(3):70–7. Available from: <http://dx.doi.org/10.1109/mis.2013.66>
56. Brugha M, Restoule J-P. Examining the learning networks of a mooc. *Data Mining and Learning Analytics* [Internet]. John Wiley & Sons, Inc.; 2016 Sep 15;121–37. Available from: <http://dx.doi.org/10.1002/9781118998205.ch8>
57. Altbach PG, Knight J. The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education* [Internet]. SAGE Publications; 2007 Sep;11(3-4):290–305. Available from: <http://dx.doi.org/10.1177/1028315307303542>
58. Kaplan AM, Haenlein M. Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster. *Business Horizons* [Internet]. Elsevier BV; 2016 Jul;59(4):441–50. Available from: <http://dx.doi.org/10.1016/j.bushor.2016.03.008>
59. Barikah KZ. Traditional and Novel Methods for Cocrystal Formation: A Mini Review. *Systematic Reviews in Pharmacy* [Internet]. EManuscript Services; 2018 Jul 31;9(1):79–82. Available from: <http://dx.doi.org/10.5530/srp.2018.1.15>
60. Tham, C.M.; Werner, J.M. Designing and Evaluating E-Learning in Higher Education: A Review and Recommendations. *J. Leadersh. Organ. Stud.* 2005, 11, 15–25.
61. Navarro, P.; Shoemaker, J. Performance and perceptions of distance learners in cyberspace. *Am. J. Distance Educ.* 2000, 14, 15–35.
62. Stern, B.S. A Comparison of Online and Face-to-Face Instruction in an Undergraduate Foundation of American Education Course. *Contemp. Issues Technol. Teach. Educ. CITE J.* 2004, 4, 196–213.
63. Bakia, M.; Shear, L.; Toyama, Y.; Lasseter, A. Understanding the Implications of Online Learning for Educational Productivity; Office of Educational Technology US Department of Education: Washington, DC, USA, 2012.
64. Arkorful, V.; Abaidoo, N. The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *Int. J. Educ. Res.* 2014, 2, 397–410.
65. Cantoni, V.; Cellario, M.; Porta, M. Perspectives and challenges in e-learning: Towards natural interaction paradigms. *J. Vis. Lang. Comput.* 2004, 15, 333–345
66. Sadeghi, M. A Shift from Classroom to Distance Learning: Advantages and Limitations. *Int. J. Res. Engl. Educ.* 2019, 4, 80–88. [CrossRef]

67. Al-Dosari, H. Faculty Members and Students Perceptions of E-Learning in the English Department: A Project Evaluation. *J. Soc. Sci.* 2011, 7, 391–407.
68. Dhull, P.I.; Sakshi, M. Online learning. *Int. Educ. Res. J.* 2017, 3, 32–34.
69. Nazarlou, M.M. Research on Negative Effect on E-Learning. *Int. J. Mob. Netw. Commun. Telemat.* 2013, 3, 11–16.

5. Various E-Learning Platforms And Their Uses, Challenges, And Solutions

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Abstract

E-learning is technology-mediated learning with a lot of educational potentials, and it's one of the key research lines in educational technology over the previous few decades. The effectiveness of e-learning has increased in recent years especially after the onset of the pandemic situation across the world. The eventual fate of e-learning will in any case see dramatic development. As more educational planners, institutions, corporations, and online students overall begin to recognize the significance of e-learning. E-learning already has numerous uses in the education system across the world and its future roles will just still ascent. The main purpose of this article is to understand the various E-learning platforms their uses and the challenges they are facing right now and what can be done to remove the barriers or things that are hindering them to increase their effectiveness.

Keywords- Technology-mediated learning, Educational technology, E-learning platforms

Introduction

In recent years the mode of education has drastically changed and evolved with the introduction of online learning. Unlike traditional education, online learning is much cheaper, effective, and requires less time commitment. In this pandemic situation, e-learning has helped to provide uninterrupted teaching and learning system. E-learning is a technology-mediated learning system that is a blend of formal teaching with electronic sources. The main components of e-learning are electronic gadgets and the internet. E-learning is a network-enabled transfer of skills and knowledge by which education can be delivered to a large number of recipients anytime and anywhere. The introduction of computers and the internet form the basis of this revolutionary education system called e-learning. At present time we are more dependent on smartphones, tablets, etc. and these devices have also established a remarkable place in the education system. Interactive messaging systems and other forms of online communication allow students to stay in touch and discuss course-related issues while also fostering a feeling of community. There are two types of e-learning- asynchronous and synchronous e-learning. In an asynchronous e-learning system learners can take course on their own using laptop tablet etc. It includes pre-recorded lecture content and video, visuals, and/or text, knowledge quizzes, simulations, games, and other interactive elements. On the other hand live-online training, online learning, synchronous online training, or virtual classroom training- all these are included in synchronous e learning system. E learning involves many platforms with help of which organizing and delivering education has become possible even without the physical appearance of teacher or learner. E learning platform is actually online services that provide information, tools and resources to learners, trainers and others involved in education. In a nutshell these platforms have made learning or training of courses available to learners at large geographical distances anytime anywhere. There are many such platforms like Swayam, Diksha, Swayam Prabha, E PG pathshala, BYJU's, Unacademy, Vedantu, and Toppr etc.

Objectives of e-learning platforms

- **Flexibility-** E-learning platforms provide user accessibility and time flexibility to connect with learners in the learning process via Online Education.
- **Self-paced-** Learners can access their courses on various e-learning platforms at their own pace

- **Any time anywhere** – Teachers can deliver their materials and learners can access them any time and anywhere. Classrooms and the physical presence of learners and teachers are not required.
- **Cost-Effective** – Online learning platforms provide learning opportunities at affordable cost.
- **More fun**- E-learning platforms are have been more fun-loving, more resourceful.
- **Quality learning**- E-learning platform enhances quality teaching-learning.
- **Interactive learning**- E platforms involve teacher-student interaction even without their presence in classrooms. It also helps interaction among students even at large geographical distances which is not possible in a traditional classroom situation.
- **More accession and exploration**- E-learning platforms facilitate the students to explore more learning resources and also save the time and money of buying books. It also involves exploring and accessing learning materials at any place.

Various E-Learning platforms and their uses

Massive Open Online Courses (MOOC) – In recent years MOOCs have gained quite a lot of popularity as it offers accessible and affordable learning opportunities to learners worldwide. Most of the courses offered by MOOCs are free of cost however some courses are charged if certificates are provided at the end of the course.

Uses- MOOCs Provide self-paced learning opportunities.

MOOCs can be used as learning platforms with pre-recorded videos and webinars.

It provides certificates at undergraduates, graduates, and postgraduates level.

Some widely used MOOCs are-

Swayam (Study Webs of Active Learning for Young Aspiring Minds) - Swayam is an initiative of Digital India and it is launched on 9th July 2017. This platform helps to provide quality education to school students, graduates, and undergraduates. Free printable and downloadable study materials, video lectures, discussion forums, and online tests from over 1600 courses are offered on this platform.

Diksha- Diksha was launched in September 2017 to facilitate advanced digital learning for teachers from classes 1 to 12. In this platform, teachers can get training course materials, videos related to the lesson and curriculum, etc. It is mainly developed for teacher education but it can also be accessed by students. Teachers and learners can access a huge quantity of learning materials and e-books. Thousands of eBooks in different languages are available for 12th standard students.

National Digital Library of India (NDLI)- This platform is available 24×7 and it provides A wide variety of learning resources are available including eBooks, videos, thesis, manuscripts, documents, and many more. It is a multipurpose platform for all.

E-ShodhSindhu- E-ShodhSindhu is a joint initiative of the Ministry of Education and Government of India which provides many journals, eBooks, citations, etc.

Swayam Prabha - It is an initiative of the Ministry of Education that consists of a collection of 32 DTH channels that will telecast educational content 24x7 for students across India. These channels will telecast new content for 4 hours per day. The students can watch the content at their timing as the programs are telecasted at different times in a day.

LMS (Learning Management System)

LMS mostly fits the learning needs of any educational institution or training organization. It helps the learners to explore more information along with gamification elements and great visual displays, video materials which overall makes the learning more interesting. Different types of learning formats are available in this system.

Uses- LMS is used for assessing students and storing content with the help of its tools.

It is used for preparing and conducting online courses worldwide.

It is used as an effecting tool for self-paced educational courses.

Some examples of LMS are:

SAP Litmos LMS is built keeping in mind students' experiences to engage them with intuition.

TalentLMS is made for training programs. It is easily manageable and fun to use.

Violet MS is the only LMS tool one will ever need to enhance the digital learning experience. It is easy to deploy. It is adaptable and configurable to meet immediate needs.

Destination Site for Learning is a type of e platform which contains articles guides videos checking tools. These articles, information, and learning videos can be accessed by students worldwide.

Uses- It is used as a platform to provide a collection of articles, papers, videos, and information to students or trainees.

Online training for employees or job candidates- Learning and training programs are prepared in accordance with the experience, position and learning pace of the employees.

Uses- It is used to check the knowledge of employees and potential candidates who want to work in the organization.

It is used by the companies to check whether all workers are on the same page and have the needed expertise.

LXS (Learning Experience System)- The learning experience system is the new direction of development of the LMS. Recently it gained popularity because digital learning is efficient, enhances user experience, and engages students in the learning process by making it more apparent. It is very simple to use and very user-friendly.

Apps (applications)- Applications for education accessible on the go are in high demand nowadays.

There is no doubt that this tendency will continue in the future because micro learning is gaining momentum.

Some popular e-learning apps:

BYJU'S- This is one of the best education apps widely used in our country. It provides a wide range of educational videos, mock tests, and papers for a student from class 7 to 12. this app has made learning more fun for the students.

Vedantu- One of the best features of this app is that it involves the best quality teachers in its tutorials. This education app is very interactive for both students and teachers because it has features like two-way audio, video, and white boarding tools.

Khan Academy- This app includes more than 10,000 videos covering a wide variety of subjects mainly focusing on Mathematics and Sciences. Its sole purpose is to provide better learning tools to students.

Toppr- Toppr app provides a wide range of learning videos mainly for K12 students. This app facilitates the students to clear their doubts in live sessions.

Challenges of using E Learning platforms

It is very well known to all of us that e learning helps the students to come across more attractive course materials. Learners find it more easy to access the classes at their own time and own place. Although e learning platforms have made possible to extend education and learning at the doorstep of every students but it has its challenges.

- **Time management**

First of all the teachers or instructors have to give more time to design the course materials and students on the other hand also need to be technically sound to decode those materials. Teachers need to devote more time to create innovative, creative and attractive course materials to catch the attention of the learners.

- **Content design**

Instructors or teachers in e learning platform face a lot of challenge to make content of the online class. As in a class there is various types of students from intelligent high ability to poor ability so content should be designed keeping this in mind so that students neither find it uninteresting nor heavy loaded.

- **Lack of practical work and in hand experience**

This is one of the major challenge or drawback of e learning platforms. Some of the core subjects like physics, chemistry or biology require practical classes or in hand experiences. But learners are deprived

of these in virtual classes where they only get the opportunity to visualize the concepts and understand the concepts theoretically.

- **Subject matter experts with poor knowledge of instructional design**

This challenge is in connection with the previous point. Teachers or instructors who are new to e learning world, face difficulty in preparing the learning materials.

- **Struggle to adapt with virtual classroom**

The students undergoes adaptability struggle as there is a shift from face to face learning in traditional classrooms to computer based virtual classes. Students need more time to get accustomed to virtual online classes. In traditional classrooms students can take notes and it also involves passive listening of lectures but some e learning platforms involves online discussions which demand more action from the students.

- **Lack of computer and technical knowledge**

Nowadays most of the learners are tech savvy but lack of computer knowledge is a problem in the path of e learning. Many of them don't know basic computer programs and so cannot handle learning materials or files provided by the e learning platforms. Not only students most of the teachers or instructors lack computer literacy. Some are not updated with new technology and as a result they fail to design quality learning materials.

- **Technical Issues and poor connectivity**

Learning by e learning platforms require high bandwidth or strong internet connection which might not be available to some learners. Some students might not have or cannot afford computer or gadgets required for the online learning. Moreover in some remote areas internet connectivity is poor or even no connection, there the students are being deprived of e learning via the online platforms.

- **Self-motivation**

Many online learners lack in self-motivation. After enrolling in online courses many students give up as they face problem in handling technological medium of education. In online classes with large number of students there the students do not directly face and interact with the teachers as a result they gradually loose interest in the course and being demotivated some even discontinue the course.

- **Loss of data privacy**

In this present pandemic situation when all educational institutions are shut down teachers and learners depend entirely on e learning platforms. They unknowingly lose many personal data to these platforms. For example- Zoom, a conference service company widely being used to make virtual classes with a large number of candidates, appeared to store all video conferences without any password.

- **Expensive**

Using e-learning platforms is not cost-effective in everyone's case. It requires computers, tablets or other expensive gadgets and also the internet connection needs a good amount of money. Hence learning by e-learning platforms is not afforded by many mostly economically underprivileged students.

The solution to the challenges

E-learning platforms have made education accessible to all students even when they are geographically far away and when educational institutions are shut down. As every good thing comes with hurdles, this facility also has its challenges. If the education planners or organizers look into these hurdles more thoughtfully then these can be solved to some extent.

- Students who prefer traditional classrooms over e-learning must open up their minds and heart and welcome it with a positive mindset. To change the mindset and to prepare the students for online classes, they must be made aware of the benefits of e-learning
- Online classes involve hours on regular basis and as a result, some students become demotivated to continue it. Hence the e-learning platforms must design their contents in such a way that it becomes more interesting, interactive, and fun to the students and they participate enthusiastically.

- Computer knowledge is a must to follow online courses. Students must be updated with basic computer knowledge so that they can enroll in online classes in the e-learning platforms without any hindrance.
- Instructors or teachers of the online classes must try to make their courses more attractive and interactive so that the learners do not lose interest or be demotivated and eventually discontinue the course.
- The solution to poor or no internet connection is that the educational planners should ensure internet connection even in remote areas.
- The teachers must update themselves by attending tech conferences, e-learning events, and trade shows. Reading articles, blogs, reviews, and even case studies related to these technologies would also help them to understand which tool will be better for their content designing.
- Teachers must plan their courses in such a way that in hand experiences can be encouraged and included in the online classes.
- Computers, tablets, and laptops are quite expensive. These indispensable gadgets for online classes cannot be afforded by economically backward students. Hence the e-learning organizers must think about this problem and take some steps. They can provide the students with low-cost gadgets so that they can attend online classes and access online learning materials.
- Similar to the above point, it must be mentioned that the internet connection also requires money which can be a problem for many students. The organizers of various e-learning platforms can overcome this barrier by ensuring free internet connection to their students.
- The teachers, as well as the students accessing the e-learning platforms, must be careful about sharing their details online. They must choose wisely and keep themselves updated about the features of the platforms they are using. All the e-learning platforms must maintain the data privacy of the users including both teachers as well as students.

Conclusion

E-learning has had a positive impact on the lives of students and professionals. It provides the option to take additional courses along with their studies or work at their convenience. E-learning has also helped faculty at institutions engage students in the online learning part of the program without much classroom instruction. Thus, it saves time for the educational instructors which allows them to interact more with students. The quality of education has improved thanks to online courses and even students can easily browse the content at their leisure. In the digital age and especially in times of pandemic, the reach of various e-learning platforms is increasing and will benefit students, professionals, and educational institutions alike.

Reference

1. Chitra,P.A.,Raj,A.M.(2018). E-Learning. Journal of Applied and Advanced Research. Published. <https://doi.org/10.21839/jaar.2018.v3iS1.158>
2. Francis, K. (2018, September 28). Major Goals And Expectations of eLearning. ELearning Industry. <https://elearningindustry.com/goals-and-expectations-ofelearning-major>
3. <https://www.quora.com/in/What-is-the-importance-of-e-learning>
4. Kumar, S. (2015, July 10). 5 Common Problems Faced By Students In eLearning And How To Overcome Them. ELearning Industry. <https://elearningindustry.com/5common-problems-faced-by-students-in-elearning-overcome>
5. Online Learning Challenges & How to Overcome These Problems. (2021). Embibe Exams.<https://www.embibe.com/exams/online-learning-challenges-and-solutions/>
6. Samantaray, N. (2021). Free e-learning platforms developed by the Government of
 - a. India. Times Now News. Retrieved May 18, 2021, from
 - b. <https://www.google.com/amp/s/www.timesnownews.com/amp/education/article/freee-learning-platforms-developed-by-the-government-of-india/758567>
7. Shanahan, A. (2021). The Top 10 E-learning Challenges L&D Pros Face Every Day. Docebo. <https://www.docebo.com/learning-network/blog/elearning-challenges/>

6. E-Learning Inhibits Vicarious Learning Process On The Long Run

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The word e-learning was popular for a decade long for the learners who were interested in pursuing courses that were not available to them in their hometown. Learners especially graduate-level were pursuing their degrees from foreign universities through e-learning and distance learning mode. But the covid-19 pandemic has turned the whole world upside down and the world came to standstill for months. Focusing on the world sophisticated thing i.e., Young Minds, all the educational bodies transformed themselves from traditional knowledge imparting to the e-learning knowledge-sharing platform.

e-Learning at present





Learning at Classroom Sitting

e-Learning

e-Learning is a process in which knowledge is imparted through electronic mode. Teachers will teach their students virtually. There are different types of e-learning, each institution adapts different types depending upon the parents and student's needs. Some institution uses asynchronous learning methods, and some will adapt synchronous learning methods.

Asynchronous learning method - In this learning method, the learner and the student will not be online at the same time. Teachers will upload the recorded video of their class in an online platform i.e., school website. This will be a self-paced learning method; the learners can access the content in their comfortable time and can pause and repeat if they are not understanding the concepts. Today this asynchronous method is most popularly carried on the WhatsApp platform. This method is suitable for the learners who are not having gadget facilities at home and for the parents who cannot afford the internet data with suitable bandwidth.

Synchronous learning method – In the Synchronous method both the learner and the teacher will meet online through virtual classroom – zoom, google meet or institute owned virtual platform, online tutoring platforms, Audio and video conferences, webinars. The learners can interact with their teachers, they can share their ideas and can clear their doubts through virtual classroom. This mode is not affordable for all learners. There is possibility of disturbances due to technical glitches and these learning processes will get interrupted often.

There are many e-learning advantages like it saves fuel which gets wasted by transportation, saves the environment by avoiding air pollution, learners can learn staying safe at home, learners can study at their own pace. Along with these, there are many added disadvantages in this e-learning that impacts young minds in long run.

Vicarious Learning



The **vicarious learning process** can also be called the **Observational Learning Process** through which the learners will learn the concepts by observing (seeing and hearing) their peers and their teachers, acquiring the responses based on classical conditioning or operant conditioning. Vicarious Learning takes place through hearing and seeing directly or indirectly.

In the *asynchronous method*, the learners can observe their teachers in the recorded video and will observe the skills, behavior, and abilities for some extent but not fully as they do in the traditional classroom. Whereas in the *synchronous learning method* which is performed in real-time (live), the learners can observe their teacher who demonstrates certain concepts, experiments, skills along with 2 or 3 classmates on the online screen out of 20-30 students. This inhibits the learners to observe the majority of their classmates while learning new skills. e-learning faces audio distortion due to technical and network issues which make the learners lose the important points which were explained or discussed during the online sessions.

Benefits of Vicarious Learning

The vicarious learning approach in any learning environment induces a lot of professional and personal knowledge and skills, it also involves learning the new concept by fun through observing and listening to the other learners.

1. It's easy to learn by observing than learning by doing in solitude.
2. It saves you from the risk of committing a mistake in every single step.
3. The observed knowledge can retain in the memory for longer than trying it out several times by trial-error method.

By reading books, listening to stories, and watching videos we can learn some concepts by observing but observing their peers directly contributes at large towards the learners learning outcomes.

Unfortunately, this vicarious learning process is not possible through e-learning. If observational learning is absent in any knowledge sharing platform, then it will never serve the purpose of its existence.

According to **American Psychologist Albert Bandura**, Vicarious Learning/Observational Learning takes place through 4 essential conditions. They are

1. Attention

2. Retention
3. Reproduction
4. Motivation.

Learning through electronic mode has its merits and demerits, observational learning can take place through e-learning but not as effective as a traditional classroom setting. To have a successful learning process observational learning is essential.

Attention condition through e-learning

If the learner has to learn anything new, he has to pay attention to the concept and behavior it exhibits. This is possible only if they are attentive towards it. Bandura says that learners will pay attention to other learners while observing new concepts. They should be in the same peer group.

Through **asynchronous e-learning mode**, learners might be pausing the recorded video and may get distracted by other homely stuff, sometimes they may go to sleep or even they may drag the video to the end without even watching.

Synchronous e-learning mode learners would get distracted by others family members when they are online or a majority of the time, they might switch off the camera stating technical/ network glitches and gets out of the attention mode.

If they are not attentive to the e-learning session, they cannot be retaining the observed content.

Retention condition through e-learning

Teachers can perform magic by grabbing all student's attention through classroom setting but this cannot be done successfully through e-learning mode. And the cognitive ability of the learners varies from one to another. While learning through e-learning very few will be attentive to the session, out of those 50% of the learners may retain the observed content.

Reproduction condition through e-learning

Reproduction is the conditioning process where the learners try to reproduce/ repeat whatever they have observed by paying attention to their teachers and peers. To perform this learner should be physically and mentally prepared. For instance, online yoga classes, where the learner has to be physically fit to perform the demonstrated asanas, should be mentally prepared and willing to do so. If not the whole purpose of the e-learning will go in vain. Teachers cannot assess the learner's reproducibility through e-learning, but it can be possible through classroom mode.

Motivation condition through e-learning

The most important aspect of the vicarious learning process is motivational conditioning, without which all the attention, retention, and reproduction will become worthless. Any learner to go through all the above 3 conditions successfully they should have some reasons in the form of motivation.

For the learners it can be positive appraisal in front of their peers, rewards for the performance will reinforce the learners to pay attention, retention and reproduction conditions.

This is not effectively possible through e-learning, there will be the least motivational factor through asynchronous learning mode – recorded videos. And teachers cannot give full attention to all their learners through an online webinar, video/audio conference mode. So, the learner who is looking positively for any rewards and appraisal from their teachers will be demotivated if it's not been met. This happens mostly in e-learning due to low accessibility to view all the students online at once on the screen unlike in a classroom setting.

e-learning can benefit the learners and teachers in many ways, but it will not serve the purpose of educating online in the absence of a vicarious learning process. So, e-learning can only be a substitute for classroom learning during uncertainty but cannot replace traditional classroom learning effectively.

7. Effective Implementation of Interactive Learner-Centric e-Learning Methods for Evaluating Learners' Learning Experience

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Abstract:

The study investigated design procedures, development techniques and effective implementation of interactive learner-centric e-learning methods for evaluating learners' learning experience. The proposed interactive learner centric e-learning method engaged the learners throughout the process of imparting education. The proposed method includes pause points during the lecture session of the teaching-learning process. That pause points are the spots for reflection to assess the learners' learning experience by their active involvement in the e-learning. The pause points also include the peer learning spot used for improving the learning ability of slow learners with the help of a fast learner by the technique of shared learning. Formative assessment has been done by raising reflection quizzes and focus questions. The results from the proposed method shows that significant improvement in the active participation of each learner in online learning and also improvement observed in the outcome of the learning process. The results suggest that greater emphasis should be placed on reflection questions and focus questions involving the interpretation and analysis of online learning. Relevant issues and implications pertaining to technological innovation and advancement could be considered but the overall academic achievements of the learners are significantly improved.

Keywords: Learner-centric, Learners' learning experience, Pause point, Reflection spot, Peer learning spot.

Introduction:

Engaging the learner throughout the lecture session has been the best and acceptable methods of the learning process. The traditional method of teaching inside the classroom engaged the students throughout the lecture session but the learner involvement could not be achieved and the evaluation process is not in an outcome-based method. The traditional way of lecture delivery is teacher-centric, not student-centered. Mostly there are no assessments followed for observing the learners' learning experience. Continuous internal assessment, seminar, quizzes are the various suitable formative assessment components followed in the traditional way of the teaching-learning process. Likewise, for an online teaching learning method following the same traditional way of lecturing, content delivery and traditional formative assessment procedures followed are not a suitable assessment for observing the learners' learning experience. To design the assessment for learners' learning experience a set of formative assessment procedures have been developed. The generalized procedures for learners' learning experience assessment include pause point, reflection spot, and peer learning spot. While creating an online lecture choose a topic, identify the pause points in the lecture and include a reflection spot, and peer learning spot. In an hour-long online lecture, the inclusion of two or more pause points

results in an interactive e-learning method as well as a suitable assessment for observing the learners' learning experience.

Development of Interactive Learner-Centric e-Learning Methods:

The ultimate aim is to improve the participation of each learner in online learning and to improve the outcome of the learning process. The proposed interactive learner-centric e-learning methods for evaluating learners' learning experience comprise four-step processes; they are design, development, implementation and evaluation. The proposed method ensures participation of each learner; prompt for learners to focus on key concepts and ideas, identification of learners' interests and questions, quick clarification of small confusions, a high outcome of information for the amount of time invested, immediate as well as important feedback for the instructor that can be useful to guide teaching decisions.

While creating an online lecture session after choosing a topic, identify the pause points in the lecture and include a 'reflection spot', and 'peer learning spot'. In an hour-long online lecture, the inclusion of two or more pause points results in an interactive e-learning method as well as a suitable assessment for observing the learners' learning experience. The pause point could be anywhere in between the content delivery and concept explanation. The inclusion of pause points has to decide by the course instructor. In the traditional method of teaching learning process at the time of transition from definition to explanation or from explanation to problem solving, no interactive participation by the learners are encouraged. In the proposed method, at the time of transition from definition to explanation or from explanation to problem solving, one or more pause points should be included. In the identified pause point in the lecture, a reflection spot or peer learning spot should be included to encourage the learners' interactive participation.

Mostly course instructor at the pause point could give one or more examples and explanations for assimilation of the topic discussed. In this activity, no learners' participation involved except listening to the lecture. The proposed design for the learner-centric e-learning method for improving learners' learning experience encourages interactive participation.

A reflection spot is a spot for observing and evaluating the reflection of what the learners' gained. True/False questions, Yes/No type questions, Short answer (1-2 words) questions are the tools used to encourage the learners' interactive participation that could be used in reflection spot. Irrespective of the learners' cognitive level all should be involved because the answer to the reflection question is either yes or no or true or false. Once learners' were involved then a short answer type reflection question should be used. The True/False questions, Yes/No type questions, Short answer (1-2 words) questions are used to assess the remember knowledge level and understand knowledge level of the learner. In the reflection spot, apply level or analysis level type multiple-choice questions could be included to assess the higher cognitive level of the learner. The time duration for the reflection spot has to decide by the instructor, but it should not exceed 2 minutes. In hour-long online e-learning, two or more pause points with reflection spots should be included.

A peer learning spot is for improving the ability of slow learners with the help of a fast learner by the technique known as learning by sharing technique. The peer learning spot in the pause point has to be initiated by the instructor by raising focus questions among learners. The focus questions should be designed by the instructor to develop learners' critical thinking ability. Learners should be encouraged to share their knowledge among them and the instructor should ensure the slow learners' participation in the focus question discussion threads. Based on the focus question discussion, one or two reflection spot quiz could be included. Slow learners' involvement in the focus question discussion should be encouraged by the instructor then fast learners should be encouraged. The focus question discussions are critical as it allows learners' to articulate their thought processes. It also improves deeper and critical thinking, problem-solving, and critical analysis. In the peer learning spot, higher cognitive level like apply and/or analysis and/or create level knowledge of the learner should be assessed. The time duration for the peer learning spot has to decide by the instructor, but it should not exceed 2 minutes. In hour-long online e-learning, only one pause point with a peer learning spot should be included.

Implementation:

Implementing interactive learner-centric e-learning methods for evaluating Learners' learning experience for the course Basic Electronics at Under Graduate level in Electronics has been chosen. While creating the online lecture for the topic current flow, some of the pause points have been noted.

At the time of the pause point, the following reflection questions identified and asked the learners. Say True or False, Analogy for charge flow is water flow. What is the analogy between current flow and water flow? What is the analogy between current flow in a conductor and vehicle movement in traffic?

At the peer learning spot, the following focus questions were asked and discussion is initiated among the learners. Which material has more resistance, carbon or copper? Why copper is used as a material for wire?

Result and Discussion:

After effective implementation of interactive learner-centric e-learning methods for evaluating Learners' learning experience, every reflection questions are responded most of the learners'. The reflection questions should be True/False questions, Yes/No type questions, and Short answer (1-2 words) questions. All the learners' responded for the Yes/No type questions. Maximum number of learners' responded for the True/False type questions. Most of learners' except few responded for the Short answer (1-2 words) questions. Carefully designed focus questions improves learners participation. The instructor should ensure the slow learners' participation in the discussion on focus question. The slow learners should be encouraged to share their knowledge among their peer group.

The time duration for the reflection spot decided by the instructor increased from 2 minutes to 5 minutes, creates difficult transition from pause point to lecture session. But in hour-long online e-learning, two or three pause points with reflection spots improves learners' participation.

Conclusion:

The interactive learner-centric e-learning methods for evaluating learners' learning experience method shows that significant improvement in the active participation of each learner in online learning and also improvement observed in the outcome of the learning process. The method also creates facilities for self-learning. The overall academic achievements of the learners are significantly improved.

Reference:

1. Murthy S. et. al. (2018) LCM: A model for planning, designing and conducting Learner-Centric MOOCs. IEEE Conference on Technology for Education (T4E).
2. Hew. K. F (2016) Promoting engagement in online courses: What strategies can we learn from three highly rated MOOCs. British Journal of Educational Technology, 47(2), 320-341.
3. Bali. M. (2014) MOOC Pedagogy: Gleaning good practice from existing MOOCs. MERLOT JOLT, 10(1).
4. Miller, M. (2014). Minds Online: Teaching Effectively with Technology. Cambridge, MA: Harvard University Press. 296 pp.
5. Artelt, C., Baumert, J., Julius-McElvany, N., & Peschar, J. (2003). Learners for life: Student approaches to learning. Results from PISA 2000.
6. Boekaerts, M. (1999). The adaptable learning process: Initiating and maintaining behavioural change. Applied Psychology, 41(4), 377-397.
7. Nikolova, I., & Collis, B. (1998). Flexible learning and design of instruction. British Journal of Educational Technology, 29(1), 59-72.
8. Choi, I., Land, S. M., & Turgeon, A. J. (2008). Instructor modeling and online question prompts for supporting peer-questioning during online discussion. Journal of Educational Technology Systems, 36(3), 255-275.

8. User Satisfaction on Public library collection and services of Chintamani Taluk, Chikkaballapura district

Public library

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Abstract

User satisfaction of public library administrations has become an essential worry lately. There is no uncertainty that library administrations' fulfillment impacts the degree where the administrations are utilized, and it has been discovered to be a significant factor that influences the utilization or non-utilization of library administrations. This examination researched the usage and client fulfillment of public library benefits in Chintamani taluk, Chikkaballapura area public library. The poll was a powerful instrument utilized for information assortment. Recurrence tallies and straightforward rates were utilized to examine the acquired information. The outcomes demonstrated that there is an improvement in the utilization of these libraries. This will likewise support the use of public libraries among the Chikkaballapura public library clients who frantically need a spot where their data needs would be met.

Keywords: Public libraries, Chikkaballapura, User satisfaction, Library collection, Library services.

Introduction

Public libraries exist in many spots on the planet and are regularly viewed as a basic piece of having an informed and educated populace. Public Libraries offer free types of assistance, for example, preschool storytimes to energize early education. Public libraries are normally loaning libraries, permitting clients to take books and different materials off the premises incidentally; they additionally have non circulating reference assortments. Public libraries fundamentally center on well-known materials, for example, mainstream fiction and motion pictures, just as instructive and verifiable materials important to the overall population; PC and web access are additionally regularly advertised.

A public library is an association set up, upheld, and supported by the network, all things considered through the neighborhood, territorial, or public government or through some other type of network association. It gives admittance to information, data, and works of the creative mind through a scope of assets and benefits and is similarly accessible to all individuals from the network despite race, ethnicity, age, sexual orientation, religion, language, incapacity, financial and work status and instructive accomplishment (Philip Gill, 2001). Various individuals characterize data public libraries in various terms. As per IFLA (1994), "The public library, the neighborhood entryway to information, gives an essential condition to long-lasting learning, free dynamic and social improvement of the individual and social gatherings." Johan (2001) characterizes, "A public library is a library which is available by people in general and is commonly supported by public sources and might be worked by government employees."

The district public library is located in a place where every person can visit. Chikkaballapur central public library under coming from 5 libraries. Gauribidanur Public library, Gudibanda Public library, Bagepalli Public library, Sidlaghatta Public library, and Chintamani Public library. Chikkaballapur district central public library maintains the 149 panchayat libraries. It had a 55686 collection, which includes Books, Children's books, Reference books, Journals, Magazines, News Papers, Audio-Visual materials, etc.

Objectives of the study

- Status of information resources, human resources, equipment, and infrastructure available in Chintamani Taluk public library.
- To find out the adequacy of existing infrastructure, services offered by library staff, and equipment available in Taluk libraries with special reference to Chintamani Taluk library in Chikkabalpur District.
- To understand the purpose of visit to the library and benefits derived from the use of the library.
- To analyze the use of public library resources and services under the study.

Scope of the study

This investigation was restricted just to Chintamani Taluk Public library in Chikkabalpur District of Karnataka. Where city library Authority doesn't exist, their region focal Branch library in the region Headquarters releases the obligations of city focal library too. In the current investigation, the agent test of public libraries offering library administrations to clients Chintamani Taluk Chikkabalpur District level in Karnataka State is contemplated.

Methodology

Based on the extensive review of literature on public library system at the global level, India and Karnataka status and keeping objective of the study in view, questionnaires were designed in the English language for users since Kannada the mother tongue of the majority of the expressed need to translate to Kannada, researcher assists the user in filling the questionnaire by translated to the Kannada language. Selection of the sample, the methodology adopted for the collection of data, software used for tabulation of data, and testing of hypotheses are discussed in detail in chapter 4 – data analysis. The collected data were tabulated using MS-EXCEL.

Analysis and interpretation of data

The collected data were analyzed to understand the utilization and the level of user satisfaction towards the available collection and services provided by the library.

Distribution of Questionnaire and Rate of Response.

Questionnaire distributed	Questionnaires received back	Response
150	124	82(67%)

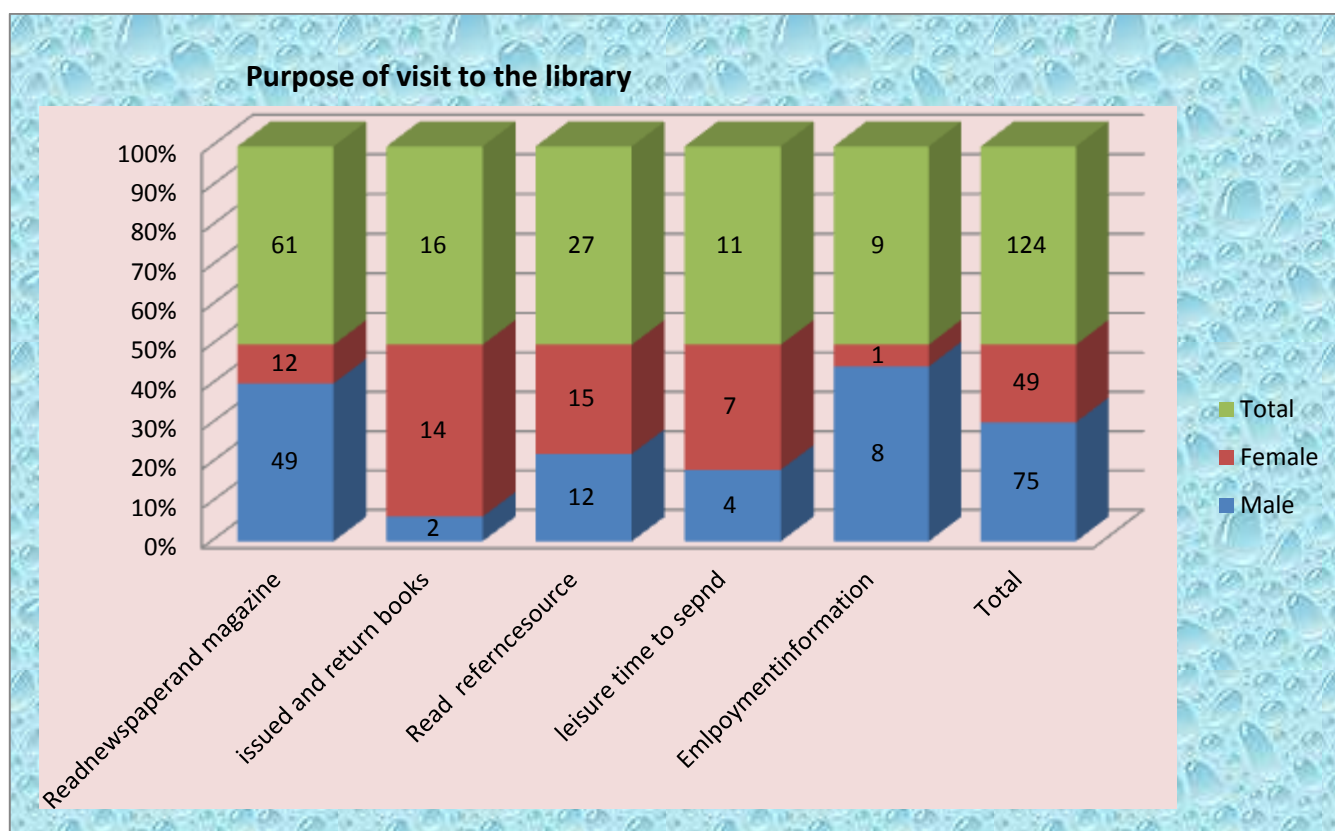
2. Frequency Visit to Public Library

Table 8 analysis shows that 39 respondents visit the library daily, followed by once a week 31 respondents and several times in week 16 respondents once in a month 13 respondents occasionally 25 users using the public library in Chintamani Taluk.

Frequency of visiting the library	Respondents
Daily	39(54.03%)
Once in week	31(25%)
Several time in the week	16(12.90%)
Once in a month	13(10.48%)
occasionally	25(20.16%)

3. Purpose of the Library Visit

The table represents the result of the purpose of visiting the library. Reading newspapers respondents 49 (39.51%) are male. Female 12(9.67%) and issued and return books male 2(1.61%) female 14 (11.29%). Read reference source male 12 (9.67%) and female 15(12.09%) respondents. Spent leisure time male 4(3.22%), female 7(5.64%). Employment information, Male 8(6.45%). Female 1(0.80%).



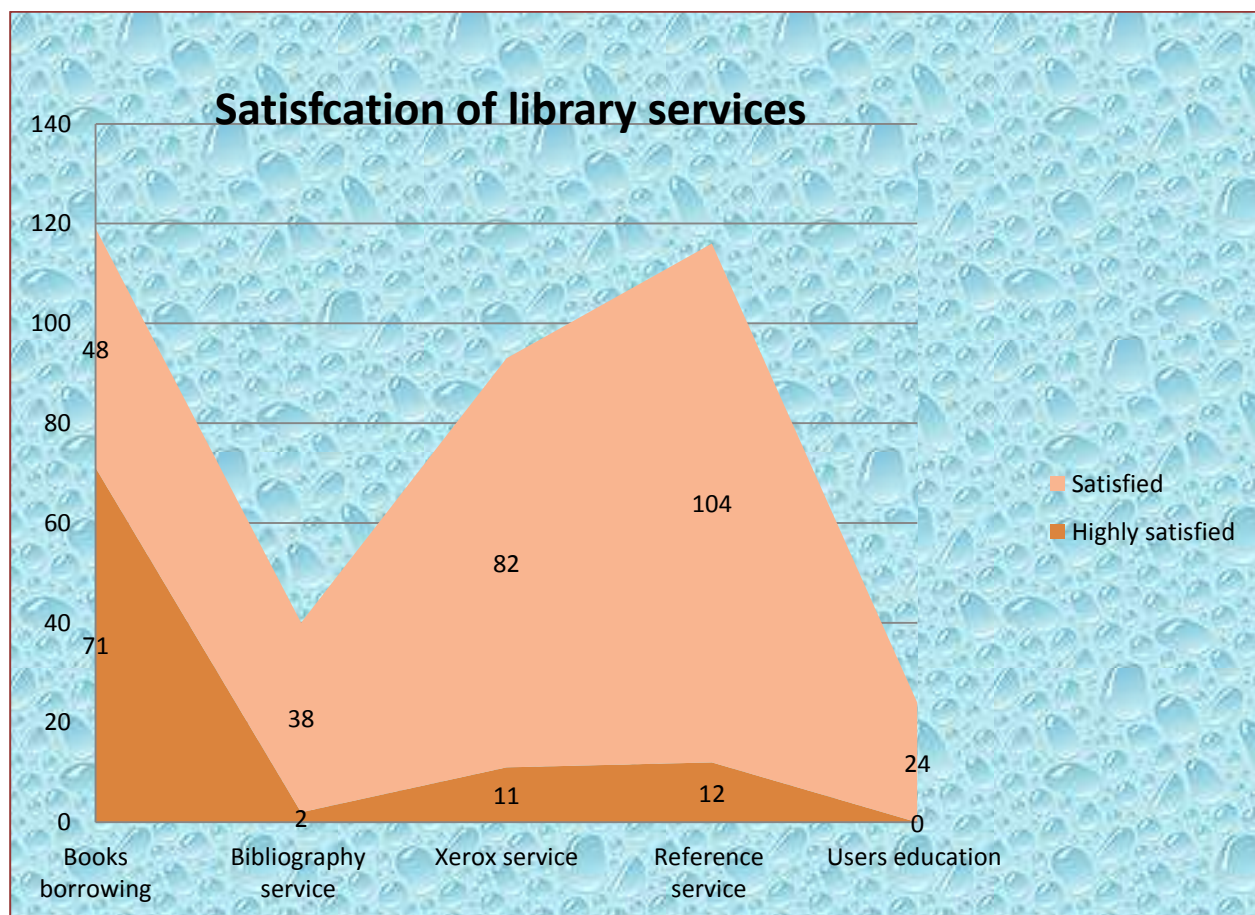
4. Public library users level of satisfaction with library collection

The table shows the levels of satisfaction with following the library collection. Books extremely satisfied 22(17.74%) satisfied 101(81.45%), not satisfied 1 (0.80%) respondent. Children's books says extremely 8(6.45%), satisfied 97(78.22%), not satisfied 3(2.41%) can't say 16(12.90%), respondents Reference books and dictionaries, says extremely satisfied 10(8.06%), satisfied 100(80.64%) not satisfied 1 (0.80%) not all satisfied 3(2.41%), and can't say 10(8.06%) respondents, respondents of journals extremely 7(5.64%), satisfied 88(70.96%), not satisfied 3(2.41%), not all satisfied 1(0.80%), can't say 25(20.16%), respondents, Magazine extremely 14 (11.29%), satisfied 98(79.03%), and can't say 12(9.67%) respondents, newspaper extremely 73(58.87%), satisfied 49(39.51%), and can't say 2 (1.61%) respondents, audio video materials can't say 124(100%), respondents these are available in public library source in chintamani.

Library collection	Extremely	Satisfied	Not satisfied	Not at all satisfied	Can't say
Books	22	101	0	1	
Children's books	8	97	0	3	16
Reference books	10	100	3	1	10
Journals	7	88	3	1	25
Magazine	14	98	0	0	12
Newspaper	73	49	0	0	2
Aud Video materials	0	13	3	40	68
Any other	0	0	0	0	124

The satisfaction of library services

The data shows the responses of the library services in Chintamani public library give the library service like book borrowing bibliographical, reference and users education program but no responded highly satisfied with user's education program all respondents only satisfied, few are respondents highly satisfied.



Findings of the study

1. Most of all the libraries in Taluk headquarters are kept open from 8.30 to 7.30 P.M
2. 150 questionnaires were distributed and after continuous follow up and the rate response is 124(82.67%)
3. The highest 39(26%) people were a response in daily visiting the library.
4. Library collection development opinion that books are highest 22 (14.67%) extremely satisfies in the public library collection.

Conclusion and recommendations:

Public libraries have been recognized as the "People's Library" also, they are needed to offer kinds of help highlighted satisfying the general populace through the course of action of relevant organizations, what's more, resources in this 21st century. In any case, the assessment has brought to the front to be sure, the condition of public libraries in Chintamani taluk, Chikkaballapura locale public library in this 21st century and revealed the way that, it has not totally delineated measurable genuineness with respect to pleasant organizations even notwithstanding the way that public library sees that it's a basic bit of the

overall population, the facilities(internet/ICT among others) and organizations that are planned to make these libraries a utilitarian additionally, basic bit of the public library structure is successfully deficient. Considering the revelations, the going with proposition were made:

It is suggested that public libraries in Chintamani should share the resources through networking with other public and rural libraries.

The library should conduct more attractive user education and orientation programs for the users to make maximum usage of the library.

It is suggested that computer networking facilities be made available in the library for general public use.

It is suggested that the public library should make an arrangement to provide the current or latest information to the visitors.

Prepare some of the new ideas regarding smart technology applications such as touchscreen-based KISHOKS.

Reference

1. Chakrabarti, Bhuvaneshwar(1993). Library and Information Society.Kolkatta: The World Press,101.
2. Chopra, R.N. (1990). Dictionary of Library Science. New Delhi; Anmol,91-117.
3. kesavan, B.S.(1961). Indian National Library. Calcutta: National library,1.
4. Krishnamurthy, C. (2018). A review of literature on reading habits and use of public library resources. 1(4) v,11p.
4. Kumar, B.D. (2016). Growth and development of public library system India with special reference to Karnataka
5. Kumar, M. and Birabar, B.S. (1998). use of mass media and public library by the rural community: A study. Annals of library science and documentation 44(3), 86-92.
6. Manohar Laman. (2016). Problems and prospects of the public library system in Karnataka State with special Reference to Uttara Kannada. Karwar. District.6(2).30-36p.ISSN 1331-6094
7. Nicolle Steffen.et.al. (9march 2009). Public libraries – A wise investment: University of Denver.

9. Implementing E-Learning in Higher Education prospects, Issues & Challenges

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ABSTRACT:

In the age of globalization and technological revolution, four-year degrees are just the start of a forty-year continuing education. Life-long learning is quickly becoming an imperative in today's world. Electronic learning (or e-Learning or eLearning) is a type of Technology supported education/learning (TSL) where the medium of instruction is computer technology. Although e-learning has potential in India, adoption has been slow and will need a major marketing and awareness effort.

This study investigates the effectiveness of using e-learning in teaching in tertiary institutions. In institutions of higher education, the issue of utilizing modern information and communication technologies for teaching and learning is very important. This study reviews literature and gives a scholarly background to the study by reviewing some contributions made by various researchers and institutions on the concept of e-learning, particularly its usage in teaching and learning in higher educational institutions. It unveils some views that people and institutions have shared globally on the adoption and integration of e-learning technologies in education through surveys and other observations. It looks at the meaning or definitions of e-learning as given by different researchers and the role that e-learning plays in higher educational institutions in relation to teaching and learning processes, and the issues and challenges of its adoption and implementation.

Key words: E-learning, Information and Communication Technologies, Higher Education, Issues and Challenges, Technology supported education/learning (TSL)

INTRODUCTION

The exponential growth of information has made it imperative for learning to happen quickly. Meeting this challenge requires new thinking about how we acquire knowledge and skills as well as how we develop learning resources that can keep up with the knowledge economy. The advent of ICT and the Internet has greatly influenced the way knowledge is transmitted. This has resulted in the development of e-learning.

There are many definitions of e-learning, some of which are as follows:

“E-Learning is the delivery of individualized, comprehensive, dynamic learning content in real time, aiding the development of communities of knowledge, linking learners and practitioners with experts.” – <http://www.linezine.com/elearning.htm>

“E-Learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance” - J. Rosenberg.

“E-Learning is the use of network technology to design, deliver, select, administer, and extend LEARNING” – Elliot Masie, *The Masie Center*.

“E-Learning is the convergence of learning and the Internet” – *Banc of America*

DIFFERENT APPROACHES TO E- LEARNING:

There are fundamentally two approaches to e-learning: Synchronous training and Asynchronous training.

Synchronous Method

Synchronous, means "at the same time," involves interaction of participants with an instructor via the Web in real time. Asynchronous, which means "not at the same time," allows the participant to complete the WBT at his own pace, without live interaction with the instructor.

- **Virtual Classroom:** Virtual classroom duplicates the features of a real classroom online. Participants interact with each other and instructors' online, instant messaging, chat, audio and video conferencing etc.

- **Blended Method:** Most companies prefer to use a mix of both synchronous and asynchronous e-learning methods according to their requirement. It is an amalgamation of synchronous and asynchronous learning methods.

Asynchronous Methods

- **Embedded Learning:** Embedded learning 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 learners the information they need whenever they need it.

LITERATURE REVIEW:

- Taurus, David and Alex, (2015) investigate the challenges hindering the implementation of E-learning in Kenyan public universities. It also emerged that implementation of E-learning in Kenya faces some challenges. These include but are not limited to inconvenient ICT and E-learning.
- Donnelly, & McAvinia, (2012) argue that there are "many academics have had no training and little experience in the use of communications and information technology as an educational tool" p 19. Furthermore, administrative factors could contribute to minimizing the benefit of using E-learning.
- Feeney (2001), E-learning has been the focus of recent scholarly attention. As the integration of technology into higher education becomes an institutional imperative at universities worldwide, the adoption of digital courses in a new E-learning environment becomes both an organizational goal and a source of data upon which to evaluate performance. Furthermore, he states the higher education institutions face persistent challenges in the use of technology, with E-learning being the latest technological challenge Feeney (2001).
- Kim (2008) indicates that the challenges of technology impede the use of E-learning in higher education is faculty resistance. In contrast, other studies show factors such as technology, interaction, instructor, and quality of students were key factors to successful E-learning (Selim, 2007, Baylor & Ritches, 2002., Volery & Lord 2000).
- Khan, Hasan., and Clement, (2012) also found out that if teachers want to use technology in their classes successfully, they need to possess a positive attitude towards the use of technology. For the benefits of E-learning, Clarke (2004) asserts that learners have freedom of choice over "place, pace and time" (p.32).
- Wanjala., Khaemba, and Mukwa, (2011) advice institutions to adopt ICT exploitation in education because these technologies recognized worldwide as tools that facilitate.
- Berhanu (2010) points out that promoting E-learning provides a potential and comparative ladder for developing countries to leapfrog to the knowledge economy. It shows facilitating learning to large groups through the use of information and communication technology.
- Bendania (2011) shows the factors related to mainly experience, positive attitudes, confidence, enjoyment, usefulness, intention to use, motivation, and whether students had ICT skills are all correlated.
- Fageeh (2011) demonstrates that informants identified the facilitators and inhibitors of E-learning previously recognized in prior research. He also shows that students are ready to accept technology implementation and shift to an E-learning model of education. In the same context,
- Al-Dosari (2011) examines the faculty members' and students' perceptions of E-learning in the English department. He observes their responses were positive and indicated that learning improved in an E-learning environment compared to a traditional method.

- Salmon (2004), "training on the technological features of the E-learning system is only the first step to success and the real challenge is training for changes to pedagogy" (p.6).
- Blinco., Mason., McLeamon, and Wilson, (2004) articulates the success of E-learning's rests upon the essential requirement that instructors & students possess adequate technical skills to use E-learning tools.
- Zake (2009) says, poverty is one of the most important barriers, especially in Africa than in developed countries because ICT relatively is more expensive. Therefore, most Kenyan public universities have opted for blended learning, the significant step that shows their commitment towards the full implementation of E-learning.
- Rhema and Miliszewska (2010) associated some challenges with cultural & linguistic background of students & instructors with their awareness & attitudes towards E-learning, such as underdeveloped technological infrastructure, cost of educational technologies, lack of local proficiency in E-learning, and lack of educational management to support E-learning initiatives.
- Ssekakubo., Suleman, and Marsden, (2011) point out the majority of E-learning initiatives implemented in some countries tend to fail while partially or entirely due to the various barriers to E-learning in developing countries.

SOME INITIATIVES AT THE NATIONAL LEVEL:

University Grants Commission (UGC) India's leading regulatory body for higher education, with the collaboration of the Ministry of Human Resources Development (MHRD) Under the Govt. of India, has made continuous efforts to implement e-learning initiatives even during the COVID-19 pandemic in India. Some of the essential steps to incorporate e-learning are:

1. **"Vidya-Daan,"** a programme focused on the crowdsourcing of teachers' content, was planned to synergies the country's innovations by supplying teachers and students from the various Metro cities to the remote areas or smallest villages for efficient quality content for e-learning that can be downloadable at anywhere, at no price and at any time.
2. Weekly Practice Program is CCT (Creative and Critical Thinking) to improve learner cognitive skills and create interest by relating learning to real-life circumstances. Teachers can also use these things to facilitate conversations and involve learners in self-learning adventures.
3. Government of India's i-Got-programme uses **DIKSHA** for COVID-19 training of physicians, nurses, ASHA staff, NCC, NSS, NYKS volunteers. Between April and June 2020, more than 17 lakh individual training sessions have been performed and well, certified.
4. **PM e-Vidya** declared under the Atma-Nirbhar Bharat policy that DIKSHA is the 'one nation; one digital platform' for education in India. DIKSHA is being converted into a forum for rich and diverse curriculum, linked to the e-content requirements of teachers and learners for all states and UTs, accessible via digital devices, to ensure continuity of access and learning experience.
5. **Online MOOC** courses related to NIOS (classes 9 to 12 of open school) are uploaded to the SWAYAM portal; about 92 courses have begun and 1.5 crore learners are enrolled. Teachers and students can access all courses modules-text, videos, evaluation questions, etc. through SWAYAM. Various online software like Zoom, Google Meet, YouTube, etc. are used for online courses and teaching.
6. We can access e-Textbooks using the **e-PG Pathshala** digital platform and phone app (Android, iOS, Windows) for learners, mentors, teachers, and parents. Around 600 eBooks, which includes approx. 377 digital textbooks from class I to XII and 3,500 NCERT video and audio contents, is available in different languages (Hindi, English, Sanskrit, and Urdu) in the public domain.
7. Apart from the preventative measures to be taken by academic institutions to deal with the rising situation of COVID-19, UGC has undertaken all steps to ensure that all higher educational institutions maintain regular interaction with students and teachers by electronic communication and keep them completely updated so that there is no distress among students, teachers, and teachers.

PROS AND CONS OF E-LEARNING:

Advantages of E-Learning:

There are a number of advantages of e-learning. First, we are using state-of-the-art technology and instructional strategies. Cultures can be shared through e-learning. Disabilities can be accommodated, with or without the knowledge of other participants. Gender may not be an issue, because in many situations, gender is unknown—or it can be. Because of global access, the classroom may be the world.

Nothing can replace traditional classroom teaching, but e-learning complements the process and can help reach out to the masses. The biggest advantage of e-learning lies in its ability to cover distances. For an organization that is spread across multiple locations, traditional training becomes a constraint. All trainees need to come to a classroom to get trained. Additionally, the trainee's learning pace is not addressed as all trainees are treated as having equal abilities and there is little flexibility in terms of timing and completion of the course. The major advantage is the consistency that e-learning provides. e-learning is self-paced, and learning is done at the learner's pace. The content can be repeated until it is understood by the trainee. It can be made compelling and interesting with multimedia, and the trainee can be given multiple learning paths depending on his or her needs.

Disadvantages of E-Learning:

Just as a glass may be half full, it may also be half empty. Which means it is not free from disadvantages to e-learning. Class members with disabilities may be functioning at a disadvantage for a number of reasons. Some participants may be technologically challenged and are hesitant to participate in full. Online discussions may inhibit class members, or they may encourage banter. One of the common disadvantages to e-learning is that some students, especially those for whom English is not their native language, have difficulty communicating and being understood. Another group of students may experience computer or technology anxiety, which may in turn impact their learning and their final grades.

ISSUES & CHALLENGES IN E-LEARNING:

The education sector has suffered a great deal from the outbreak of COVID-19. Adopting e-learning technology without careful planning will cost a lot of money, e-learning products that are not desirable and lead to problems. It has had many negative impacts on education, some of which are as follows:

- 1. Students:** Students from rural areas are neither having android and smartphones, very few Computers/Laptops due to various financial problems or constraints (MHRD, 2020). Students with disabilities are lacking behind in online classes. Learners belonging to science and medical streams are not able to practice in labs and performing experiments as they do in offline classes. They are facing various health-related issues and feel stress as students study for long hours on smartphones/computers for online classes. Due to inconsistency an irregular schedule is harming the physical well-being of students and going for long hours of sleep.
- 2. Educational Institutions:** From an infrastructural point of view, researchers have revealed that all the higher education institutions, schools, and colleges, are not ready or willing to perform online technology-based education and evaluation. All teachers from higher educational institutions are not trained or certified to teach online methods and software. Some educators are not ready for the immediate adaptation of the internet form of teaching-learning. The online teaching of a non-qualified teacher cannot reach expectations and learning goals for students.
- 3. Parents:** Due to lockdown people working in the informal sector lost their job and no source of income leads to non-payment of fees. There are also other issues for parents in addition to payments for programs that the schools and universities are not prepared to offer. Who's going to pay for the data? Is there enough space and peace at home for students to focus on? How do you teach children at home to follow digital self-restraint? There are huge obstacles for working parents and disadvantaged people in the slum areas and rural areas.

4. Miscellaneous: The connection of electricity is again an important challenge for both teachers and students of the rural area. Inadequate Internet Penetration according to the report of TRAI in India the internet penetration is 68.6 crores (49%) active users of internet in January 2020 with 138.00 crores Population in 2020 which is far less as compared to developed countries. 64.85% of Urban Area internet penetration with 48.30 crores population in urban area. 20.26 % from rural area internet penetration with 89.70 crores population in the rural area. Slow internet speed as a result students and teachers cannot attend all the classes online and there is a lack of Social Cohesion.

5. Difficult to motivate students:

A motivated person always gives the best on their performance. They stay always loyal and committed to their task or responsibilities. Without motivation it becomes difficult for the students to cope up with academics as they lost their interest and they are unable to perform better in the exam.

6. Challenges to keep tracking of student's progress:

In online learning environment, it is important to help students to engage with course material which provides them ample opportunities of learning. Especially when students are learning remotely; the teacher must recognize the importance and problems of the students. Progress of students can be tracked through student's attendance, periodically exam, and mock interview.

7. Problem of electricity / Internet connectivity:

Without strong access of electricity and internet connectivity online classes cannot think. In rural area, electricity is cut down most of the time, and there is no fixed time to availability. High internet connectivity, Wi-Fi and broadband connections that facilitate high-speed internet is not installed as it is not required daily basis by the people in rural area, while some people can't afford it due to its high cost. Therefore, problems of electricity/internet connectivity are one of the most important challenges faced by the teachers in online learning.

8. Lack of technical /Software knowledge:

Teacher and students should able to handle computer and software easily during online classes. Without proper knowledge of the software they can't able to access online learning or record visual and audio. Software also required some specific requirement i.e. – space of operating hard disk, updated windows, latest graphic on computer and many more. Without proper knowledge, it is quiet harassment to take online classes for both teacher and student.

9. Required more time in preparing course content:

Teaching online courses are not the same as classroom teaching. The teachers want to prepare for the course content in online teaching much more than preparing for classroom teaching.

10. Lack of motivation in online learner:

Motivation influence interest and changes student behavior. Online learning requires more self-attention than in classroom education. It is important for learners to be active and interested during online classes to understand the syllabus or course content.

11. Difficult to teach numerical subject through online mode:

In classroom teaching numerical subjects are taught on a blackboard/ whiteboard. In blackboard/ whiteboard the teacher can write the formula and methods to explain students. Learners also can respond immediately to the teacher if there are any doubts about formula and equations.

12. Difficult to monitoring discipline:

The goal of teaching is to ensure that each student receives quality education, skills and develop talent. In classroom teaching - the teacher ensures discipline is maintained properly, rules are enforced, and students are in a safe learning environment. But in the case of online classes teachers cannot exercise physical control on the learners.

13. Research Issues for e-learning:

Current e-learning research brings together pedagogical, technical and organizational concerns within a wider set of socio-cultural factors. These factors influence the research agenda in e-learning system.

Understanding these broader social and cultural issues is of significant importance to the research communities involved in e-learning and will have a significant role in informing future practices.

CONCLUSIONS:

In anticipation of this growth, the Governments, business companies and professional associations can start focusing on applications and the effective and efficient implementation of e-learning. By recognizing that e-learning truly is a methodology, one can experience the greatest benefits that e-learning has to offer now and in the future. In the end, the fact remains that, with respect to e-learning, poor quality procurement practices (in all sectors but especially in the public sector) are a barrier to growth and adoption. So it is necessary to make a thorough evaluation when it comes to choose E-learning software for education in order to improve the knowledge of learners, the learning outcomes, the performance outcomes, and the business and policy impact and in order to value the money spent.

In a market such as India where the concept is still new, one crucial element that will make a difference in generating a good response is marketing. This not only holds true for segments such as Government and education, but for the corporate sector as well. Experts are of the view that there needs to be a mindset for the adoption of e-learning. The other point is content. If content providers are giving off-the-shelf content, there should be scope for customization since each organization has its own needs. Regions without university education can access universities in other regions via the Web, a solution much cheaper than building university infrastructure. In underdeveloped countries, e-learning can raise the level of education, literacy and economic development. This is especially true for countries where technical education is expensive, opportunities are limited, and economic disparities exist. However, one of the problems with e-learning in India is the lack of course content, especially outside the mainstream focus areas of IT education, English-language content, and tutorial-like courses. There will be high demand for people who can develop multi-lingual courseware that addresses various topics. The social implications of online learning center around one primary requirement that students need to feel a part of the class, regardless of where they are located physically or geographically. The missing of connection to the other students in the class and with the institution can impact the success of an online student. The Bottom line is that, the Indian market is still young, but it will continue to adopt the concept of e-learning in order to meet its communication needs and seize business opportunities.

REFERENCES:

1. Kerry Blinco, Jon Mason, Neil McLean, Scott Wilson –“Trends and Issues in E-learning Infrastructure Development”, July 2004
2. Joe Pulichino - “Current Trends in e-Learning” - Research Report, March 2005
3. Alexandros Paramythis and Susanne Loidl-Reisinger – “Adaptive Learning Environments and e-Learning Standards”
4. Mark W. Brodsky – “E-Learning Trends Today and Beyond”, May 2003.
5. Consuelo L. Waight, Pedro A. Willging, Tim L. Wentling – “Recurrent Themes in E-Learning: A Meta-Analysis of Major E-Learning Reports”
6. Jane Massy – “Study of the e-learning suppliers’ market in Europe”
7. Advanced Distributed Learning (ADL), Sharable Content Object Reference Model (SCORM®) 2004 2nd Edition Overview,
8. Nishikant Waikar – _Healthcare: e-learning in India- A time for booster dosel, www.themanager.org
9. Is there a case for eLearning in India’, www.gurukulonline.co.in
10. E-Learning, www.nextwavemultimedia.com/html/profile.html.
11. 20. International Journal of Cyber Society and Education Pages 17 -32, Vol. 1, No. 1, March 2008.
12. Bhowmik, A. (2020). COVID-19 Outbreak and Edification: Challenges and Trends in Higher Education of India (pp. 101–108).

13. Choudhary, R. (2020). COVID-19 Pandemic: Impact and strategies for education sector in India.<https://government.economictimes.indiatimes.com/news/education/covid-19-pandemic-impact-and-strategies-for-education-sector-in-india/75173099>
14. India Report Digital Education. (2020). Department of School Education & Literacy under Ministry of Human Resource Development Government of India. www.mhrd.gov.in.
15. Luciana Carabaneanu, Romica Trandafir, Ion Mierlus Mazilu, “TRENDS IN E-LEARNING”,http://www.codewitz.net/papers/MMT_106111_Trends_in_E-Learning.pdf.
16. Shiva Kanaujia, N R Satyanarayana, “E-Education in India: Pace of Learning on a Hi-Tech Path”, 2nd International CALIBER, New Delhi, 11-13 February, 2004.
17. EDUCASE Chapter 6, “Impact and Challenges of ELearning”, Supporting E-Learning in Higher Education, Center for Applied Research, vol.3, 2003.
18. Dr. T. Rama Devi, “E-Learning Tools and Technologies for Rural Development Community with special reference to training: Experiences of National Institute of Rural Development”, DRTC – ICT Conference on Digital Learning Environment, 11th –13th January, DRTC, Bangalore, 2006.
19. Deepshikha Aggarwal, “Role of E-Learning in A Developing Country Like India”, 3rd National Conference; Computing For Nation Development, February 26 – 27, 2009 Bharati Vidyapeeth’s Institute of Computer Applications and Management, New Delhi, INDIACom-2009. Rimmi Anand, did MCA in 2002.

10. Media in Sustainable Lifestyle of Undergraduate Students in Murshidabad District

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Abstract- Sustainable living describes a lifestyle, that attempts to reduce an individual's or society's use of the Earth's natural resources, and one's personal resources. It is often called as "earth harmony living" or "net zero living". Its practitioners often attempt to reduce their ecological footprint (including their carbon footprint) by altering their methods of transportation, energy consumption, and/or diet. Its proponents aim to conduct their lives in ways that are consistent with sustainability, naturally balanced, and respectful of humanity's symbiotic relationship with the Earth's natural ecology. The practice and general philosophy of ecological living closely follows the overall principles of sustainable development. Lester R. Brown, a prominent environmentalist and founder of the Worldwatch Institute and Earth Policy Institute, describes sustainable living in the twenty-first century as "shifting to a renewable energy-based, reuse/recycle economy with a diversified transport system." Derrick Jensen ("the poet-philosopher of the ecological movement"), a celebrated American author, radical environmentalist and prominent critic of mainstream environmentalism argues that "industrial civilization is not and can never be sustainable".

Keywords: Sustainable lifestyle, Mainstream, Environment.

1.Introduction

Sustainable lifestyle means sustain of purification in our life, the society is include sustainable lifestyle, especially- 3P (Pupil, parent, public), sustain means strengthen or support physically or mentally, undergo or suffer (something unpleasant, especially an injury unfold affirm or confirm the justice or validity of an effort or facility on a keyboard or electronic instrument (means media). Where by a note can be sustained after the key is released. Our everyday life is common see for sustainable lifestyle. Media influence human lifestyle, the increase sustainable lifestyle but journal, news channel production presents a worldwide platform to campaign for better sustainable practices, through its own efforts behind camera as well as the message portrayed on screen, with the need and desire to maintain more eco-friendly production processes, certain organization, including several of the major studio have made on effort to set in place specific requirmentsin order to met sustainability standers, sustainable lifestyle like the some major factor this is namely education lifestyle, food passion lifestyle, food consciousness lifestyle, spiritual lifestyle, traditional lifestyle, travel lifestyle/adventurous lifestyle, Health and Body fitness lifestyle, Buying Home appliances lifestyle, Purchaser Avenue lifestyle, Unethical lifestyle adoption, Journey lifestyle, Participant lifestyle, Sports lifestyle, Gadget seeker lifestyle, Cognitive adopted lifestyle, Gaming aid for Health and Fitness, Spiritual lifestyle, Music aid for Fitness, etc, Impact of media and entertainment industry on sustainable lifestyle this is namely Education, Sanitation, Social tolerance, Religious harmony, Health, Cultured Heritage etc. Sustainable lifestyle is a human nature in the living life. Sustainable lifestyle is a positive side in our life. its include human behavior, awareness, and mass education. Lifestyle is a practices of yoga and emphasis social media, news paper and news channel and others media. Democratic country is India when the increase co-curricular activity without sustainable lifestyle. social media has a huge impact on individuals and their lives. While some impacts can be positive, social media has been shown to negatively affects thing like our mood and streets levels. Addiction is caused by social media too here are a few areas where social media addiction can have a negative impact.Sustainable lifestyle also giving stimulation to continue the sustainable

lifestyle. Public awareness also develop through this study research could identify the effect of movie, newspaper, and news channel to sustainable lifestyle of public life.

Young people around the world are well aware of environmental challenges, but the connection between such challenges and their lifestyle is not clear so them. There is a great need to translate these challenges into action and opportunities at the local and individual level, as well as to create a holistic and pragmatic vision of what a sustainable society (Fobienne Pierre. Programme officer, UNEP)

‘I’m not a tree hugger, I’m just like you’: changing perceptions of sustainable lifestyles

Broadcast Media Related to T.V its actively mass awareness sustainability lifestyle the movie name Tare Zameen Par, Super30, Sadash, Chalk and Duster, Paa, Babar Name Gandhi, South Movie Nayak, Balak Ambedkar, Mary, etc. Radio related to sustainability lifestyle Krisak Bandhu, Gach lagan Pran Bachan, Jol bharo and jhol dharo, Avoid of Strongly Plastic use, Tobacco is painful death etc.

Objective of sustainable lifestyle:-

Sustainable lifestyle is our style in life.

The aim of sustainable development is to balance our economic, environmental and social needs, allowing prosperity for now and future generations.

Sustainable lifestyle is sustained of purification in our life.

Sustainable lifestyle is a health awareness education, involve online health advise, various release movie, audio related radio, various lecture etc.

Our society needs to adapt to sustainable lifestyle.

Emphasis should be placed on managing a sustainable lifestyle in the society.

II. RATIONAL OF THE STUDY:

In Murshidabad District most of the society in sustainable lifestyle and the parents belonging to this category are not enough educationally qualified and less knowledge as a result of which they do not provide adequate nutrition, health care, and preschool education is not qualified for their children.

This study will help to develop responsibility about the sustainable society and environment. This study also giving stimulation to continue the sustainable lifestyle. Public awareness also develop through this study research could identify the effect of movie, newspaper, and news channel to sustainable lifestyle of public life.

It may help us to growing attitude towards sustainable lifestyle which strengthens the environmental stability of the nation, People should pass his or her life naturally and healthily way according to suitable needs that does not obstruct the future generation. So, the researcher finds out how do the media reflect in human life to maintain sustainable lifestyle. Media is the provided for all people learn to sustainable lifestyle.

III. OPERATIONAL DEFINITION OF THE KEY TERMS USED:

Media: -Media is process the include various example journal and News Channel. The news media or news industry is forms of mass that focus on delivering news to the general public or a target public. These include print media (newspapers, newsmagazines), broadcast news (radio and television), and more recently the internet (online newspapers, news blogs, news videos, live news streaming, etc.). Undergraduate Students: Undergraduate refers the students studying in Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.) Sustainable Lifestyle: - Sustainable lifestyle is a human related to awareness, food reuse, and environment awareness. Sustainable lifestyle that attempts to reduce an individual's or society's use of the earth natural resource and personal resource. Practitioners of sustainable lifestyle. Sustainable lifestyle emphasis the media (Movie, Newspaper and News Channel).

IV. STATEMENT OF THE PROBLEM:

Keeping in view the above illustrations the statement of the problem is presented as: “MEDIA IN SUSTAINABLE LIFESTYLE OF UNDERGRADUATE STUDENTS IN MURSHIDABAD DISTRICT”.

V .RESEARCH QUESTION:

The study will be aimed to address the following research questions:

How do news channels develop the thinking about the sustainable lifestyle of the U.G Students?

How do newspapers effect to develop the thinking about the sustainable lifestyle of the U.G students?

How do movies effect continue the sustainable lifestyle of U.G students?

What is the perception of undergraduate students about contribution of media in their sustainable lifestyle?

VI. OBJECTIVE OF THIS STUDY:

To study the role of movies in sustainable lifestyle news paper and news channels.

To study the perception of undergraduate students about contribution of News channel in their sustainable lifestyle.

To study the perception of undergraduate students about contribution of News paper in their sustainable lifestyle.

To study the perception of undergraduate students about contribution of movies in their sustainable lifestyle.

To study the perception of undergraduate students about contribution of Social media in their sustainable lifestyle.

VII. DELIMITATION OF THE STUDY:

The study will be delimited to only B.A. and B.Sc. students studying at Murshidabad district of West Bengal.

VIII. REVIEW RELATED LITARATURE:

Das (2009) conducted a study on “Social and Environmental impacts of Television and Radio programmes” The aim of the study was intended to access time spent watching television and evaluate. The awareness about social and environmental programme and education dependency among views. A survey was conducted by administering the structured questionnaire by convenient random sampling techniques to a sample size of n=100 in Delhi. The sample size had representation from five zones of Delhi name South North, East, west, and Central, the findings reveal that viewers wants informational programs about the entrepreneurial programmes a government initiatives, health, and hygienic related issue, various natural activity.

Pandey and Pandey (2011)the primary purpose of this study entitled as ‘Education for sustainable development in India: Problems and prospects’ was that education for sustainable development (ESD) refocuses the achieving goals of better future and wellbeing for quality. ESD had to be understood as an integral part of quality education, inherent in the concept of lifelong learning. This study showed that all educational institution can and should consider it their responsibility to deal intensively with maters of sustainable development and to foster the development of sustainability competencies. SD teachers all the sphere of sustainability-environment, society and economic, with an underlying dimension of culture.

Banaji (2011) conducted a study on “Young people viewing Hindi film ideology and meaning” The objective of the study was to analyze the ideology and pleasure of watching film. The observation methodology was use to over a two-and-a-half-year period outside and inside. Sample 80 participant country of Asian.

X. RESEARCH GAP:

After reviewing the above-mentioned related literatures, the researcher has found lots of literatures related with sustainable lifestyle related media and entertainment. Their research works Food passion lifestyle, traditional lifestyle, travel/adventure lifestyle, and Buying home application lifestyle etc.In environment awareness. But the researcher failed to find any work on Sustainable lifestyle impact media and entertainment in murshidabad. Therefore, the researcher has tried to address the gap and selected the present research problem.

XI. METHODOLOGY OF THE PRESENT STUDY

A. **METHOD:** described survey method is used for the present phenomena, situation, and problem etc. Therefore here had been used the Descriptive survey method and it is a field study. Normally Descriptive survey method is applied in social science or behaviour science. However the media in sustainable lifestyle of undergraduate student. So, to know the actual situation of the phenomenon had been performed at sustainable lifestyle researcher had been applied descriptive survey method.

B. **POLPULATION:** All undergraduate students studying in Murshidabad will be considered as population for the proposed study. My district of murshidabad many college here but I selected only 4 Colleges namely – 1. Dukhulal Nibaran Chandra College. 2. Sayed nurul hasan College. 3. Nur Mahammad smiriti Mahavidyalaya. And 4. Jangipur College.

C. **SAMPLE:** Total number of 100 students from B.A. and B.Sc. will be selected as sample for the proposed study and 50 students will be selected from each discipline.

C.I- 4 colleges out of all college in Murshidabad district will be selected randomly.

C.II- 100 students from those for college will be selected randomly.

TECHNIQUES: Appropriate techniques will be used for the analysis and interpretation of the collected data.

E. **TOOLS:** The following tools will be used for the proposed study:

1.Content analysis will be used for the objective number 1, 2, and 3.

XIV.DATA ANALYSIS, INTERPRETATION & DUSCUSSION:

Is organisation. After then the data will be organised, analysis and interpretation and formulation and conclusion and generalization to get a meaningful picture out of the row information collected. The analysis and interpretation of involve the objective material in the process of the researcher and his subjective reactions and desires to be derived from the data that is the inherent meaning in their relation to the problem.

Data analysis is the process of bringing order, structure and meaning to the mass of collected data. It is a messy, ambiguous, time consuming, creative, and fascinating process. It does not proceed in a linear fashion; it is not heat. Interpretation demands fair and careful judgments. Often the same data can be interpreted in different ways. So, it is helpful to involve others or take time to hear how different people interpret the same information.

.CONCLUSION

Conducting this research it's not easy but it is necessary to leave a swerved. As a human being we always on to get assurance, of safety, security, and retention for the purpose of a develop life it is need to assure sustainability in the living attitude. Everyone in this modern are closely connected with the social networking activity all the human being truly important of about the online and offline information database. Movies taught us to utilize sustainable life in day to day practices other online of offline social networking life olays, news paper, and news channel are try to develop sustainability through various influence way, example- Super30, Swadesh, P.K, Paa, Toilet ek prem katha, Tare zammen paar, etc. This movies taught us to continue religious harmony and nature based society. Online news channel helps us to preserve being natural resources like – woods, paper, polythine, ant mostly time. Form to generation to generation sustainability secure the human life from present generation to the future generation , present industrial society, first go drawing and first changing lifestyle with huse population make in possible to sustain wealth or sustainable life. But more knowledgeable other person from there next generation, teachers, pupil, parent from the child being example to maintain the sustainability. A research of this research i am Atanu roy conducting the survey and descriptive through tools in qualitive nature ti analyse the student feedback about sustainable lifestyle and there insipience sector, the common people of this country are not sufficiently able to maintain the sustainability. In the time to conducting research and the survey researcher are able to find out the reflection of student, the sustainable attitude. From the beginning of the survey. Like to the curriculum people belonging to all activities include the sustainable lifestyle. The central government as well as the state government take

various steps towards sustainability among the citizens to the various offline and online activities through the development of the curriculum.

REFERENCE:

Rajadhyaksha A. (2013), the 'Bollywoodization' of the Indian Cinema: Cultural Nationalism in a Global Arena. *Inter-Asia Cultural Studies* 4(1);25-39.

Abelman Robert and Hoover Stewart M.(1990) "Religious Television: Controversies and Conclusions". Norwood, NJ: Ablex.Ajanta, 2001.

A.J Zatorre R.J Bermudez P. and Evans, A.C. (1999), "Emotional responses to pleasant and unpleasant music correlate with activity in paralimbic brain regions". *Nature Neuroscience*2.

Balio Tino(1990), "Hollywood in the age of television" ,Boston : Unwin Hyman.

Livingstone S. (1998), "Making Sense of Television: The psychology of audience interpretation" (2nd edition), London: Routledge.

Lull J. (1990), "Inside family viewing: Ethnographic research on television's audiences" , London: Routledge.

internet and youtube

Attri, K.(200). School Climate. *The Rajasthan Board Journal Of Education*, 40 (1), 49-52.

Worland J., David G W., Cynthia, L. J. & Barbara, D. S. (1984). Intelligence, classroom behaviour, and achievement in children at high and low risk for psychopathology: A structural equation analysis. *Journal of Abnormal Child Psychology*, 12 (3).

11. Challenges and Perspectives of E Learning As a Medical Education Tool in The Era of Covid-19 Pandemic

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The COVID-19 pandemic was termed by WHO as an unprecedented Global crisis.¹ With lockdowns being imposed by various countries to curtail the viral transmission and flatten the epidemic curve. The lockdown has led to the suspension of the traditional methods of teaching in schools, colleges and universities but rather utilize the e learning tools in order to continue with the curriculum. Medical colleges too, were no different from this scenario and had to resort to the technology-based learning in order to ensure that the students could improve their knowledge and performance during the pandemic times.^{2,3}

The online learning concepts are not anything new, but dates back to more than 150 years old. To facilitate learning beyond the geographical and time bound barriers, came up the correspondence courses. In 1960, intranet was used to provide academic materials to students by linking computer terminals.⁴ By 1994, the internet brought new wings to the academics which could progress in various formats like formal education, online accredited courses to online modules etc. this was further augmented by the easy access to mobiles, internet, web, social media provide improvised personal learning experiences to the individuals.⁵

One of the most essential part of medical student education in the patient contact and it cannot be relied only on medical books for their knowledge and competencies.⁶ the major hurdle faced by the medical students is their risk of acquiring the covid infection during their clinical sessions from an asymptomatic patient of SarsCoV2 infection or they could be asymptomatic carriers of the virus at risk of transmitting infection to their peers, patients or faculty. So, new ways of teaching-learning had to be explored and it took various forms like online classes, live web-based simulations, online chat rooms etc.⁷

ONLINE TEACHING LEARNING

There are many strong attributes of online learning like it transcends time and geographical boundaries, it is learner-centric where it gives the opportunities to the learner to do at his own pace and promote self-directed learning and adaptive learning-catering to individualised needs of the learner.³

We all know “Change is inevitable”. So is medical education today – quite different from what it was 20 years back, curtesy the advent of internet. Online learning has progressed from being a mere fringe to the mainstream classroom learning to virtual simulation learning techniques. Tele-learning has brought both the teacher and the student to virtual patient room. This serves not only for teaching-learning but also for assessing their knowledge, skills and attitudes.⁸

Online learning can be demanding due to the shift in the learning environment for both the learner and the teachers, having a two-way interaction in multiple ways like the following:

- i. Learner-content
- ii. Learner-teacher
- iii. Peer group interactions

This necessitates a pro-active, self-directive and self-regulative approach by the learner in order to stimulate their meta-cognitive skills for successful learning experiences and have better academic achievements. It should be borne in mind that pedagogy cannot be replaced by technology.

We have various perspectives to determine the purpose of a course. If the primary purpose of a course is to provide resource material, then the focus lies on aligning and sorting content between teachers and students. Whereas, if the primary purpose is about student engagement in active learning then the focus lies on planning, discussing and pursuing student engagement for a virtual learning experience.

ONLINE TEACHING IN MEDICINE – THEN AND NOW

With our country keen on implementing competency-based education system, even the medical colleges are embracing the outcome-based competency based medical education (CBME). This favours skill development, professional training of the medical students to face the competitive global market. This demands clinical training, practice with patients and regular out-patient clinic visits.⁹ Thus the new CBME curriculum brings in both the traditional methods for clinical exposure and the best available online evidence to be aware of the latest updates in the medical field and also attempts to strengthen the research abilities of the students. Most of the regular medical education is conducted through classrooms and live practical sessions with limited online teaching tools.

Therefore, the medical teachers have a key role to play to maximise the benefits of online education and minimise the losses due to clinical rotations disruption. E learning resources supplement medical learning with their easy accessibility and facilitation of flexible on demand training.¹⁰ Cognitive learning better improved with interactive web-based tutorials than with the traditional teaching methods.¹¹ Better performance in the skill domain is observed with blended learning and virtual patient utilisation.¹² Nowadays, students are more tech-savvy and more than 90% access the web for medical studies.¹³ Health care is advancing leaps and bounds due to the rapid progression of information technology. To keep pace with it, online learning is a definitive promise.

Most of the developed countries have adequate infrastructure to handle the increasing health care and medical education demands, it is the developing and the under-developed countries that face difficulties in handling their growing challenges during the COVID-19 pandemic.¹⁴ Adapting to new online education system, coping up with the technological advancements in health care systems at the same time maintaining excellence in education – is a difficult task for the medical schools. Online learning will serve to bridge this gap strengthening the medical education both quantitatively as well as qualitatively.

The COVID-19 pandemic created geographical and time barriers to education, technology can be used to carry on the learning process without any discontinuity. This global COVID crisis has given us all opportunity to explore the unexplored areas of technology based medical education. Transformative changes in medical education with the help of emergent technology are expected by the time COVID-19 resolves.¹⁵

With all its attributes it should be still borne in mind that online learning is just another tool in the toolbox of teachers and not an ultimate solution for the academic woes – not every objective is deliverable by online learning methods.¹⁶

CURRENTLY AVAILABLE TOOLS AND PLATFORMS

Medical colleges globally are now using online teaching-learning platforms in the form of tutorials, videos, webcasts, video-conferencing, virtual simulation exercises etc. through various websites, discussion forums, communication apps etc. Streamed online lectures, interactive webinars replace the traditional classroom lectures, small group sessions and tutorials. Similarly procedural clinical skills, communication skills can be demonstrated by videos hosted on websites and blogs.

Synchronous and asynchronous modes can be adopted for online teaching-learning process. Synchronous learning is a two-way interactive online or distance education happening in real time with

a teacher. Asynchronous learning is carried out online virtually through prepared resources with no real time teacher-led interaction. E-lectures, e PBL (problem based learning), virtual patients and e-labs can be done through the synchronous teaching tools whereas the chat rooms, discussion forums in the asynchronous mode enhance the interaction and involvement by the student.¹⁷ To achieve these we have many learning- management systems (LMSs) and platforms to choose from for carrying out either synchronous or asynchronous mode of online learning.¹⁸

Flipped classroom model or Blended learning use significant asynchronous online coursework in combination with synchronous in-classroom time. This model was found to be highly appreciated by some of the teachers and students in online teaching-learning process. Apart from these the user friendly apps like Acadly, social media tools like WhatsApp, Telegram and the YouTube have played an effective role in imparting medical education.¹⁹ Some of the commonly available and used online tools and platforms are enumerated in the tables 1 and 2 respectively.

Table-1 : Tools commonly utilised

Synchronous mode	Asynchronous mode
Real time, same time – different place mode	Different time – different place mode
Audio conferencing Video conferencing Web conferencing Chat Instant Messaging White Boarding Application Sharing	Discussion Boards Blogs E mail Audio streaming Video streaming Narrated slideshows Web-based training Databases Web Books Surveys and Polls Website links

Table-2 : Commonly used Platforms

Synchronous mode platforms	Asynchronous mode platforms
Zoom Google Suite Microsoft Office 365 GoTo Meeting GoTo Webinar Go Webex Team viewer Skype Blackboard Collaborate Ultra Loom Blue Jeans Say Namaste	Moodle Blackboard Schoolology Slack Edmodo Flock

However, one should understand that online learning is a planned structured programme aimed to attain pre-defined objectives. To achieve sustainable effective online teaching-learning outcomes, good teaching practices have to be adopted. Some of the recommended principles of good online teaching-learning are as follows^{20,21,22}

- i. Teaching learning methods (pedagogy) should be aligned to the curriculum and objectives with alignment of learning process, outcomes and assessment strategies.
- ii. Encourage teacher-student interaction in both synchronous and asynchronous modes
- iii. Encourage higher order thinking and communication skills by online pedagogy
- iv. Encourage team spirit among students
- v. Promote active learning by interactive problem solving activities
- vi. Promote self directed learning
- vii. Provide opportunities by timely feedback for reliable summative and formative assessment and communicate high expectations
- viii. Prompt appropriate student centric feedback
- ix. Emphasize effective time management and assignment completion
- x. Promote effective mentoring and monitoring

CHALLENGES IN IMPLEMENTATION

Online medical education faced many hurdles to its implementation. Some of these barriers are time constraints, poor technological knowledge and skills, lack of infrastructure and institutional strategies. Negative hostile attitude towards the giant shift in teaching-learning methods.²²

- i. Competencies of the teacher and student

The faculty involved in the online teaching should be competent in terms of their knowledge of subject, pedagogy and technological skills so that the design of the course, interactivity and effectiveness of their online class is better and improved.^{23,24} there also exists the probability of inadequate clinical skills development by the online system for the students

- ii. Time Management

A sudden drift from the classroom to online learning platform demands a lot of time and energy of the teachers. More time than the usual is required for improving their technical

skills, rewrite the content suitable for the online teaching, overcome the technical glitches and take adequate efforts to engage the students. This in fact increases their stress – compromising their physical and mental health as most of them are involved in COVID duties too.⁵ Same issues arise with students also to adapt to the online lectures.

iii. Availability of Resources and Infrastructure

Access to devices, uninterrupted internet pose a major problem in online teaching-learning.^{25,26} In the 2019 report of “Digital in India”, over 12 years of age only 54% of urban and 32% rural population have access to the internet.²⁷

iv. Communication Gaps

For smooth functioning of online education programme - a proper communication is necessary across the institution, departments, teachers and students. This will improve the students’ engagement and understanding in the class.⁵

v. Attitude

Apprehensions of the teachers and students to adapt to the new techniques, fear of stable internet connectivity paved way for a negative attitude in accepting the online mode of teaching and learning.

vi. Screen time of the students

With multiple distractions in their surroundings the screen time of the students falls low, so keeping them focussed and nurturing the excitement of clinical practice falls low.²⁸

WAY FORWARD

Every new beginning starts with a single step. Measures taken to overcome the challenges can definitely improve the acceptance and adaptability of online teaching-learning. Few recommendations to overcome these pitfalls could be :

- i. Faculty Development Programmes (FDPs) to improve teacher competencies is the need of the hour. It is not just the subject knowledge but it involves multiple competencies building like social, pedagogical, managerial and technical.²⁹ Apart from all these competencies certain other concepts that should be kept in mind while designing the FDPs are the evaluation and management, resource management, ethical concerns, institutional requirements etc.³⁰ The LMS and its advancement tools should definitely be a part of the FDPS.
- ii. Schedule special clinical rotations for the students once the routine medical school resumes to acquire the required clinical skills
- iii. Detailed timetable of the classes schedule along with the resource materials, faculty details to be communicated well in advance to students.²⁸
- iv. Pre-recorded sessions can be utilised to save time and relieve the stress of the teachers and students.³¹
- v. Improving the accessibility and availability of resources should be a priority, which needs to be addressed on larger scale by the organisation and the government and not just by the teachers and students. This has been a priority of Indian government in its digitalisation and education policies.³²
- vi. Co-ordinated work carried out as a team at institutional level will definitely overcome the communication barriers.⁵ working as a team involving the head of the institution, medical education unit, curriculum committee and course co-ordinators along with the support staff, information technology and LMs support teams and student representatives will improve the desired outcomes.
- vii. The apprehensions to adapt to new technology has to be overcome both by the teachers and the students. One should have the idea “it’s never too late to learn” to change the attitudes and perceptions towards the online education.

- viii. Designing the curriculum in such a way that it's delivery has both synchronous and asynchronous modes inbuilt will improve the student participation and engagement. A positive feedback mechanism has to be incorporated. Chat rooms, discussion forums, mini assessment after every lecture, virtual patients will improve their interactions.^{33,34}
- ix. Recorded videos, transcripts of the presentations, on screen captions, quizzes and multiple choice questions have helped in the student engagement. This can be further improvised with continued mentoring and monitoring.

STUDENTS ASSESSMENTS

Online assessments play an important role in assessing and ensuring the involvement of the students. Online assessment could be in the form of knowledge, performance, practice and attitude based as enumerated in the table-3 which can be structured for formative or summative pattern.³⁵

Table-3 : Formats of various assessment criteria

Assessment criteria	Format
Knowledge	Multiple choice questions, matching the items
Performance	Virtual patient cases, OSCE/OSPE
Practice based	Log book, e portfolios
Attitude	Reflections, contribution as a team member

Assessment done in competency based medical education focusses on the skills developed by the student. Multiple choice questions (MCQs), short and long answer questions (SAQs, LAQs) on case vignettes can be used to assess their ability to diagnose and interpret the clinical problems. Objective structured clinical or practical examination (OSCE/OSPE) and Direct Observed Practical sessions (DOPS) can be used to assess their clinical or procedural skills.³⁶

Formative assessment is mainly assessed in the online teaching-learning process using tools like Kahoot, Google quizzes, Quizlet live etc. Open book examination, assignments and essays serve to assess knowledge domain as part of the summative assessment.³⁷ Virtual patient with virtual objective structured clinical examination can help in assessing the clinical reasoning. However, the psychomotor assessment remains challenging in the online education.

CONCLUSION

With COVID-19, this transformation from classroom to online teaching was sudden and posed multiple challenges to faculty as well as students. These barriers can be overcome with constant untiring efforts of the institutions, educators and students. In spite of the various setbacks, the online medical education has gained good momentum and hope it sustains in the years to come.

REFERENCES

1. WHO (2020). WHO announces COVID-19 outbreak a pandemic, 2020. Available at: <https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/2020/3/who-announces-covid-19-outbreak-a-pandemic#:text=The%20meeting%20follows%20the%20announcement>. Accessed on 18 June 2020.
2. Sahi PK, Mishra D, Singh T (2020). Medical education amid the COVID-19 pandemic. *Indian Pediatr*. Available at: <https://pubmed.ncbi.nlm.nih.gov/32412913/>.
3. Ruiz JG, Mintzer MJ, Leipzig MR (2006). The impact of e-learning in medical education. *Acad Med*. 81(3):207-12.
4. Tom T.(2020). The History of Online Education. Weblog. [Last accessed on 2020 Jun 04]. Available from: <https://www.petersons.com/blog/the-history-of-online-education/>
5. O'Doherty D, Dromey M, Loughheed J, Hannigan A, Last J, McGrath D. (2018) Barriers and solutions to online learning in medical education An integrative review. *BMC Med Educ*. 18:130. [PMCID: PMC5992716] [PubMed: 29880045]
6. Byrnes YM, Civantos AM, Go BC, McWilliams TL, Rajasekaran K. (2020). Effect of the COVID-19 pandemic on medical student career perceptions: a national survey study. *Med Educ Online*. 25 (1):1798088. doi:10.1080/10872981.2020.1798088 3.
7. Ish P, Sakthivel P, Gupta N, Malhotra N, Rajeshwari M. (2020). E-learning of medical residents during COVID-19: perspective from a developing nation. *Postgrad Med J*. postgradmedj-2020-139022. doi:10.1136/postgradmedj-2020-139022
8. Ellaway R, Masters K. (2008). AMEE Guide 32: E-Learning in medical education Part 1: Learning, teaching and assessment. *Med Teach*. 30:455–73. [PubMed: 18576185]
9. India MC. (2018). Competency Based Undergraduate Curriculum for the Indian Medical Graduate.
10. Chin RY, Tjahjono R, Rutledge MJ, Lambert T, Deboever N. (2019). The evaluation of e-learning resources as an adjunct to otolaryngology teaching: A pilot study. *BMC Med Educ*. 19:181. [PMCID: PMC6545733] [PubMed: 31159793]
11. Kumta SM, Tsang PL, Hung LK, Cheng JC. (2003). Fostering critical thinking skills through a web-based tutorial programme for final year medical students-A randomized controlled study. *J Educ Multimed Hypermedia*. 12:267–73.
12. Lehmann R, Thiessen C, Frick B, Bosse HM, Nikendei C, Hoffmann GF, et al. (2015). Improving pediatric basic life support performance through blended learning with web-based virtual patients: Randomized controlled trial. *J Med Internet Res*. 17:e162. [PMCID: PMC4526972] [PubMed: 26139388]
13. Kadam SS, Bagle TR, Baviskar PA. (2018). Utilization of internet by undergraduate medical students. *Natl J Physiol Pharm Pharmacol*. 8:1–6.
14. Solanki A, Kashyap S. (2014). Medical education in India: current challenges and the way forward. *Med Teach*. 36(12):1027–1031. doi:10.3109/0142159X.2014.927574
15. Goh P, Sandars J. (2020). A vision of the use of technology in medical education after the COVID-19 pandemic. *Med Ed Publish*. 2020;9:49.
16. Pei L, Wu H. (2019). Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis. *Med Educ Online*. 24:1666538. [PMCID: PMC6758693] [PubMed: 31526248]
17. Taha M, Abdalla M, Wadi M, Khalafalla H. (2020). Curriculum delivery in Medical Education during an emergency: A guide based on the responses to the COVID-19 pandemic. *MedEdPublish*. 9:69.
18. Sutterlin J. (2018). Learning is social with zoom video conferencing in your classroom. *eLearn Magazine*. [Last accessed 2020 Jun 04]. Available from: <https://elearnmag.acm.org/featured.cfm?aid=3236697> .

19. Sutherland S, Jalali A. (2017). Social media as an open-learning resource in medical education: Current perspectives. *Adv Med Educ Pract.* 8:369–75. [PMCID: PMC5476438] [PubMed: 28652840]
20. Chickering AW, Gamson ZF. (1991). *New Directions for Teaching and Learning: Applying the Seven Principles for Good Practice in Undergraduate Education*. San Francisco: Jossey-Bass Publishers.
21. Anderson J, McCormick R. (2005). Ten Pedagogic Principles of E-Learning. *Observatory for New Technologies and Education*. [Last accessed on 2020 Jun 02]. Available from: http://www.icwe.net/oeb_special/OEB_Newsportal/wp-content/uploads/2011/09/10-Principlesfor-Successful-E-learning.pdf.
22. Saiyad S, Virk A, Mahajan R, Singh T. (2020). Online teaching in medical training: establishing good online teaching practices from cumulative experience. *Int J Appl Basic Med Res.* 10(3):149–155. doi:10.4103/ijabmr.IJABMR_358_20
23. Bawane J, Spector J. (2009). Prioritization of online instructor roles: Implications for competency-based teacher education programs. *Distance Educ.* 30:383–97.
24. Grant MR, Thornton HR. (2007). Best practices in undergraduate adult-centered online learning: Mechanisms for course design and delivery. *J Online Learning Teaching.* 3:346–56.
25. Sahi PK, Mishra D, Singh T. (2020). Medical education amid the COVID-19 Pandemic. *Indian Pediatr.* 57(7):652–657. doi:10.1007/s13312-020-1894-7
26. Abbasi S, Ayoob T, Malik A, Memon SI. (2020). Perceptions of students regarding E-learning during Covid-19 at a private medical college. *Pak J Med Sci.* 36(COVID19–S4). doi:10.12669/pjms.36.COVID19-S4.2766
27. Nielsen. (2019). Digital in India:2019-Round 2 Report.
28. Del Rio C, Malani PN. (2020). 2019 Novel Coronavirus—important information for clinicians. *JAMA.* 323(11):1039. doi:10.1001/jama.2020.1490
29. Berge ZL, Collins MP. (2000). Perceptions of E-moderators about their roles and functions in moderating electronic mailing lists. *Distance Educ.* 21:81–100.
30. Badrul HK. (2020). *The Global e-Learning Framework*. [Last accessed 2020 Jun 23]. Available from: https://www.academia.edu/2478564/The_Global_eLearning_Framework_by_Badrul_H._Khan.
31. Taha MH, Abdalla ME, Wadi M, Khalafalla H. (2020). Curriculum delivery in Medical Education during an emergency: a guide based on the responses to the COVID-19 pandemic. *MedEdPublish.* 9(1). doi:10.15694/mep.2020.000069.1
32. World Economic Forum. (2021). How COVID-19 deepens the digital education divide in India. Available from: <https://www.weforum.org/agenda/2020/10/how-covid-19-deepens-the-digital-education-divide-in-india/>. Accessed January 15, 2021
33. Goh P-S, Sanders J. (2020). A vision of the use of technology in medical education after the COVID-19 pandemic. *MedEdPublish.* 9(1). doi:10.15694/mep.2020.000049.1
34. Imperial College London. (2020). COVID-19 response: edTech expertise strengthening remote learning transition | Imperial News. Available from: <https://www.imperial.ac.uk/news/196253/covid-19-response-edtech-expertise-strengthening-remote/>. Accessed November 9, 2020
35. Crisp G. (2007). *e-Assessment Handbook*. London, UK: Continuum International Publishing Group.
36. Badyal DK, Sharma M. (2020). Internal assessment in new MBBS curriculum: methods and logistics. *Int J Appl Basic Med Res.* 10 (2):68–75. doi:10.4103/ijabmr.IJABMR_70_20 30.
37. Barzansky B. (2020). LCME update on medical students, patients, and COVID-19: approaches to the clinical curriculum. Available from: www.lcme.org. Accessed November 9, 2020

12. E-Learning Teaching Strategies and Teaching Technique Stress in Post COVID-19 Period

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Abstract : E-Learning is the most modern way learning by which any student from anywhere of the world can access all kinds of information, course, degree both individual and group levels without leaving the comfort of their homes. All school, college and university tuition classes have been shut down for maintain social distance during COVID-19 pandemic. So in this situation E-Learning is one and only teaching technique to continue educational session. So researcher write this article. In this article researcher focus on how E-Learning become effective during crisis time like covid-19 pandemic, how to teach through E-Learning, what strategies and technique use in E-Learning, what challenges come on online education, what step government takes for improvement of accessibility of E-Learning to the learner and how much budget allocate government for effective online education, explanation of COVID scenario, demand of E-Learning during pandemic situation, which method and material use in online education, what effect has of E-Learning on Indian education sector. During this time all has to stay at home and their all work has been done from the home.

Key words : COVID 19 Pandemic Situation, E-Learning, Online Teaching and Learning, Educational Sector.

Introduction - E-Learning is a form of information and communication technology which provide learning experience in the virtual classroom to the learner through internet services and web technology of the computer. E-Learning provides knowledge, skill according to the learner's need and desire and it makes class more attractive. So learner can easily access all update resources at any time and any place at their hand in a few minutes through online education using Internet and mobile. E-Learning save learner's money and time also make environment friendly. Student can see online video many time until they understand it properly and there is also opportunity of live class by which student can interact with teacher and say their problem related study. There are many types of E-Learning receivable for learned like lesson based learning, game and activity based learning, 'lesson a day' learning, self-paced learning, video-based learning, course-based learning and so on which retain learner's attention on study. Through mobile, computer, tab or any other devices learner can gain knowledge using Internet from E-Learning technique. The virtual classroom replaced totally the conversational educational, evaluation and administration function of a regular classroom by adopting the advanced computer and ICT technologies like the Internet, E-mail, online chatting, WWW, CD-ROMS, DVDs, Tele-conferencing and video-conferencing etc.

Objectives of the Study : Researcher has framed in the following objective of the present study -
1. To illustrate how E-Learning become effective in COVID-19 period.

2. To look effect of E-Learning on teaching.
3. Discuss the scenario of COVID situation.
4. To describe strategies and techniques of E-Learning for interesting and practical learning.
5. To observe budget allocation for E-Learning.
6. To interpret what challenges are come on E-Learning.

Scenario of COVID-19 and Demand of E-Learning in This Situation : COVID 19 (Corona virus disease in 2019) world-wide pandemic, firstly detected it's symptoms at the city of Wuhan in China. Corona virus, in its different variable structure has engulfed the whole world in to its jaw. More than 130 million confirmed cases and 2.8 million deaths are confirmed in more than 200 countries across the world. It's severity is not only been the threatening cause on health but also, it's rapid spreading and lethal structure has forced the whole countries across the world to stagnant their economy via lockdown, curfew so on. Corona has impacted the human respiratory system and its saliva can spread by person to person by close proximity. So making a proper mask while coming contact with people, avoid gathering, using hand sanitizer are essential to protect self from this lethal disease, are necessary. It's several rate has impacted the all streams of life's across the world. Shops were advised to open and shut their shutter within a limited period. Milkmen have been forced to keep their dairy supplies into rotten, foreigners trades have been regularize by their own rules. All of the most countries have close their boundaries for protecting self from this disease.

School, college, university, tuition classes etc. have been shut down. That's why millions of youth, children are forced to live in their closed homes and citadels. So they can not go outside of House. As a result the demand of E-Learning techniques as a method of teaching is increasing day by day to the learner in the developing and under developing countries.

Methods and Materials : The study is qualitative in nature. It deals primary with secondary data that have been collected throughout various websites, institutional publications, Journal, newspaper report and government publications on the basis of data analysis, in major challenges concerning E-Learning teaching in India under backdrop of COVID-19 pandemic situation.

A Glimpse of Indian Education Sector : E-Learning is gaining popularity in India day by day. E-Learning is known an electronic learning because it is derived the help of electronic learning resources. E-Learning use electronic media like microphone, listening device or audio, video tapes etc. In the pandemic situation teacher can not teach students in the classroom of school. So all teacher teach students by using E-Learning techniques at primary to higher educational level. Teacher also get scope to provide update and current information of the topic to the learner by using Internet and they makes attractive materials for students. There are many electronic information and communication media like CD-ROMS and DVDS, teleconferencing, video conferencing, e-mail, live chat, online reference like libraries, video game- style simulation, Web-blogs etc. which use teachers to conduct teaching process. Specially, in the COVID-19 situation Indian education system totally lies on E-Learning and virtual classrooms.

E-Learning : Web-based learning and its newer and more general synchronous from 'E-Learning' our badge what new ages in the academic and business party meeting. The term 'E-Learning' was made Miller of the first time in October 1999, when it was used at a computer based training (CBT) system

seminar in Los Angeles, USA. It is defined of knowledge and skill using electric technologies, search edge computer and Internet based courseware local and wide area networks. Content is delivered by Internet, Intranet and Extranet, audio or video tape, satellite TV, and CD ROM. It can be self-paced or instructor late and included this media in the form of text, image animation, video and audio E-Learning also refers to a best learning, online learning and network learning. In its board connection of them cover some ideas.

1. The convention of Internet and Learning.
2. Internet Based Learning.
3. The use of network technologies to create, and deliver teaching learning materials and facilities learning content learning synchronous or asynchronous, aiding the development of communication.
4. The delivery of individual, comprehensive learning.

Why E-Teaching and Learning : The Indian educational framework preliminary relief on the traditional physical face to face classroom methodology. However advisement in ICT late to the purpose of improvement instructional method and technique long before Corona come us down our educational institutions. Internet has made online learning possible and many universities in India have already adapted online teaching learning improve student learning outcome. Given the growth of online education and is potential exception adversely effecting academic progress of the learners. Through all student may be not be benefited pulley in this progress at last it can assist to narrow down the gap caused due lockdown situation.

- **Compensation for academic loss:** The lockdown is adversely effecting academic progress of the learners. This loss can become be tended by embarrassing E-Learning methods. Through all students may not be benefited fully in this progress, as latest it can assist to narrow down the gap cause view to the lockdown situation.
- **Help for flipped learning:** Even in normal study, candidates, useful articles, video, write-ups are provided to the student beep beforehand with a message of what to be do than as instruction. The process classroom discussion on the provided material this type of trip planning is very useful if you see in efficiency in higher classes.
- **Aid to teacher:** ICT can aid a teacher in this duty and can help make baby charge student relationship more interactive.
- **Improve digital library:** E-Learning will augment Coronal library among learners versus variation shall to service in today competitive world.
- **Makes learning interesting and practical:** Since the young learners our teacher savvy, impersonators there learning and makes learning interesting and practical.
- **Helps implementing constructive pedagogy:** E-Learning can be used as an effective resource for implementing constructivist pedagogy among the learner it makes them learn ‘how to learn’ rather than ‘what to learn’.
- **Doubts regarding E-Learning and Teaching:** It is the nature of human being to resist change and prefer the ‘status quo’ situation. Naturally, many among the academic fraternity are debate full about the success E-Education.
- **Doubt about feasibility of E-Education in reality:** When we think about advancement in the field of artificial intelligence (AI), there is room for any debate in terms of this feasibility. It is

possible that mechanics world pick up the job of teaching conducting classes, E-Learning doubt and almost all the duties a human teacher does in a classroom.

- **Doubt about effectiveness of online class:** Some people many doubt whether E-Education could be as the effective and conventional mode of teaching learning program. It is to be accepted that machine is a machine. Therefore the success of E-Learning depends upon the effective content generation and planning for this delivery by the teacher.
- **Doubt about replacement of human teacher by machine:** This debate is about the replacement of human teacher by the mechanic what technology can only supplemented their effort of the teacher it cannot supplement him.
- **Doubt about facilitating of creating an environment suitable for Teaching and Learning:** This debate participants create an environment for E-Learning with necessary equipment and investment. It is true that many educational institutions are not yet able to each up demand, only for the is on that technology is relating to E-Learning teaching me poop closely do effort.

Challenges of Continuing with E-Learning and Teaching -: E-Learning surely has some advantages. But at the same time, it process to following challenges. The following point out some promote Bing challenges, among many of this mode of delivery.

Now, doubt challenges of learning as well face today, many discuss through the following sub points.

- **Learning depends on the readiness of teachers and the taught to accept this method:** Merely moving classroom online word two main effective E-Teaching learning, because interaction among powers and teachers are very important in this regard on a digital platform, how learn an content communicate with other depend mainly on the readiness for both teacher and student to accept it.
- **Disparity in access to gadgets:** The major challenges of online teaching learning age disparity in access to device like computer or smartphones. While 24% Indians own a smart phone, only 11% person Indian process any type computer, which could include desktops, computers, laptops, notebooks or tablets.
- **Disparity in access to Internet (according to the global education monitoring report in 2020):** Countries are not focusing on at risk learners during the pandemic situation. Almost half of the world population has no access to the Internet, as per the world inequality database on education (2020). Unequal access Internet advantage social stratification and limits educational opportunity. According to 75 NSSO report on education (2017 and 18) only 24% of Indian households have an Internet facility. In which 66% of Indian population lives in villages, only 15% of rural household have access Internet services for urban house proportion is 42%.
- **Digital disparity across the states:** The digital drive is evident across state in India to. For example, the proportion of household with access to a computer from 2.7% in Bihar, 34.7% in Delhi .The different it is sticker with regard to Internet access in state like Delhi, Kerala, Himachal Pradesh, Haryana, Punjab and Uttarakhand. More than 40% households have access to Internet. The proposition is less than 20% for Odisha, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh and West Bengal.
- **Gender disparity Internet usage:** The gender device in Internet uses draw special attention. As per the Internet and mobile association of India report (2019), while 67% men had access to Internet, this figure only 33% for women. The disparity is more in rural India, where the figure are 72% and 28% for men and women respectively.

- **Poor connectivity and signal issues:** As per overview report (2020) by Quacquarell shows that in case of mobile data, 40.2% people face poor connectivity and 56.6% complain about Signal issues.
- **Problem for digitally inept teacher's:** Internet is report which tools and make interactive online education happen, but a tool is only as useful as its user and his and her creatively. But many of the teachers are digitally inept, and a large number of teachers have never used an online environment to teach.
- **Possibility of replication of daily classroom:** A major protein the E-Learning teaching materials are currently available composed of video and quizzes that promote for remote learning over reliance on lecture based on video best content many even replicate by daily class room into online space also.
- **Learner's multiples intelligences and Learning style neglected:** The use of hosting online classes, the best teaching practice search a nurturing learners multiple intelligence and learning style are being neglected.
- **Lack of conducive environment for E-Learning:** Learning demands a conducive environment for study. However not all student have a quiet space for learning at home. NSSO report (2017 – 18) revealed that 37% of household in in India have one dwelling room. So world be just a luxury for many attend E-Lectures by teachers in an understand environment.
- **Illiterate graduation inability to help their children in E-Learning:** E-Learning demands also help that graduation children to learn but nearly 45% to Indian population above 15 years of is the either literate of has just attend in formal primary education in rural India. Such population consists of almost 70%. This action may not have the required level of education to help their children in E-Learning.
- **Learner's inability to afford the cost of E-Learning:** Having online classes on a regular basis has a cost implication. As students have to bear the cost of Internet services, in the current situation maybe student especially whose families is have lost income as result of a lockdown related job loss, will not be able afford this cost.
- **Possibility of negative impact on social relation among peers, teachers and the thought:** E-Learning teaching system may impact the social relation between peers, teachers and school community on the whole in a negative way. The social class gap between the teacher and student maybe widen if and when the school response after lockdown period.
- **No benified for the marginalised primary school children:** India cannot afford provide primary education in online mode even those who are able to evil themselves of online learning will not benefited accepted is small proportion of children from elite families where parents are also educated.
- **Problem for learner's with disabilities:** Learners with disabilities will face problem is assessing E-Learning resources.
- **Concern regarding cyber security:** Cyber security remains a concern in using the E-Learning teaching platforms.
- **Problem in monitoring student's understanding and getting feedback:** A physical classroom impacts education incrementally, so student do not get lost. It is easier to provide feedback in an online environment, it is harder to monitor student understanding and there is possibility that the learners follow may be delivered too early, leaving learners lost.
- **No little space for Co-curricular activities:** Apart from classroom learning, student are attend laboratory and library work, physical education, NCC an NSS related activities, and other Co-

curriculum activities that include seminars, debate, art and crafts, music and dance etc. meant for the wholesome development student they are might be little space for fulfilling those needs or no schedule for such co-curricular activities in online mode of teaching learning.

- **Insufficient budget allocation of E-Learning:** Despite initiatives from the central and state governments, there has not been enough expenditure to improving the digital infrastructure for E-Learning. In fact, in 2020-2021, the MHRD, the budget for digital India E-Learning has reduced to Rs. 444 crore from Rs. 441 crore in 2019 and 2020.

Conclusion : If the learners and teachers are blessed with requested gadgets an Internet access and skill online education has an advantage of universal access increase flexibility. It has also been observed that teachers were generally motivated when the wire provided with the opportunity ‘to gain new pedagogical knowledge thought online teaching, including opportunity to experiment with new pedagogy, reflect on classroom teaching and gain new understanding of assessment issues’. E-Learning teaching may build confidence and communication skills in both to teacher and the thought, augment experimental learning, and allow wider choices gain knowledge. Digital education code offering if mode a part of institutional mission we thought planning for a reliable infrastructure and crystallized vision for learner support. But as far now keeping the challenges of E-Learning in mind, in a populous 8 technologies growing country like hours, blended learning scheme to be most valuable option.

Except that, it must be say that today’s 3G, 4G, 5G Internet facilities based only video conferencing, classes have pacified this severity, still not be the best option of regular classes. So far out country India is concerned, big sectional of people from rural and labour classes, BPL (below poverty line), are still far away from the reaching of best Internet facilities, good Electricity connections. Therefore, E-Learning is still being not fulfilment the desire inputs in our education system.

References –

1. Rasmitadila, Aliyyah R. R., Rachmadtullah R., Samsudin A., Syaodih E., Nurtanto M., and Tambunan A. R. S. (2020). The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies*, Vol. 7, No. 2, pp. 90-109.
2. Rapanta C., Botturi L., Goodyear P., Guardia L., and Koole M. (7 July 2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity, *Postdigital Science and Education*. (2), pp. 923-945.
3. Mathivanan S. K., Jayagopal P., Ahmed S., Manivannan S. S., Kumar P. J., Raja K. T., Dharinya S. S., and Prasad R. G., (24 February 2021). Adoption of E-Learning during Lockdown in India. *International Journal of System Assurance Engineering and Management*. pp. 10.
4. Shea P. (January 2007). Bridges and Barriers to Teaching Online College Courses: A Study of Experienced Online Faculty in Thirty-six Colleges. *Journal of Asynchronous Learning Networks*. 11(2), pp. 73-128.
5. AISHE Report 2018-19, Department of Higher Education MHRD, New Delhi.

6. A Quick Evaluation Study of Anganwadis Under ICDS (June 2015). NITI AAYOG. Programme Evaluation Organisation. Government of India. New Delhi-110001.
7. World Inequality Database on Education from <https://www.education-inequalities.org/>

13. Impact of Modern Educational Technology in Teaching and Learning

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Abstract

Technology is a present of God to the world of education. After the presence of existence, it is possibly the biggest of God's gifts. Technology has simply modified the way we live. It has impacted exceptional sides of existence and redefined living. Undoubtedly, technological know-how performs a vital function in every sphere of life. Several guide duties can be automated, thanks to technology. Also, many complicated and integral procedures can be carried out with ease and larger effectivity with the assist of modern-day technology. This paper described the Impact of ICT on education. This chapter explains Factors affecting technology with positive and negative impacts. Its focus on the Importance of technology in the teaching and learning process. Thanks to the software of technology, residing have modified and it has modified for better. Technology has revolutionized the area of education. The significance of science in colleges can't be ignored. In fact, with the onset of computer systems in education, it has to turn out to be less difficult for instructors to impart expertise and for college students to accumulate It.

Keywords: Education, modern technology, teaching, and learning.

Introduction

The technology of the twenty-first century is frequently considered a generation of technology. Technology, today, performs a very necessary position in our life. It is considered as a foundation of the increase of an economy. An economic system that is bad in science can by no means develop in today's scenario. This is due to the fact technological know-how makes our work a lot less difficult and much less time-consuming. The effect of science can be felt in every viable subject one such subject is Education.

Modern science in education

According to today's insights as to how precisely present-day college students of nowadays decide upon to use science and how does their getting to know get an influence if they use.

Technology, it used to be printed that the use of current tools science and tools, the gaining knowledge of and interactivity of college students increases. They additionally locate it an awful lot greater interactive, as properly as full of fascinating areas, when aided through technology. The switch of expertise will become very effortless and convenient, as properly as effective. What this capacity is, that our minds now tend to work quicker when assisted with the use of contemporary technology, be it any phase of life, right here we speak about education. The reliance and dependence on such innovation, that genuinely makes existence an easy, clean ride is unavoidable these days even in schools, universities, and colleges. Students these days can make use of science in the following ways:

Internet connection and spherical the clock connectivity

The web has grown in significance by way of many folds, over the manner of the decade. Its significance in the training world can now in no way be undermined. Despite the possibilities of fraud and drawbacks, the use of the web is like a blessing for students. Today, the net is current in nearly the entirety we use. From tv to gaming consoles, and our phones, the web is everywhere.

Using projectors and visuals

Visual photographs usually have a robust enchantment in contrast to words. Using projectors and visuals to resource in gaining knowledge of is every other shape of super technological use. Top establishments around the world, now remember the use of exceptional PowerPoint shows and projections to hold the studying interactive and interesting. Technological use such as projectors inside the colleges and schools can take the interplay and hobby tiers proper up and additionally enhance motivation. Students like to see attractive visuals and something that entices them to assume instead of simply analyzing words.

Digital footprint in the schooling sector

This penetration has resulted in spherical the clock connectivity with college students and exclusive boards that are handy for exceptional types of assignments or help. As the electricity of digital increases, there are and there will be extra purposes that will help college students in improvement and learning.

Online levels with the use of technology

Online levels now have grown to be a very frequent phenomenon. People desire to take up online publications for their mastering and certifications. Top establishments provide splendid online packages with the use of several functions and the internet. This is a thinking that will proceed to upward thrust as it receives greater guide and awareness.

Importance of technological know-how in education

The position of science in the area of training is four-fold: it is covered as a section of the curriculum, as an academic shipping system, as an ability to assist guidelines, and additionally as a device to beautify the whole mastering process. Education is critical in the company and educational settings. In the former, schooling or coaching is used to assist people to do matters in another way than they did before. In the latter; schooling is geared closer to developing curiosity in the minds of students. In both cases, the use of technological know-how can assist college students to apprehend and keep standards better.

Factors affecting technological know-how in education

I. Jung talks about the sizeable assignment instructors are going through in our society due to the fast growth of knowledge. The contemporary applied sciences are worrying that instructors examine how to use these applied sciences in their teaching. Hence these new applied sciences extend the teachers' education needs. Gressard and Loyd (1985) asserted that teacher's attitudes towards computer systems are a key issue in the profitable implementation of ICT in education. Also, the most often mentioned obstacles are:

lack of time; lack of access; lack of resources; lack of knowledge and lack of support.

Impact of ICT on education

Active learning: ICT equipment assist for the calculation and analysis of facts bought for examination and additionally students' overall performance document are all being computerized and made without problems reachable for inquiry. In distinction to memorization-based or rote learning, ICT promotes learner engagement as newbies pick what to examine at their tempo and work on actual existence situations' problems.

Collaborative and Cooperative learning: ICT encourages interaction and cooperation amongst students, instructors, regardless of the distance which is between them. It additionally affords college students the danger to work with human beings from distinct cultures and working

Creative Learning: ICT promotes the manipulation of current facts and creates one's very own understanding to produce a tangible product or a given academic purpose.

Integrative learning: ICT promotes an integrative strategy to instructing and learning, using doing away with the artificial separation between principle and exercise in contrast to in the common lecture room the place emphasis encloses simply a precise aspect.

Evaluative learning: The use of ICT for getting to know is student-centered and affords beneficial remarks thru quite a several interactive features. ICT permit college students to find out and analyze thru new methods of educating and getting to know which are sustained using constructivist theories of gaining knowledge of instead than college students do memorization and rote learning.

Positive impact

1. Enhanced Teaching and Learning:

Technological traits like digital cameras, projectors, thinking coaching software, computers, Power factor presentations, 3D visualization tools; all have to turn out to be gorgeous sources for instructors to assist college students to draw close thinking easily.

2. Globalization:

When college is one-of-a-kind components of the state, students can “meet” their counterparts thru video conferencing besides leaving the classroom.

Some sites, such as www.glovico.com are used to assist college students to study overseas languages online with the aid of pairing a crew of college students with an instructor from every other country.

3. No Geographical Limitations:

With the introduction of online diploma packages, there is infrequently any want of being current bodily in the classroom. Even quite a few overseas universities have started online diploma guides that scholars can join.

Negative impact

1. Declining Writing Skills:

Due to the immoderate utilization of online chatting and shortcuts, the writing abilities of today's younger technology have declined pretty tremendously.

These days, young people are relying extra and greater on a digital verbal exchange that they have completely forgotten about enhancing their writing skills.

2. Increasing Incidents of Cheating:

Technological trends like graphical calculators, excessive-tech watches, mini cameras, and comparable gear have emerged as incredible sources to cheat in exams. It is simpler for college students to write formulation and notes on graphing calculators, with the least probabilities of being caught.

3. Lack of Focus:

SMS or textual content messaging has come to be a favorite activity of many students. Students are viewed taking part in with their mobile phone, iPhones day and night time or riding and very regularly even between lectures.

Advantages

It makes college students extra excited to learn. Train college students to study new science abilities they can use later in the workplace.

Decrease paper and photocopying costs, advertising notion of “green revolution”.

Disadvantages

Sometimes it's additionally time-consuming from the teacher's factor of view. It is steeply priced to set up such technology. There can be fitness problems too when used over limit.

Conclusion

Technology plays a very important role in developing education hence it is everyone's responsibility to promote the integration of smart learning in all aspects and has a superb have an impact on schooling and at the identical time can also additionally pose bad effects. Teachers and college students need to take benefit of this in the proper mild and get rid of the drawbacks which are pulling returned many college students as properly as faculties from attaining excellence. It is consequently time for every USA to introduce a greater technologically geared up schooling area in the future.

References

1. Heo, M. (2009). Digital storytelling: An empirical study of the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. *Journal of Educational Multimedia and Hypermedia*, 18(4), 405-428.
2. Lazar, S. (2015). The importance of educational technology in teaching. *International Journal of Cognitive Research in Science, Engineering and Education*, 3(1).

3. Montrieux, H., Vanderlinde, R., Schellens, T., & De Marez, L. (2015). Teaching and learning with mobile technology: A qualitative explorative study about the introduction of tablet devices in secondary education. *PloS one*, 10(12), e0144008.
4. Mortimore, P. (Ed.). (1999). *Understanding pedagogy: and its impact on learning*. Sage.
5. Nomass, B. B. (2013). The impact of using technology in teaching English as a second language. *English language and literature studies*, 3(1), 111.

14. Importance of Integration of Modern Technology in Education

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Abstract

Presently most governments and private institutions have integrated the smart classroom approach in their campus to bring smart learning to their student learning experience. Due to the advent of this educational technology students are naturally tempted to be inside the classroom and learning occurs better than traditional classroom learning. This chapter has identified the challenges of how students handle the situation while working with technology and it explores a potential solution to overcome hurdles faced by students and educators in higher education. This problem-solving solution may help for sustainable development. This paper explains present technological advancement, its importance, and its application. This chapter concludes that there are numerous advantages in implementing the technical aspect of education but at the same time need skills to solve the technological issue.

Keywords: Educational technology, Teaching, and learning, Smart classroom.

Introduction

Teaching is one of the main aspects in developing education across the board presently, which can play a very vital role in bringing new dimensions to the entire perception of education. Today many educational institutions are providing quality technology to foster the importance of computer literacy, starting from students to educators. This effort to implement the quality of education all across the field may push deprived society into a fruitful society. The scope of information communication technology has been developed by getting enormous assistance from government and institutions as a result of which many local governments and non-governmental organizations are offering the best education-related to hardware and software such as computer, mobile phone, and internet connectivity which connect the entire world to be a part of one unit. All these provisions will lead to the maximum level of growth and development that will pave the way for solving social problems. Now all the educational institutions have realized the significance of the integration of new education technology in the field of education. Today institutions are trying to implement the integrated computer program that has now reached its full-fledged activities. Acquisition of new technology and integration of new technical features related to software and hardware tools in higher education has been increasing tremendously .while integrating this technology has brought in front many new challenges to the educational communities.

Communication technology has plenty of advantages over bringing brand new techniques in the educational field that has created a new dimension in the field of teaching and learning. It helps very much to facilitate the process of learning including document disposal, speed process, paperless work, everlasting data storage, and anytime anywhere access have emphasized the importance of educational technology in higher education. a

The purpose of this chapter is to address the problems regarding the integration of new technology and provide fruitful solutions to society. This chapter also describes many new features of technology in higher education.

This paper discusses the most challenges faced by the educational institutions trying to implement the technological approach in the classroom environment and this chapter has provided appropriate solutions to solve all these problems effectively by analyzing the very latest technology and it has mentioned detailed information about technological application and importance in the learning communities.

Application of educational technology in higher education

1. Integration of artificial intelligence. Artificial intelligence is a process by which thinking like a human by analyzing the previous errors and performs better than that. Now almost all technology has been trying to integrate with artificial intelligence that will bring the learning process effectively with the on-the-go process then never before, this automatic process will improve the guidance and. A better learning environment will also bring powerful learning outcomes sometimes even better than a traditional learning approach. Due to its human-like behavior in analyzing, interpreting, and correcting the process and doing a better multitasking job it has produced a new dimension to the entire teaching and learning process. It also performs the activities such as curriculum designing, preparation of study material for individual students and gives appropriate guidance for the students.

2. Smart classroom. In the Smart classroom, all the devices are inbuilt with Internet and Wi-Fi connectivity that enable the student to hook up with all countries and even at the end of the world smart classroom connect the different kinds of experts across the world at the same time and provide effective communication and interaction among the student that brings a most advanced way of learning in Modern era. The devices like projected tools namely overhead projector, LCD projector with internet connectivity make electronic learning easy and comfortable in their zone.

3. Online class. In many developed nations, the teaching and learning process occurs online rather than in a traditional physical classroom. Presently there are several online platforms available such as social media, many mobile applications, WhatsApp, Twitter, and Instagram serve as main resources for online classes and it has created a vibrant learning experience just like in traditional classroom environment and gives the most powerful learning experience like in classroom learning. In addition to this, it has brought learning at any time anywhere in which students can feel in their comfort zone and it makes them learn joyfully. it offers to reach to the unreached peoples from the different places at the same time many people can get together and share their ideas effectively that will save the money for Poor and underprivileged peoples, even the students from the mountain and coastal areas through the internet connection can communicate with each other from the end-to-end approach. Moreover, very easy clarification of doubt is possible through whiteboard animation; live interaction with the subject is export, and animated videos will enhance a great learning experience among the students. 4. Virtual reality. By using this particular device we can enjoy the presence of real place-like experiences this virtual reality technology offers by managing robots from a distance and learning through a three-dimensional and 360-degree view of images give an exciting learning experience as they were in a real place. These gadgets are available online that are inbuilt with Computer-Based simulation, and it creates a real-life-like environment around the users. Now this VR is being practiced in the driving and piloting process.

5.Video conferencing. The help of the most advanced camera feature enabled devices used to communicate all around the world with face-to-face interaction. Video conferencing comes in handy when it is not possible to get together at the same place and this method has been used in online classes, seminars, workshops, and so on. Even official meetings and inquiries have been conducted through online video conferencing to avoid traveling from distant places.

6. Television. TV Which can telecast both pre-recorded and live videos by which one can learn education-related programs. How many channels offer programs related to scientific findings and inventions. With the help of satellite direct live telecasting is possible across the world.

Through television programs, students can engage themselves and achieve their goals to fulfill their needs many governments launched their channel to offer education programs in vast areas. Education technology increases student participation in all areas curricular, co-curricular, holistic leadership development, and Scientific thinking. The latest educational technology uses a variety of tools to enhance the entire system through investigation. Analysis that solves emerging problems.

Most commonly used devices

1.Digital whiteboard 2. Ultra high definition 3. Smartboard 4. Projector 5.Tablet 6. Phonetic ear 7. Clicker response system.

Importance of education technology in higher education

Educational technology is one of the key aspects of higher education. Whether we like it or not, it has a major role in developing education as a whole. Now the prevalence of technology is everywhere, and it has become mandatory for all to learn some basic computer literacy.

1. People. Students, educators demand technology

Using technology now becomes a part of all lifestyles. It has created an indispensable need for all due to its enormous applications in various fields. As it has a faster mode of disposal of any task at the same time, facilitating a user-friendly approach makes all people appeal to it.

2. Professors and educators prefer technology

Since learning and teaching are becoming very easy through technology all the professionals like to adapt tech to offer a superior quality of education.

3. Students of all grades prefer technology

Modern technology not only helps students acquire knowledge but also they learn multi-tasking skills required to speed up the entire process. Now it seems that the real virtual world can not function on its own without the integration of new technology such as cybersecurity. Students from all walks of life love to engage with audio and video learning. so it is not surprising that all domains of education will go online platforms for teaching and learning processes.

4. It has no limitation

It has plenty of advantages over the teaching and learning process as it offers many ways to acquire a concept. It comes up with an innovative way to instruct and it keeps them engaged in an educational process consequently the way of learning changed through the simplified application of software and hardware tools. As online cloud computing offers plenty of documents to be stored and retrieved large amounts of data on the internet it allows for maximum output across the virtual student's communities. It has the highest advantages over traditional classrooms in terms of the availability of resources and easy access to information. The conventional method has very limited scope available as compared to virtual education in which a multidimensional approach is possible through the extended scope in various domains.

5. Students can learn at their own pace

In many situations, students find it difficult to go at their own pace of learning in a traditional classroom. In such cases, the integration of technology will help higher education students to be able to go with their learning speed and ability as it offers individualized learning material that can easily be picked up by all categories of pupils especially slow learners find it easy to achieve their goal. It allows going back over previously recorded concepts for better understanding and enables students to cope up with the tough situation.

6. It can enhance better cooperation between educators and pupils.

Students can maintain better and cordial relationships with teachers and their classmates when subjects are integrated with technical aspects. As it offers a more meaningful and fun way of learning it creates a smooth functioning, conducive learning environment, and happy ambiance in learning. Technology helps to boost collaboration through a multidimensional technical approach. With the help of software developers, educational software tools are created in such a way as to improve relationships.

7. Online exam

It comes in handy when it is not possible to get together at the same place. With the crisis-like pandemic situation prevailing over the period, then there is an only option in front is to take tests online because it will help us anywhere activities at the same time from different places. At present 2020 owing to the COVID-19 pandemic situation prevailing all around the world, all nations have adopted the online mode of testing. In India, all universities and colleges go online as per the instruction of the government. Perhaps many of us begin to feel that it is the most effective way of teaching and learning process than in traditional approaches. Writing tests from their places give some advantage to overcome psychological barriers like fear and anxiety can be reduced to a large extent and eventually it will pave the way for better performance better result can be expected since learning become at their disposal. This is what we witnessed in today's online exam showing its great outcomes.

8. Easy availability and multimedia resources

Different resources of teaching and learning materials are available online in the form of digital storage, digital library, and software application through cloud computing. Since each student has a different way of learning style technology, bridge this gap as well by providing appropriate teaching and learning materials. Now searching and receiving data becomes very easy due to the advent of cutting-edge technology and it connects the entire world in which anyone can get their information at their fingertips. That's making it globally united and bringing multiple resources for the teacher. These fascinating features cannot be obtained from traditional resources like books and notes. This is what the main reason all the professional attempting to integrate the new technology whereby students are engaged with exciting new features makes them joyful learning at every time

9. Technology keeps students motivated and engaged

The students of this era are considered to be more technological learners than 20th-century students hence technical integration becomes compulsory in all walks of life. Recent research shows that students are better focused and learn faster in the virtual world than in the traditional mode of approach. The new technical learning concept has the potential to achieve their goals and stay motivated in the learning process. As they learn from self-motivation, the learning leads to long-lasting and boosts self-confidence to accomplish difficult tasks on their own. It creates some necessary life skills such as problem-solving. Decision making. Creativity and helping others10. Technology is essential to succeed outside of the classroom

Because of its high accuracy and applicability, we need to accept the incorporation of new concepts. Whether we desire it or not, it has created a situation that everyone has to learn some basic computer literacy. Since higher education, students are better off learning through incorporation of new ideas and it necessitates the implementation of technical programs in all domains

Problem and solution

Educational technology provides many advantages but at the same time, it presents a parallel challenge to the students. To solve this problem some solutions have been suggested as below.

1. Difficulties in reading electronic text. Many educational devices with displays make it difficult to read text outdoors. Working In sunlight with a low brightness display makes it blur appearance as a consequence of that difficulty in the reading text but this does not happen indoors. This problem of visibility can be rectified by choosing a high-resolution display with an auto-brightness mode that can bring better visibility in a bright environment as well so that electronic text can be readable everywhere.

2. Memory storage. This storage space needs to save all kinds of documents and videos but with little space, only a limited number of data can be stored, especially in the context of uploading and downloading files. The performance of a multi-tasking procedure needs adequate space. This particular problem can be solved by increasing hard disk and RAM space. More than 4gp RAM would be perfect for multitasking and more than 500 GP hard disk makes it enough for large amounts of data storage, which enables rich data transfer and high-quality educational content can be processed simultaneously.

3. Comparability problem. It has two main elements when it comes to comparabilities, such as software and hardware compatibility. Good comparable devices can perform the better function of software applications and can support all kinds of external devices such as printers. Headphone and Speaker etc... with the integration of the latest electrical parts and updating with latest version software could enable comparable function. Today in the globalized market, even at a low price better-featured devices are available.

4. Durability and availability of spare parts. The device made with quality material can be expected to be durable whereas a poor material device cannot work up to one's expectations. Availability of original parts to replace damaged ones is difficult when it comes to imported products. To handle this situation indigenously made products would be preferable to imported products so this approach will ensure durability and availability of spare parts.

5. Quality and accuracy of the content. Since the content in the electronic devices can be edited and modified. An unauthorized third party can intrude and change the original quality and accuracy of data. This problem can be prevented by enabling a high-security password that will protect devices from hackers. presently many devices available with the most advanced security features like face unlock and fingerprint technology that ensures the highest protection from intruders.

6. Ownership of the product. Some universities provide a rental device for their students. When the duration of the ownership is less than required by students, then they have to encounter massive issues like data loss. To avoid this problem higher education must ensure to provide appropriate duration as per their level of learning pace. Increasing ownership rights will help them achieve their goal.

7. Health risk. This is a major concern about the long-term use of technology on pupil health. It has created mild to severe health issues in students with continuous use of devices like laptops and Mobile phones that cause radiation. Recent research revealed that several health-related problems including skin disorders. Cancer and infertility. Perpetual use of mobile displays on reading electronic text causes eye dryness. computer eye syndrome, eye irritation, and headaches. To stay away from these problems, the brightness of the monitor should be reduced to the maximum. Frequent eye blinking hydrates the eye

and stops eye dryness. Eye exercise might reduce all health-related issues also every 15 minutes take the eye away from the display and see the distant object may give eye muscle relaxation. While sitting in front of the computer one should sit uprightly to avoid back pain.

8. Copyright issue. Copyright is a legal process enacted by all local governments to ensure ownership and right to use for a particular period and even for a lifetime. Usage rights give ownership protection from unauthorized persons. A lot of information is available from the Ebook library and website. When you copy of exact content and use it on another platform might cause copyright issues moreover without the permission of concern the author will be subjected to legal action as per enacted copyright law. Hence care must be given whenever you take information from an unknown source and agree to the terms and conditions to get prior permission from the author.

9. Bandwidth. It refers to the internet speed, with high-frequency bandwidth allowing for the maximum and faster process of files that is possible through technology like 4g. 5g and fiber optics. By using high-frequency bandwidth, we can avoid slow-speed internet and handle large amounts of data with high speed.

10. Professional development. Research and development have developed a lot of new technology to face problems. When tackling new situations we need to upgrade with these emerging technologies. To update technical skills, one must take a pre and in-service training program that enables professional development. For instance, traditional classroom teachers are not aware of how to use educational technology effectively, in such cases, the integration of proper orientation programs such as seminars and workshops will lead to professional development. Thus the attitude of accepting new to the old can bring a radical change in educational technology.

11. Failure to use technology effectively. Technology can be used in formative and summative assessments. That provides ongoing and entire details about students' performance. The use of technical skills enhances the accuracy of the assessment. When there is a failure that leads to inappropriate evaluation. So to avoid all these mixups one must be properly trained in computer literacy and also with the integration of most advanced technology like artificial intelligence may prevent failure of use technology in some areas. With the help of AI manual error can be reduced to a large extent.

12. Overcrowded class. Whether it is an online class or a traditional classroom if over the strength of students creates unwanted confusion and distraction as a result difficulty in classroom management and slow network speed is encountered in the context of large numbers of students are present. This problem can be eliminated with a restricted number of students in a class.

13. Teacher innovation. In all classes, each student has a different way of learning style so a personalized teaching approach is necessary for each student. To meet the needs of each student, educators must choose an innovative approach by integrating educational technology such as electronic text readers. Audio. Visual. Computers and projectors have the potential to attract all kinds of pupils hence teachers must be aware of using technological skills along with traditional methods of teaching.

14. Expenses and interrupted power supply. Smart classes need highly equipped devices which might cost very lot. To reduce expenses for the economically weaker section, government and non-governmental organizations should help economically through a program like a scholarship and a stipend so that economically poor students can get maximum benefits out of that.

Conclusion

Integration of technology into education is considered to be cost-effective with exciting features whereby students can develop their life skills and attitude that is essential for growth and development. It enhances instant access to knowledge so that one can achieve their goal.

As far as developed nations are concerned implementation of education technology is much better than in developing nations. As per present statistics regarding the integration of educational technology is happening slowly in developing countries, this attitude should be changed to bring the quality of education for all. We have to understand the importance of technology from its massive application point of view. Though it has many challenges in various domains, adequate measures should be taken to solve the problem by the concerned authority. All higher education labs must be equipped with advanced devices to motivate the students for inventions moreover Students, teachers, and parents all must work together to achieve the desired goal.

The main proposal of this chapter is to emphasize the significance of technology to implement this program all across colleges and universities to make a positive impact in higher education. This article aims to highlight the unique features of technology associated with software and hardware application. This paper identifies challenges while attempting to integrate the technology and offers appropriate solutions to overcome the problem. The major findings are that when applying technological skills in higher education needs expenditure and skill especially in developing countries and to meet these needs enough funds should be generated by concerned governments and also it recommends that setting up a cloud computing system because it has mainstream technology in higher education.

References

1. Attaran, M., Attaran, S., and Celik, B. G. (2017). Guarantees and difficulties of distributed computing in advanced education: a pragmatic guide for execution. *Diary of Higher Education Theory and Practice*, 17(6).
2. Bates, T., and Poole, G. (2003). Powerful instructing with innovation in advanced education: Foundations for progress.
3. Strecker, S., Kundisch, D., Lehner, F., Leimeister, J. M., and Schubert, P. (2018). Advanced education and the chances and difficulties of instructive innovation. *Business and Information Systems Engineering*, 60(2), 181-189.

Internet References

1. David, N. (2013). 6 Technology Challenges Facing Education. Recovered from <https://thejournal.com/articles/2013/06/04/6-innovation-challenges-confronting-education.aspx>
2. Jean, D. (2018). 6 patterns and a 'fiendish test' in higher ed tech. Recovered from <https://givingcompass.org/article/challenges-with-innovation-in-advanced-education/>
3. Meghan, B. (2018). 5 Technology Tools in the Higher Education Classroom. Recovered from <https://edtechmagazine.com/higher/article/2018/03/5-innovation-devices-advanced-education-homeroom-perfection>
4. Roger, G. B. (n.d). Innovation in Education Higher Education. Recovered from <https://education.stateuniversity.com/pages/2496/Technology-in-Education-HIGHER-EDUCATION.html>
5. Susan, M. (2018). Innovation in EducationSchool, Higher Education Current patterns. Recovered from <https://education.stateuniversity.com/pages/2497/Technology-in-Education.html>

15. Implementation of E-Learning in School Education and its Consequences

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INTRODUCTION

At present the system of learning through ICT (information and communication technology) is known as E-learning (electronic learning). According to Oxford- a system of learning and teaching through an electronic media, especially the internet is known as E-learning. It helps people to learn anything, anytime and anywhere with the help of internet. So internet is the prime source of E-learning, which helps people to connect and communicate to a larger number of audiences at the same time. It is the fastest means of communication from one corner of the world to the other through different methods. Due to this pandemic situation which started in 2020 people have started adopting E-learning as the most important method of learning. E-learning gives us a virtual platform to connect teachers and students to share knowledge even they are physically miles apart. Eventually people are also getting used to these new methods of learning especially in India. In various other sectors like MNC, Agriculture, Health, etc, people have already included ICT for learning and communicating due to which they have also progressed. Gradually education also involves ICT which assist to increase literacy among people. E-learning processes lend a hand in gaining the importance of education in our everyday life. Exposure of internet attracted people to learn and explore new things even in their everyday life. This paper is focussing on the changes that have taken place in recent times due to the implementation of E-learning process in school education. As we all know that school is the foundation of students where they learn different life skills simultaneously with the course study.

POSITIVE IMPACT OF E-LEARNING

In the past years E-learning methods was not very much in use and limited people had access to it. But today various modes like live chats, video conferences, webinars, accessing of different audio-visual lectures or books, etc is easily accessible. People can easily participate in different knowledge based programmes without spending a large amount. It is an effective option for both learners and educators. E-learning gives the opportunity to students to learn out of the physical classroom which becomes interesting. Virtual classrooms are our latest classroom for sharing knowledge to different mass of people from, employees to students or any other group. E-learning gives the opportunity to learn according to your convenience. There are several courses available in the internet free of cost where students gain some

Knowledge. So many distance courses can be availed from anywhere in any part of the world. Several people are availing them not only to gain knowledge but also degree or certificate with their convenience. E-learning helps students to explore knowledge without going anywhere. Due to the implementation of E-learning both students and teachers got the opportunity to learn new technology. This recent learning process has been adopted by all the schools and colleges where students and teachers accessing virtual classrooms.

NEGATIVE IMPACT OF E-LEARNING IN SCHOOL EDUCATION

E-learning has become a life saviour in present situation when children could not go out of their homes. With the help of E-learning process they are in touch with their schools and courses. On one hand they

gain so much knowledge about ICT and on the other hand they are also getting distracted from their real world. Few days back parents and schools were taking measures to keep their children out of this virtual world but due to this present scenario children were compelled to take up computers and mobile phones for learning. There are some problems which we cannot overlook and can be a severe setback for our future generations.

Firstly E-learning process is very attractive for the students because it provides classes out of classrooms. They were very happy to be able to use computers and mobile phones for 4-5 hours a day apart from that they also use it for their project and other curriculum. There are several other students who do not have access to computers or internet. Everybody could not have enough money to buy computers or even android mobile phones or internet in daily basis because lot of data is consumed in virtual classrooms. So that does not mean they will not learn. Still there are so many people who fear of using or learning ICTs, they lack computer knowledge. E-learning has become expensive for most of the parents, even for the teachers or schools. In many schools they failed to start virtual classes due to lack of access in ICTs. For those students E-learning is not at all impactful.

Secondly for the use of ICTs internet is like the soul, without internet E-learning is not possible. There are connectivity issues and in many places they do not have proper network. So during virtual classes teachers and students had to face these issues. There are times when teachers had to spend so much time on solving these problems instead of any productivity. Due to which both teachers and students tend to get distracted. This hampered our teaching and learning process. These kind of technical issues are hard to handle for them also because they are not very much aware of technology. They also tend to miss classes for high and low connectivity of internet.

Thirdly E-learning is now a part of life without ICTs learning becomes hard mainly in present circumstances. Now they always wanted to refer Google or any other websites instead of books. Use of internet is not bad but hard copy books are very essential for their first hand knowledge. Still we imagine class lectures and text books and note books to summarize our knowledge because we have been brought in that way. It is said that books are the man's best friend as they do not demand anything. They just give us knowledge and share with us. Books are our first hand source of knowledge which is reliable and it's easy to handle and study. Due to more use of ICTs students had to suffer lot of other issues like strain in their eyes, back pains, headaches, etc. They have become lethargic to move around. It is also difficult to keep notes in E-learning process. Students are losing habits of keeping notes and practicing writing skills. They are now in habits of following all short cut methods which is not always useful in learning.

Fourthly as a student we always wanted to go to school and meet our friends but due to online classes they are forgetting their physical class rooms and playgrounds with lots of physical activities. School is the place where students learn basic life skills like to cooperate, team work, discipline, routine, tidiness, etc. Students get motivation from teachers, classmates and various other activities. In the physical environment they were more concentrated and focussed. In the virtual class rooms they just sit in front of their computers without much attention. Management of time becomes little difficult for the teachers in their home as well.. Even for the teachers it is not possible to engage so many students at a time like in physical classrooms. Interaction is very less due to which students get distracted or bored. Students or teachers are not being able to communicate properly; physical impact is always missing on the students. They hardly have anyone to monitor all the time at home. With the use of internet they are also getting access to different social media, YouTube or any other sites which can be the reason for distraction. But for some students it is difficult to understand virtual class and ask questions to the teachers. Different Practical based classes are of no importance in virtual classrooms and scientifically practical knowledge

is very important for a child. It is important to have face to face communication for a child to learn and implement those basic disciplines of life which we cannot ignore.

Last but not the least students are not taking the examination process very seriously in E-learning, there can be a situation where cheating can be done and teachers are not being able to monitor minutely. Due to this students are lacking interest in studies, more than knowledge they wanted to complete their courses. They lack in competition spirit.. The system of school education will lack importance if we accept E-learning as important platform. As an organization the value of school will bring to an end.

CONCLUSION

The process of E-learning is very helpful and we can involve it in our learning and teaching process but it cannot be an everyday routine. Audio-visual learning process is interesting to make students understand better. But it cannot be a permanent source of learning. We also have to understand the need of every student which is not just completing course but more than that. If we indulge young students only on screens then that might effect in their health in future. For pre-primary or primary students it is possible to engage them in other activities but for the secondary education practical education, curriculum and concentration everything is important because that is the time they need to decide their career. They need to face several examinations, so they need to get prepared. E-learning alone cannot fulfil all the requirements of a student from time to time. Coming from the underprivileged background students cannot avail E-learning, they have been deprived of education during this pandemic. Students from government schools in remote areas especially failed to avail education. Students with disability find it difficult to communicate properly .Most of the students find it distracted to sit and study at home, same goes with teachers. At home we do not get proper environment and ambience. It is not possible to accept e-learning in schools permanently. It has so many backdrops for both learners and educators. Students lack value for both education and educators.

School is a proper place for students as well as teachers to share knowledge and guide them through their learning process. It is the place where students make mistakes and learn through their mistakes, they not only complete their courses but also develop personality. E-learning can provide mostly theoretical knowledge to students and it lacks practical knowledge. It is a part of education but it cannot be an important medium of education. Proper use of E-learning is still unknown for school students; they are vulnerable to use of ICTs. Implementing E-learning in schools seems not very constructive for students.

Bibliography:

- 1) N. SOME, JAN 2006, [**E-Learning - A Guidebook of Principles Procedures and Practices**](#), E-Learning : Meaning, importance , principals and relevance in higher education ,Dr. Nandita Kaushal
- 2) Ketut Sudarsana et al 2019 J. Phys.: Conf. Ser. 1363 012063, The Implementation of The E-Learning Concept In Education, journal of physics, conference series
- 3) <https://engineering.careers360.com/articles/books-vs-e-learning-which-best>
- 4) <https://elearningindustry.com/5-common-problems-faced-by-students-in-elearning-overcome>
- 5) <https://www.embibe.com/exams/online-learning-challenges-and-solutions/>
- 6) <https://economictimes.indiatimes.com/definition/e-learning>
- 7) <https://www.td.org/talent-development-glossary-terms/what-is-e-learning>
- 8) <https://e-student.org/disadvantages-of-e-learning/>
- 9) <https://www.docebo.com/learning-network/blog/elearning-challenges/>

16. Enhance Communication Skills through eLearning

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A significant advantage of online education is that it keeps you current with contemporary learners. This allows the student to have access to the most up-to-date information anytime they choose. The area of education has seen significant transformations as a result of technological advancements. The internet has globalized the whole system of learning and development. The young have pushed it forward, and eLearning undoubtedly has a great career ahead of it. E-Learning has become an essential forum for instructors from all over the globe to share their knowledge. It has been observed that the popularity of electronic learning and electronic learning techniques has risen steadily over the past several years. We are dependent on the digital lifestyle, which makes it feasible for us to provide plans at this price. However, since the globe has been confronted with the pandemic of Covid-19, the development of eLearning has grown tenfold in the last decade. Everyone, from students to professionals, is using digital media to expand their knowledge and add new talents to their repertoire. In this article, we will examine the importance of electronic learning and its ways to make the students better in communication skill through eLearning.

Previously, cell phones were mostly used for making phone calls or sending text messages. However, we increasingly use our phones to accomplish anything from listening to music to purchasing goods and even conducting monetary transactions. Consequently, in order to acquire new skills, individuals have been increasingly turning to eLearning techniques in recent years. Our reliance on and use of technology are evolving in tandem with technological advancement. Learners may now use eLearning applications that will help them grasp the basics of the subject matter and improve their abilities. They may also get a degree certificate without ever having attended a school, university, or other kind of academic facility.

The instructor's ability to understand and meet the requirements of his or her pupils is essential. As a result, possessing excellent verbal and non-verbal communication skills can help you advance quickly in this field. Instructors are often called upon to assist students in resolving their confusions and difficulties. And this will not be feasible if the teacher does not possess effective communication abilities. Participation in eLearning is accomplished via active involvement on information sources such as forums and discussion boards. Ultimately, it is our goal to locate figuring out ways to get learners more involved in online learning classes and improve the communication skills. We hope that this will result in positive outcomes. It is important to have positive learning experiences. This is in accordance with the belief that communication is essential for direct involvement in a course linked with higher stages of electronic learning output.

The aim of internet interaction is more like the purpose of direct in person communication, to establish connections, exchange information, and be acknowledged and understood by the other person. It is important to consider when and how teacher interact with the students since this helps them feel more connected to the teachers and their fellow students in online courses. When it comes to being a teacher, finding the most effective ways to communicate with the students should be the teachers' first focus.

The discussion in an online context requires a bit more thinking and preparation than the one that takes place in a traditional classroom setting, mostly owing to the lack of physical communication. It is not always easy to develop communication for your students that is current, relevant, and helpful. Make

an effort to adopt the fewest number of words reasonable. Since online students are constantly being inundated with material that is mostly textual in nature, the very last point students want to do is read just another lengthy message.

The message should be succinct and straightforward, offering no opportunity for ambiguity or misunderstanding. If you want your pupils to be aware that the deadline for a study has been prolonged, for example, your communication should be limited to that subject matter and nothing else. You need to think beyond the text box when communicating with your students online. Because not everyone likes to connect in the same way, you must be prepared to communicate via a variety of modes.

The communication styles used by teachers in their online courses should be representative of the variety of their students. It is possible to improve the efficiency of your communication and relationship with pupils by using a variety of accessible resources. Decide how you will connect with your pupils, whether it is via email, messaging apps, webinars, video messages, web conferencing, or indeed electronic communications. It is critical that you plan ahead of time how you will communicate with your pupils so that when the time comes, selecting the most appropriate way for communicating with them is simple. It is also critical that you inform your pupils of the ways you intend to use to communicate with them so that they are aware of where to search for your communications when they arrive.

There is no effective communication skill without listening first. Students' listening skills may be developed by teachers reading aloud a selection of material to their classes and afterwards having the students debate and respond on the topic. Active listening also entails listening with the intent of understanding rather than responding. Encourage pupils to exercise asking clarifying questions in order to fully comprehend the speaker's intended message in order to reinforce the development of excellent listening skills.

The consequences of technology are also seen in the area of education, where they have led to major changes in the way academic achievement is taught as well as how it is consumed. Books-based learning, as well as revolving learning, is fast becoming a product of the past. The Teaching profession has been focusing on classroom-based teaching up to the beginning of the 21st century, in which learners have not been given the opportunity to take part in immersive sessions. It is essential to make concepts easier and to give pupils confidence in order to cater the requirements of constantly changing times. The conventional classroom, previously defined by lengthy, dreary sessions, is now a dynamic and stimulating learning environment due to technology entering the education industry. Education throughout the digital age has improved the lives of students and instructors alike.

Not everyone would be able to get access to knowledge as quickly as others. Moving instructors and pupils across international boundaries was made difficult due to geographical limits. This most recent shift has made it possible to maintain consistency in education. Learners and instructors benefit from eLearning mobile apps because they encourage more collaboration and worldwide incentives. In today's digital age, it is impossible to overstate the significance of online learning education. Syllabuses delivered through the internet and immersive courses are becoming more popular methods of instruction. It is also correct to propose that an expanding should begin eLearning and seek the assistance of an eLearning application development firm. Thus, the delivery of learning to learners has been radically changed as a result of the advent of electronic learning. eLearning, as compared to the traditional chalk and board style of teaching, makes learning simpler, easier, and more effective for students.

References:

Anvarovna, B., & Nasirovna, D. (2021). Verbal and non - verbal means of communication as a psycho linguistic factor of teaching communication in a foreign language. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(3), 596-599. <https://doi.org/10.5958/2249-7137.2021.00672.8>

Bambaeeroo, F., & Shokrpour, N. (2017). The impact of the teachers' non-verbal communication on success in teaching. *Journal of advances in medical education & professionalism*, 5(2), 51–59.

Coman, C., Țîru, L., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 10367. <https://doi.org/10.3390/su122410367>

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>

<https://elearningindustry.com/elearning-is-transforming-education-in-india-importance>

<https://unremot.com/blog/introduction-to-e-learning-methods/>

17. E-Learning Facilitates the Development of Second Language Proficiency

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E-Learners of English as a second language should apply their developing language abilities to rich academic material across all disciplines rather than focusing only on the basics of the English language. Accomplishment of e-learning a second language is a major accomplishment in which one should take pride! It will not only help in our intellectual and emotional development, but it will also enhance our communication skills, motivate us to accomplish our objectives, and increase our self-esteem as a result of our participation.

While learning a second language through electronic learning, a student will think in their first language and express themselves in their second language. It takes a long time to become comfortable with this process of online learning. As a result, with enough practise in e-Learning, one can master both their major and secondary languages. Language is used to express our thoughts and feelings, both verbally and nonverbally. The influence of one's mother tongue on the acquisition of a foreign language will be felt. This can't be avoided. Indian people's Indian's phrases are influenced by the mother tongue language's sound patterns. E-Learners face language obstacles when attempting to convey their thoughts and feelings. It is not easy to teach English as a second language or to learn English as a second language through eLearning. To develop communication abilities in a second language, a variety of tactics can be applied in eLearning. Students and learners who are striving to overcome the limitations of their native language will find that practising communication and comprehensive skills is quite beneficial. The purpose of this paper is to address the challenges that e-Learners of English as a second language face, as well as ways for overcoming them.

The impact of the native language on the eLearner's capacity to acquire the second language will be substantial, limiting the e-Learner's ability to go further in the second language. It's referred to as Mother-Tongue Interference, and it has a negative impact on e-learners' capacity to communicate and write in their second language, which is English. During the process of e-learning a second language, it is impossible to avoid the influence of one's native language. It will have an effect on the kids' ability to advance in their academics.

In India, English is considered to be a complex language to learn and teach, and it is widely used. E-Learning English as a second language takes more effort and time than learning English as a first language. The vast majority of Indian classes are devoted to the basic concepts and norms of English grammar, rather than to other subjects. It is also important to teach and practise soft skills and understanding levels in a proper manner with the students. The consequence of this is that Indian students are less confidence in their abilities to communicate effectively in English.

It is impossible to exaggerate the significance of pronunciation in communication, since it is just as essential as grammar and vocabulary in most situations. In contrast, there is no denying that the mother tongue has a significant effect on the second language e-learning process. Correct pronunciation has a distinct structure, which makes it simple to identify. It is not common practise in most courses to

put considerable emphasis to pronunciation training or the advantages of having a native-like accent. Because there are so many distinct Indian dialects spoken across the nation, it is almost difficult to teach online all of the accents to all of the students in a single class. This is a significant source of disagreement in Indian educational institutions. In order to successfully overcome the obstacles to e-learning English, it is necessary to deliberately approach the subjects of soft skills, pronunciation, phonetics, and spoken English from an Indian point of view while discussing these topics.

Due to the increasing globalisation of the globe, the advantages of e-learning other languages are increasing in number, and bilingualism is today considered to be one of the most useful real-world abilities that has ever existed, rather than simply a great party trick. If you are contemplating putting out the effort to e-learn a second language rather than wishing for the world to accept your unilingualism, you are really one of a kind. You will bloom into the great polyglot you've always wanted to be if you have the proper strategy and mindset toward learning.

To really learn a foreign language, one must first master the art of genuine communication and connection with others, a vital life skill that can only be acquired by direct contact with people. Learn a foreign language and you will use your new superhuman ability to understand what someone is saying, remember the proper vocabulary and grammar, bring the vocabulary and grammar into the proper sense, and respond back—all on the spot and in a timely manner—because you will have developed superhuman abilities. You've gotten in touch with us. And therein is the heart of the problem. The warmth and sensuous sounds of someone speaking in a foreign language are like hearing gold coming to meet you with its warm, voluptuous tones. Speaking a foreign language is very tempting since it may make you seem more attractive, fascinating, and clever, all of which are desirable qualities can be master from electronic learning.

It takes time and effort to learn a second language, and it takes dedication, hard work, and persistence to succeed. Many students believe that studying a second language would offer them a competitive advantage when applying for internships and employment. This is not always the case. Learning a second language by e-learning provides the chance to interact with a diverse variety of individuals and acquire fresh views, which is another benefit of doing so. Students may choose from a wide range of effective electronic learning and research techniques to suit their needs. In order to effectively learn a second language, it is essential to develop detailed study programmes. Students may utilise study programmes to stay on track and gain more knowledge. One of the most important aspects of e-learning a second language is to immerse oneself in the language. The activities include listening to music, viewing television programmes and movies, and talking with native speakers of the language, among other things.

It is more effective to teach English through online in a student's native language since it helps them improve their literacy and critical thinking abilities. Student's ability to comprehend a second language in their mother tongue is greatly enhanced if they are doing it in their mother tongue. They have the option of interrupting the course in order to acquire a better grasp of the material.

Thus, In the course of e-learning a foreign language, students often suffer emotions of failure when they think that they are not acquiring it well enough or at the pace that they want. Despite the fact that this is a major barrier to overcome, it is essential to keep pushing forward in order to learn another language. Students must make errors in order to be able to learn from their mistakes. When learning a foreign language from the electronic devices not like face-face interactions, it is important to be comfortable with making errors in order to move out of your comfort zone and become more independent. No need to complete full immersion; instead, individuals may start by selecting an English-

speaking partner who is on the same level as them and working together through video calls to enhance their English proficiency.

References:

Beebe, L. (1983). Risk-taking and the language learner. In H. Seliger and M. Long (eds.), *Classroom Oriented Research in Second Language Acquisition*. Rowley, MA: Newbury House.

Dornyei, Z. (2006). *Individual differences in second language acquisition*. AILA Review, 19, 42-68.

Ellis, R. (2008). *The Study of Second Language Acquisition*, 2nd ed. Oxford: Oxford University Press.

Nordquist, Richard. "*Definition of English as a Second Language (ESL)*."Thought Co, Aug. 27, 2020, [thoughtco.com/english-as-a-second-language-esl-1690599](https://www.thoughtco.com/english-as-a-second-language-esl-1690599).

Scovel, T. (2001). *Learning New Languages: A Guide to Second Language Acquisition*. Boston: Heinle and Heinle.

18. English Language Lab as a Tool for e- Learning to Improve Communication Skills

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In terms of e-learning, the teacher will act as the students' first and most important role model. Students should be able to comprehend the target language at the beginning of the course. Students will develop confidence in their abilities to communicate successfully in English as a target language if the teacher encourages them to speak online class on a regular basis. E-Learners will benefit from starting to study a foreign language from the beginning of their education since it will assist them in making connections between the target language and their native language. Their ability to compare and contrast the two languages, as well as have a deeper knowledge of each, is expected to aid students in improving their public speaking abilities through e-learning. It is essential that e-learners may practise these sound samples with a replica voice over and over again in order to stay up with the success of the English language lab.

Most importantly, utilising one's mother tongue in a English language lab is consistent with the majority of students' chosen e-learning methods, which is one of the most significant advantages of doing so. Beginning and intermediate students will most likely translate the phrases from their original language into English once they have fully comprehended them in their native language. Knowing precisely what a new grammatical structure or lexical item means in the original language provides e-learners with a feeling of comfort and confidence. It's tough to turn a blind eye to the needs of the students. However, as second-language teachers, we must be aware of when and how to use our mother tongue as a useful teaching tool in order to be successful person in e-learning. Because students learn and use their mother tongue from an early age, it is very difficult for them to break free of its influence. They are less confident in their abilities to communicate in a foreign language than they were in their own language. Native speakers who are skilled communicators will feel inferior to their non-native counterparts. When the target language learners can understand the concept in their mother tongue, they can then transfer the knowledge into their second language. The most of the time while students/learners are at the online class, they will communicate with one another in their native language, Because of their little exposure to the English language, they are having difficulty communicating.

Languages are great skills to have on a student's resume or in their professional profile. When it comes to students who have committed themselves to studying a foreign language for many years or more, college admissions officials are impressed. Regardless of whether or not they want to attend college, kids who possess strong language abilities will have a major competitive edge in the employment market. Languages are one of the top eight talents required by all professions, regardless of sector or skill level, and are in great demand in both the public and private sectors. Language skills are also in high demand in the public sector. People who are bilingual have improved problem-solving skills, as well as improved memory, concentration, and mental flexibility. In addition to seeming to perform well on standardised tests, students who study languages tend to make scholastic improvements in other subject areas as well. E-Learning another language is the most direct route to become acquainted with another culture. It assists you in developing a more in-depth knowledge of different cultures and viewpoints on the global stage. Having that sort of knowledge is very beneficial. Because

the earlier learners begin, the more probable it is that they will be able to finish a lengthy, continuous sequence of teaching through online, which is the most effective method of learning a new language. So go ahead and take action! Languages will aid you in your e-learning and leadership endeavours.

As a language teacher, I think it is important to take into account the emotional difficulties that come with e-learning a new language. Putting oneself in the position of a language student is a great approach to accomplish this goal. You get a feeling of how it feels to make errors in a language online class as a student, how difficult it is to explain oneself properly, how difficult it is to grasp grammatical rules, how tough it is to pronounce words correctly, and how humiliating it is to speak in public. As a teacher, you may use this information to help you improve your communication skills with your own pupils and to provide ideas on how to respond to their problems through e-learning. And, perhaps most importantly, you'll have a better understanding of how to help them in conquering their problems. I think that being on the other side of the desk provides a humbling experience that may be beneficial in the virtual classroom, even if I do not believe that learning a second language is necessary to have empathy as a language teacher. Consider keeping note of the activities the teacher conducted with the e-learners that they considered to be beneficial, useful, fascinating, engaging, or effective, as well as the activities you found to be unproductive, boring, or too difficult to keep track of. These exercises may then be customised for use in their own virtual classes by adding a personal touch and/or improving on the originals.

References:

Allwright, D., & Hanks, J. (2009). *The developing language learner: An introduction to exploratory practice*. London: Palgrave Macmillan.

Ambridge, B., & Lieven, E.V.M. (2011). *Language Acquisition: Contrasting theoretical approaches*. Cambridge: Cambridge University Press.

Corder, S. P. (1967). The significance of learners' errors. *International Review of Applied Linguistics*, 5, 160-170.

Dörnyei, Zoltán, (2003) *Attitudes, orientations, and motivations in language learning*. Malden, Mass.: Blackwell.

McArthur, Tom. (2002). *The Oxford Guide to World English*. Oxford University Press.

19. The Advantages of E-Learning and Online Education in Broadening our Horizons

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E-learning and online education give you the benefits of expanded horizons and Studies have demonstrated that e-learning offers cognitive advantages for people of any age, regardless of their background. In accordance with these results, bilinguals have bigger brains, greater memory, are more creative, and are better problem solvers, among other characteristics. These advantages not only make it simpler to learn new languages, but they also make it easier to learn anything new in any subject. In today's busy multitasking environment, the ability to switch between activities rapidly is essential for success. Bilinguals are able to switch between activities considerably more quickly than monolinguals, and they are able to do much more things at the same time. E-Learning a new language is an excellent method to meet new and fascinating people while also establishing lasting connections. Meeting new and interesting people through online and making lifelong friendships are certainly worthwhile objectives to strive towards. Language enables us to express our feelings and desires, as well as connect with others and create meaningful relationships with those around us. When meeting native speakers, being able to communicate in a foreign language not only opens up a vast pool of prospective partners, but it also acts as an immediate common denominator between them. Having a basic liberal education that includes mastering a foreign language is not a prerequisite for studying abroad. Educating individuals entails guiding them out of their confinement, narrowness, and gloomy circumstances.

While studying with someone else, there are many effective research methods to choose from, and determining which one is the most effective is what makes the learning process more fruitful. Learning a new language via distributed practise is a popular method used by language learners throughout the world. When using this method, students learn the significance of breaking down concepts into smaller pieces in order to make the content simpler to comprehend. It is necessary to spread out such sessions over a period of time in order to make development. However, even if learning a new language requires a great deal of practise and may rapidly tyre a student, it is critical that they recall why they began their studies in the first place. A new language will open up a world of possibilities, and it will also help in the development of new methods of expressing oneself, one's feelings, or one's thoughts and ideas. Every person's ability to communicate is critical in today's world, and studying a second language will help everyone enhance their communication skills in a number of ways. According to e-learning, considerate and interesting ways of teaching will get the attention of the students.

Being exposed to online courses and immersing oneself in a new culture and perspective is the most certain method to become a more open-minded, compassionate, and tolerant person, and this is something that is absolutely valuable. When you see the world from a new perspective, it may be a beautiful and eye-opening experience, and it helps you to understand where you and others come from. E-Learning may have the reverse impact, enabling you to acquire a better knowledge of your own home tongue and culture as a result of your experience. One of the most unexpected advantages of e-learning is the opportunity to broaden your horizons. Not only will you become more conscious of cultural conventions, but you will also become more aware of the syntax, vocabulary, and pronunciation patterns

of your native language. As a consequence of learning online, former monolinguals' hearing, reading, and writing abilities are likely to improve. The importance of electronic learning cannot be overstated, and there are many reasons for doing so. Taking the time to learn new languages and ultimately being proficient in it may assist to break down barriers and bring people closer together on a deeper level of mutual understanding. More importantly, establishing this common understanding will ultimately open a series of doors that will lead to a more exciting and rewarding personal and professional life!

E-learner who has prior experience with the mother tongue will be able to understand the meaning of words in the target language. The instructor may explain difficult subjects in the first language, but this should not interfere with the student's ability to communicate successfully in the second language, which is the English language. As a consequence, there is more time for observation and practise, and there is no need for non-natural circumstances. As a consequence, instructors may take advantage of the additional time to practise sentence patterns, vocabulary, and structural elements. It has the potential to be helpful in terms of improving one's English language abilities. When the instructor explains the significance of the content in the original language, students are better able to understand the subject. Learners get more experience speaking and communicating in English as a result of this course. If the teacher instructs in his or her native language instead of English, the aim of helping students improve their communication skills will be useless. The students' pronunciation and fluency in the second language will only improve as they get more experience speaking it.

It is common for children to be quite young when they first begin to comprehend or utilise the online way learning in this covid-19 pandemic situation. They speak in both their primary and second languages at home and at school, and they are fluent in both languages. They are processing the environment around them in both languages. There is no difference between the two. The learner utilises their native language in one context, such as at home, and the second language in another setting, such as at school, resulting in both languages becoming separated based on the environment in which they are used. It is common for language learners to pick up a second language by incorporating it into their original language via translation, learning grammatical rules, and then applying these concepts in a real-world setting to their newfound knowledge. But with the online classes students should be aware of the common and communication language which is very important for their future. Studying and mastering the native language of any pupils who fall into this category will aid the instructors in communicating more effectively and clearly with them in the future. It is possible for the teacher to figure out why they are making errors and what they are attempting to communicate when they talk, if the students grasp the grammatical and phonetic structure of their language. It may take much longer to explain how to utilise these colloquial phrases than it does to just translate them into your students' native language. It is always more effective to just translate them into English and then seek up the definitions and examples of these words in the English language. In addition to the e-learning, it's important to note that you are under no need to and generally should not speak the students' native language during the whole session. The teacher, on the other hand, will come to realise how helpful and advantageous it is to be able to speak with them in their home language on occasion. The language of a civilization is often referred to as the core of the community.

The ability to communicate well in English is now needed to graduate from high school and get a college diploma. Both instructors and students strive for a high proportion of passing grades. Because of this, students learn for the goal of passing tests rather than as a method of communication. Sadly, their indifference makes it impossible for them to acquire English as a communication language. A teacher should pay close attention to each and every student in the virtual class and provide them with individual attention and care. The practise of communicating and increasing one's vocabulary in the target language should be encouraged for students and learners who are afraid of public speaking. Those learning will eventually be able to communicate and write in English without encountering any problems. Instead of

racing through the curriculum, instructors should collaborate with students to assist them enjoy e-learning a new language one step at a time, as opposed to all at once. In terms of fluency, it will be beneficial to both students and instructors. Because of their financial circumstances, learners and students are unable to get a quality education. They also lack knowledge of the subject matter. It was the underprivileged students' inferiority complex that held them back in their efforts to learn a new language in the second grade.

So, almost without exception, we learn online a great deal about the culture and people of the place or nations where that language is spoken as well as about ourselves. This allows the learning students to acquire a deeper grasp of the traditions, sports, activities, films, public personalities, holidays, and a range of other subjects that they are knowledgeable about, want to learn about, and have a strong emotional connection to when they participate in this activity. When students develop an emotional connection to the e-learning content, they are more motivated to express their opinions about it. And the more students talk throughout the session, the more opportunities the instructors have to correct their expression and help them in better expressing themselves in front of their classmates who are connected in the virtual class. This has resulted in a wealth of excellent content that we may utilise in the virtual classrooms going forward. In part, this is because the e-learners will be drawing parallels between whatever information they hear in a foreign language and what they hear in their home language, which will aid them in understanding the foundations of English.

References:

- Lightbown, P., & Spada, N. (2013). *How Languages Are Learned*, 4th ed. Oxford: Oxford University Press.
- McArthur, Tom. (2002). *The Oxford Guide to World English*. Oxford University Press.
- Crystal, David, (1997). *English as a global language*, Cambridge Univ. Press, Cambridge.
- Ford, M., (2015). Educational Implications of Choosing “Practice” to Describe Science in the Next Generation Science Standards. *Science Education*, 99(6), pp.1041-1048.
- Selvi, A. F., & Yazan, B. (2021). *Language Teacher Education for Global Englishes: A Practical Resource Book* (Routledge Advances in Teaching English as an International Language Series) (1st ed.). Routledge.

20. Benefits of E-learning in Higher Education

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Abstract: This study investigates the effectiveness of using e-learning in teaching in institutions of higher education. The issue of utilizing modern information and communication technologies for teaching and learning is very important. This study reviews literature and gives a scholarly background to the study by reviewing various researchers and institutions on the concept of e-learning, particularly its usage in teaching and learning in higher educational institutions processes and the advantages and its adoption and implementation.

Key words: E-learning, benefits, effectiveness, Information and Communication Technologies, Higher Education.

Introduction

E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources. In its broadest sense, Abbad et al (2009), defined E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based (LaRose et al, 1998; Keller and Cernerud, 2002).

Considering the growing importance of online learning programs, it becomes critical to understand the benefits and limitations as perceived by the learners' and further act upon the improvement areas for a successful implementation of online learning. Online learning has the potential to offer many advantages to all the stakeholders such as learners, instructors, management, service providers etc. while these advantages attract student enrolment, there are associated limitations as well. Realizing the existence of deficiencies in the online learning program, educational institutions can initiate corrective actions starting toward improving the effectiveness of the programs.

Increasingly computer technology and the Internet are having major impact on educational programs. The development of the Internet, email, and virtual classrooms has allowed schools to connect with students from all corners of the world. Because of E-Learning many people that could not attend college due to class and work schedule conflicts now obtain college degrees.

Reviews

According to Tao et al (2006), this new environment for learning that is centered on electronic networks has allowed learners in universities to receive individualized support and also to have learning schedules that is more suitable to them as well as separate from other learners. This facilitates a high interaction and collaboration level between instructors or teachers and peers than traditional environment for learning.

E-learning in academics which is characterized by the use of multimedia constructs made the process of learning more active, interesting and enjoyable (Liaw et al, 2007). The main constructs that have made e-learning the most promising educational technology according to Hammer and Champy (2001) and Liaw et al (2007) include service, cost, quality, and speed. It is apparent that e-learning can empower students at higher educational levels to acquire their education in while at the same time perusing their

personal objectives as well as maintaining their own careers, with no need to attend be subjected to rigid schedule (Borstorff and Lowe. 2007).

Kartha (2006) in support of this thought reported that the number of courses online has vividly increased as a result of the attained benefits for both learners and universities. Algahtani (2011) in his evaluation of the effectiveness of the e-learning experience in Saudi Arabia categorized the definitions of e-learning from three different perspectives: the distance learning perspective

(Perraton, 2002; Alarifi, 2003; Holmes and Gardner, 2006), the technological perspective (Wentling et al. 2000; Nichols, 2003) and also from the perspective of e-learning as pedagogy (Khan, 2005; Schank, 2000).

The inventions of online educational platforms such as Blackboard and E-Campus have made online class assignments and communication with students and instructors more efficient and effective (Palloff & Pratt, 2001). Technology has enhanced faculty diversity in many universities by connecting with specialists in various fields of study. Many faculty members are able to provide adjunct support to institutions that are at a distance. Due to E-learning students are now receiving a quality education that once was unavailable (Palloff & Pratt, 2001; Kramer, 2001).

Types of e-learning

There are diverse ways of classifying the types of e-learning. According to Algahtani (2011), there have been some classifications based on the extent of their engagement in education. Some classifications are also based on the timing of interaction.

Algahtani (2011) divided e-learning into two basic types, consisting of **computer-based and the internet based e-learning**.

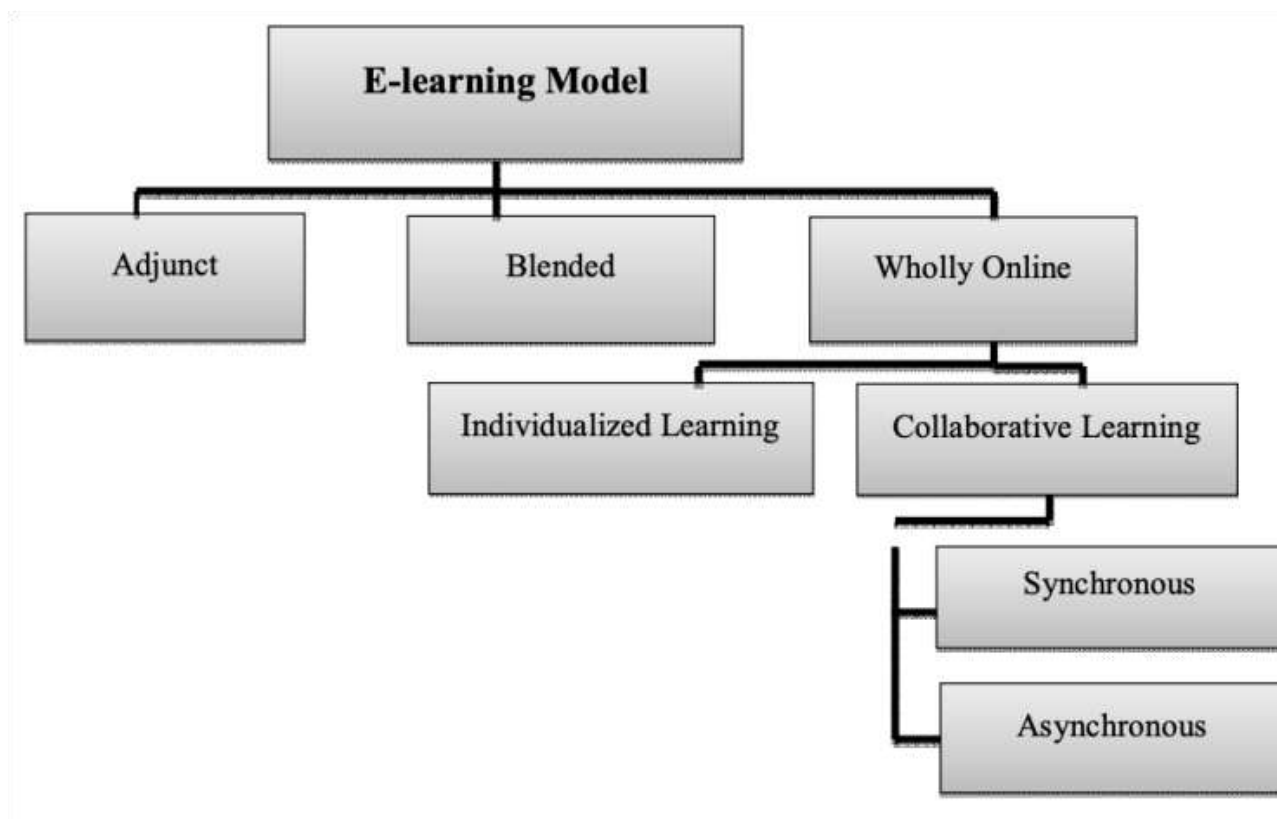
Zeitoun (2008) classified this by the extent of such features use in education, **mixed or blended more, assistant mode, and completely online mode**.

The assistant mode supplements the traditional method as needed. Mixed or blended mode offers a short-term degree for a partly traditional method.

The completely online mode, which is the most complete improvement, involves the exclusive use of the network for learning (Zeitoun, 2008). Algahtani (2011) described the completely online mode as **“synchronous” or “asynchronous”** by the application of applying optional timing of interaction.

The synchronous timing comprises alternate on-line access between teachers or instructors and learners, or between learners, and the asynchronous, to him allows all participants to post communications to any other participant over the internet (Algahtani, 2011; Almosa and Almubarak, 2005).

A Model for Using E-Learning in Education



Use of e-learning in education

Algahtani, (2011), in his evaluation of E-learning effectiveness and experience in Saudi Arabia, discovered three distinct models of using e-learning in education including the “adjunct, blended e-Learning and online”.

The three ways of using e-Learning technologies as discovered by Algahtani (2011) are described below.

The “adjunct e-Learning is the situation which e-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011).

In the blended e-Learning, Algahtani (2011) and Zeitoun (2008) explained that, in this way of using e-Learning, the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting.

The third one which is the online is devoid of the traditional learning participation or classroom participation. In this form of usage, the eLearning is total so that there is maximum independence of the learners or students (Algahtani, 2011; Zeitoun, 2008).

Zeitoun (2008) has gone further to explain that the online model is divided into the individual and collaborative learning, where the collaborative learning also consist of the synchronous and asynchronous learning (Zeitoun, 2008).

Advantages or Benefits of E-learning

Several studies and authors have provided benefits and advantages derived from the adoption of e-learning technologies into schools (Klein and Ware, 2003; Algahtani, 2011; Hameed et al, 2008; Marc, 2002; Wentling et al. 2000; Nichols, 2003).

Marc (2000) in his book review on e-learning strategies for delivering knowledge in digital age noted that one of the advantages of e-learning in education is its focus on the needs of individual learners as an important factor in the process of education rather than on the instructors’, or educational institutions’ needs.

Advantages

- student-centered learning
- Self-paced learning
- Flexibility of time and location
- Cost-effective
- Attracts global enrolment
- Enhanced accessibility to knowledge
- Archival capability of information

Advantages that the adoption of e-learning in education, obtained from review of literature includes the following:

1. It is flexible when issues of time and place are taken into consideration. Every student has the luxury of choosing the place and time that suits him/her. According to Smedley (2010), the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
2. E-learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners. E-learning motivates students to interact with other, as well as exchange and respect different point of views. Elearning eases communication and also improves the relationships that sustain learning. Wagner et al (2008) note that e-Learning makes available extra prospects for interactivity between students and teachers during content delivery.
4. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
5. E-learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.
6. E-learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.
7. The use of e-Learning allows self-pacing. For instance the asynchronous way permits each student to study at his or her own pace and speed whether slow or quick. It therefore increases satisfaction and decreases stress (Codone, 2001; Amer, 2007; Urdan and Weggen, 2000; Algahtani, 2011; Marc, 2002; Klein and Ware, 2003).

Benefits to Institutions

E-learning has greatly benefited higher education by enabling institutions to expand their curricula and add new programs (Palloff & Pratt, 2001). In the past, schools grew by opening multiple campuses or erecting more buildings. With e-learning they can grow without physical expansion and the money saved by not expanding the campus can be used to improve the quality of the education through instructional design. Updated computers, faster network connections and better learning platforms are being purchased to enhance the program quality, which in turn expands the student enrollment of the institution (Palloff & Pratt, 2001).

Specialists in any field of study can now teach classes that were not possible in the traditional classroom, e.g., online platform reduces the costs for travel and lodging for instructors and speakers (Palloff & Pratt, 2001). Due to the increased faculty pool, there has been a boom in program innovation among the institutions and e-learning has played a large part in this development. The virtual classroom or online platform has improved greatly in the last few years. While there are many different online platforms, Blackboard has become the standard for most universities.

Online platforms are usually centralized and supported by the institution's IT department. Strong technology involvement requires a solid IT department and 24-hour helpdesk support. This department can prove invaluable to the institution, faculty and students (Bedord, 2007). E-learning has many different ways to deliver the course information to the online student. The development of multimedia add-ins has only enhanced the online learning experience. The invention of video conferencing has given lecturers the capability to address an audience in multiple locations without leaving home. Institutions are now able to sponsor more conferences and workshops and invite specialists from all over the world. The video conferencing tool is also a great asset for institutions that still want to use the traditional classroom setting but want to use faculty expertise from other locations. Many faculty members are teaching abroad as well due to this technology (Palloff & Pratt, 2001).

E-learning has made it possible for institutions to reach millions of students that could not be served by traditional learning methods (Palloff & Pratt, 2001). There are many locations that do not have physical institutions but they do have internet access so now it is possible for these students to receive a quality education. Foreign students now obtain an American education without leaving their countries. Colleges and universities can now market their programs to a broader audience, which, in turn, brings greater educational opportunities to the masses. It helps institutions that have declining enrolments to reach out to people outside the local area.

The Benefits of E-Learning to Higher Education in Public Health and Public Health Research 474 E-learning programs need the support from the administration of the institution. They must be able to use, develop, and provide training for the technology that has been incorporated into the curricula (Lessen and Sorensen, 2006). Many institutions are now providing instructional designers to develop courses and to maintain the learning platforms. This is a way to keep the course information uniform and the faculty on board with the program. There are also institutions that have decided to make a separate online division. This is where all programs that are offered online are handled in one department.

This is a great way for traditional schools that are transitioning to online programs where only one area is directly affected in the implementing process. Each department will give feedback during the development process but it is the administration's responsibility to staff the online division with capable staff and faculty for insured success (Palloff & Pratt, 2001).

Conclusion

E-learning involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners study anytime and anywhere. It involves the training, delivery of knowledge and motivates students to interact with each other, as well as exchange and respect different point of views. It eases communication and improves the relationships that sustain learning.

References

- Abbit, J. T., & Klett, M. D. (2007). Identifying influences on attitudes and self –efficacy beliefs towards technology integration among pre-service educators: *Electronic Journal for the integration of technology in Education*, 6, 28-42
- Adams, D. A; Nelson, R. R.; Todd, P. A. (1992), "Perceived u, ease of use, and usage of information technology: A replication", *MIS Quarterly* 16: 227–247.
- Aithal P.S., Aithal S., Impact of online education on higher education, *International Journal of Engineering Research and Modern Education* 1(1) (2016), 225-235.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds.), *Springer series in social psychology* (pp. 11-39). Berlin: Springer.
- Akkoyuklu, B. & Soyly, M. Y. (2006). A study on students' views on blended learning environment. *Turkish Online Journal of Distance Education*, 7(3), ISSN 1302-6488.

- Al-adwan, A., & Smedly, J. (2012). Implementing E-Learning in the Jordanian Higher Education Universities in Saudi Arabia from Male Students' Perceptions, Durham theses, Durham University.
- Alias, N. A., & Zainuddin, A. M. (2005). Innovation for Better Teaching and Learning: Adopting the Learning Management System. *Malaysian Online Journal of Instructional Technology*, 2(2), 27-40.
- Allen I.E., Seaman J., *Going the Distance: Online Education in the United States*, 2011 [online]. Sloane Consortium website
- Alkhateeb F., AlMaghayreh E. Aljawarneh S., Muhsin Z., Nsour A. E-learning Tools & Technologies in Education: A Perspective.
- Almosa, A. (2002). *Use of Computer in Education*, (2nd ed), Riyadh: Future Education Library.
- Almosa, A. & Almubarak, A. (2005). *E-learning Foundations and Applications*, Saudi Arabia: Technology and Standards
- Altan, M. Z. & Trombly, C. (2001) Creating a learner-centered teacher education program, *Forum*, 39(3), pp. 28-35.
- Anderson, S., & Maninger, R, (2007). Preservice teachers' abilities, beliefs, and intentions regarding technology integration. *Journal of Educational Computing Research*, 37 (2), 151-172
- Andersson, A., (2008). Seven Major Challenges for e-learning in Developing Countries: Case Study eBIT, Sri Lanka, *International Journal of Education and Development using ICT*, Vol 4, Issue
- Arabasz, P., Pirani, J. & Fawcett, D. (2003). Supporting e-learning in higher education.[Online].
- Awidi, I.T, (2008). Developing an e-learning Strategy for Public Universities in Ghana, *EDUCAUSE Quarterly*, Vol. 31 No. 2, EDUCASE, 66-69.
- Bandura A., *Social Foundations of Thought and Action*, New Jersey: Prentice Hall (1986).
- Bedord, J. (2007) *Distance Education Choices, Choices, and More Choices*, Searcher, 15(9), p.
- Borstorff, P. C., & Lowe, S. L. (2007). Student perceptions and opinions toward e-learning in the college environment. *Academy of Educational Leadership Journal*, 11(2), 13–30.
- Brown, J. S. & Duguid, P. (2000) *The Social Life of Information*,
- Chyung S., Moll A., Berg S., The role of intrinsic goal orientation, self-efficacy, and e-learning practice in engineering education. *The Journal of Effective Teaching* (2010).
- Coldeway, D. (1998) *Instructional systems design*, University of Wisconsin Press, Madison, Wisconsin
- Coghlan, D. & Brannick, T. (2005) *Doing action research in your own organization* (2nd ed.) Sage Publications Ltd., London
- Hair J.F., Anderson R.E., Tatham R.L., *Multivariate Data Analysis*.10th edn. Prentice Hall: New Jersey (2006)
- Hair J.F., Anderson R.E., Tatham R.L., Black W.C., Babin B.J., *Multivariate Data Analysis*, 6th edn.PearsonEducation, NDelhi (2006), 734-735. Hu

L.T., Bentler P.M., Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives, *Struct. Equ. Model.* 6(1) (1999), 1-55

Jung-Wan Lee, Samuel Mendlinger, Perceived Self-Efficacy and Its Effect on Online Learning Acceptance and Student Satisfaction, *Journal of Service Science and Management* 4 (2011), 243-252.
Lynch R., Dembo M., The relationship between self-regulation and online learning in a blended learning context.

Malek A.L., Modeling the antecedents of internet banking service adoption (IBSA) in Jordan: A Structural Equation Modeling (SEM) approach, *Journal of internet banking and commerce* 16(1) (2011).
Monika Č., Analysis of Perceptions of Conventional and ELearning Education in Corporate Training, *Journal of Competitiveness* 5(4) (2013), 73–97

Sharma S., Dick G., Chin W., Land L., Self-Regulation and ELearning, *Proceedings of the Fifteenth European Conference on Information Systems* (2007), 383-394

Xu H., Ebojoh O., Effectiveness of Online Learning Program: A Case Study of A Higher Education Institution (2007).

21. Understanding the Challenges and Benefits of E-Learning process during the Pandemic: Especial focus on Bangladesh

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Introduction

The year 2020 was worse than ever before years for Coronavirus in the whole world. The main address of Coronavirus is it is a disease which is known as Coronavirus disease-2019 (COVID-19) (Dhawan, 2020). And, a deadly virus which is called Severe Acute Respiratory Syndrome Coronavirus 2 is the cause of Coronavirus disease (Gazi, 2020a). The World Health Organization (WHO) declared to maintain social distance, quarantine, isolation, lockdown, shutdown, etc. to be safe from being infected by COVID-19 (Gazi, 2020b). As a result, all types of educational institutions became shut down for many days long. In the case of the duration of shutting down institutions, Panama placed the first position, El Salvador placed second and Bangladesh placed third gradually (Unicef, 2021). Almost 1.5 billion students are far away from the educational institutions in a total of 180 countries where 220 million students are deprived of both study and conducting research at the tertiary level (IEHS, 2020). Another statistics showed that 168 million children are deprived of schools in which 888 million children both partially and fully (Unicef, 2021).

Over the past year and a half, Bangladesh faced the dangerous-looking of coronavirus disease which was diagnosed on March 8, 2020, in Dhaka city (Gazi, 2020a). Immediately, the policymakers of the Bangladesh government decided to close all types of academic institutions in the middle March and further intended to reopen them on May 23, 2021 (The Dhaka Tribune, 2021). But the truth is the situation was not under the control to reopen institutions in many areas of Bangladesh. Besides, Coronavirus killed a vast number of people in Bangladesh. According to the Worldometer daily report, 888,406 people are infected whereas 14,172 people died by the virus until June 26, 2021 (Worldometer, 2021). As a matter of fact, the Bangladesh government closed to protect students and their guardians; teachers; and staff from the virus (The Dhaka Tribune, 2021). It is equally important, there are 40 million students in Bangladesh are disrupted by novel coronavirus lockdown (Emon et al., 2020). Similarly, 19% of primary level students and 23% of secondary level students are at risk for study loss due to the longest closure of schools (The Dhaka Tribune, 2021).

E-Learning System during the Pandemic

Since all kinds of academic institutions are closed for an uncertain duration, there was a crying need for the E-Learning system to protect students, teachers, academic staff, society and nations (Dhawan, 2020). The E-Learning is, according to Guri-Rosenbilt, electronic media-based teaching-learning system in face-to-face meetings where conventional room control over substations (Guri-Rosenbilt, 2008 cited in Tamm, 2020). Subsequently, Clark and Mayar defined as E-Learning is a supporting learning system which is delivered by the institution through digital media (Clark and Mayar, 2016 cited in Tamm, 2020). It is mentionable that online education or the E-learning method is not a very old method of study, rather it origins in the 21st century (Sangra et al., 2012). During COVID-19 in 2020, many methods of online learning were applied, for instance, language apps, virtual tutoring, online language systems, and video conferencing tools Typically, different countries used several types of E-learning

apps all over the world, such as BYJU's in India; Tencent K-12 in China; Lark in Singapore; Ding Talk by Alibaba in many areas of the world (Li and Lalani, 2020).

In the implementation of the E-learning process, 1st and 2nd world countries made good but 3rd world countries are not good in providing sufficient supports (Emon et al., 2020). Simultaneously, Bangladesh also had an entrance into the E-learning process in 2009 with the support of BRAC to teach secondary students in Comilla and Gazipur (Zannat, 2019). In the same way, the Bangladesh government realized during COVID-19 the importance of the E-learning process from the previous disastrous situations and initiated an online learning process in Bangladesh (Gazi, 2020 b). In most the cases, zoom meeting app and Google meet app are used to give lectures and giving online examinations here.

Benefits of E-Learning

To be fair, the E-Learning method is a collaborative interactional teaching-learning method (Dhawan, 2020). It has a few helpful features, such as students can join in the class easily, learn anytime, and be connected to others; and having been motivated, they can think regarding the future (Zambito, 2020). A statistics showed that a student can retain 25% to 60% of lectures through the online method while he or she can retain 8% to 10% in the regular class system (Li and Lalani, 2020). And, less time is consumed, that means 40 to 60% of the time is saved being attended at his or her own place (Li and Lalani, 2020; Dhawan, 2020). The most important matter is E-learning rescues students from pandemic situation and opens the door to studying (Dhawan, 2020). In Bangladesh, E-learning grows many opportunities for Bangladeshi students. In fact, the Bangladesh government has not sufficient supports to provide 100% students security and conduct classes in institutions; even most of the countries have no also. It goes without saying; E-learning is the key leading method to reduce the study loss of students. Most importantly, students became bored and anxious during national lockdown (Islam et al., 2020) and the online learning method is the best way to be connected to others. Likewise, teachers are out of giving lectures at their institutions for many days where online learning made a big opportunity for them to give lectures to their students. On the other hand, private institutions got chance to survive their institutions through online class and exams. Because, guardians didn't pay the fees if the authority of private institutions didn't conduct the online learning process at all.

Challenges of E-learning

In general, internet connection and technologies are must to join in E-learning education system (Li and Lalani, 2020). Unfortunately, internet connection affordability of computers and other devices are not sufficient all over the world. For instance, 35% of students have internet access in developing countries and 80% of students have internet access to developed countries (IEHS, 2020). In contrast, 95% of students from Switzerland, Norway, and Australia have a computer and 34% of students have one in Indonesia (Li and Lalani, 2020). As well as, students have no access and support to modern technology if their devices are backdated (Adedoyin and Soykan, 2020). As a result, overall students faced difficulties in using the device; managing time schedules; and paying attention (Dhawan, 2020). Having a poor economy and infrastructure, Bangladesh is a less developed country where implementation of E-learning is not so good (Mahmud and Gope, 2009). A study showed that people in rural areas and semi-periphery areas have less access to the internet. Among all of the internet users, 93.7 million people use mobile internet and 5.7% of the million use broadband in Bangladesh (Abdullah, 2020). To be more, precise, students who use mobile data, faced many problems with networks. Accordingly, Islam pointed out that 57.9% of students have access to 3G; 16.5% 2G; 22.8% 4G network. In consequence, 36% of rural students have weak internet speed (Islam, 2020). Mahmud and Gope also identified a few numbers of challenges of e-learning in Bangladesh, such as-

- All of the apps regarding E-learning are run in the English language. So, weak proficiency in English is the main barrier;

- There are lacks of funds and technical devices;
- Less experience is in using computers;
- Parents fear misuse of the internet;
- Less awareness among people;
- Frequent load shedding;
- Less training (Mahmud and Gope, 2009).

Conclusion:

It is concluded that E-learning is the only way to protect students effectively in pandemic situations worldwide. In the meantime, all of the countries went through this way of the education system. More especially, underdeveloped countries didn't initiate online education having poor economies and infrastructure. On the contrary, developed economies got success in this initiative. In spite of holding various challenges, the Bangladesh government initiated classes through TV channels and YouTube so that secondary level students can learn furthermore (Gazi, 2020 b). Consequently, it is clear that the Bangladesh government also tried enough along with other countries to run E-learning in Bangladesh. In this case, parents should manage online materials for students as much as possible so that they can participate in the online education process. Secondly, students should be interested to engage in online methods of study to alleviate the study gap. Then, policymakers also have to take more effective strategies along with the current way of online learning policies. We hope we will be free from the captivity of the closure situation of educational institutions soon.

Reference

- Abdullah, M. (2020). 2020: The Rise of Online Education. *The Dhaka Tribune*. Retrieved from <https://www.dhakatribune.com/bangladesh/2020/12/31/2020-rise-of-online-education>
- Adedoyin, O.B. and Soykan, E. (2020). COVID-19 Pandemic and Online Learning: The Challenges and Opportunities. *Interactive Learning Environment*, 1-13. Doi <https://doi.org/10.1080/10494820.2020.1813180>
- Emon, E.K.H., Alif, A.R. and Islam, M.S. (2020). Impact of CVID-19 on the Institutional Education System and Its Associated Students in Bangladesh. *Asian Journal of Education and Social Studies*, 1(2): 34-46. Doi 10.9734/AJESS/2020/v11i230288
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis, *Journal of Educational Technology*, 49(1): 5-22. Doi 10.1177/0047239520934018
- Gazi, A.K. (2020 a). The Scenarios of COVID-19 in the Context of the Indian Sub-Continent (Bangladesh, India and Pakistan). *International Journal of Crime, Laws and Social Issues*, 7(1): 10-18. Retrieved from <https://so02.tci-thaijo.org/index.php/IJCLSI/article/view/244915/166252>
- Gazi, A.K. (2020 b). COVID-19: Consequences of the Nationwide Closure of Educational Institutions on the Students in Bangladesh. In Vijayakumar, R and Singha, S (Eds). *Impact of COVID-19 on Economy, Business, Education and Social Life*. Vol-3: 133-149
- Institute for Environment and Human Security (IEHS). (2020). Five Factors on E-Learning that can be Applied to COVID-19. United Nations University. Retrieved from <https://ehs.unu.edu/news/news/five-facts-on-e-learning-that-can-be-applied-to-covid-19.html>
- Islam, M.R., Rahman, M.M., Kabir, M.Z., Rahamn, S. and Kabir, S. (2020). Assessing the Challenges in Online Classes during the Coronavirus (COVID-19) Pandemic in Bangladesh. *Academy of Strategic Management Journal*, 19(1). Retrieved from

<https://www.abacademies.org/articles/assessing-the-challenges-in-online-class-during-the-coronavirus-covid19-pandemic-in-bangladesh-9885.html>

- Islam, M.A., Barna, S.D., Raihan, H., Khan, M.N.A. and Hossain, T. (2020). Depression and Anxiety among University Students during COVID-19 Pandemic in Bangladesh: A Web Base Cross-Sectional Survey. *Plos One Journal*, 15(8):e0238162. Doi
- Li, C. and Lalani, F. (2020). The COVID-19 Pandemic has Changed Education Forever: This is how. The World Economic Forum. Retrieved from <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
- Mahmud, K and Gope, K. (2009). Challenges of Implementing E-Learning for Higher Education in Least Developed Countries: A Case Study on Bangladesh. *2009 International Conference on Information and Multimedia Technology*. Doi 10.1109/ICIMT.2009.27
- Sangra, A., Vlachopoulos., D. and Cabrera, W. (2012). Building an Inclusive Definition of E-learning: An approach to the Conceptual Framework. *The International Review of Research in Open and Distance Learning*, 145-160. Retrieved from
- Tamm, S. (2020). What is E-learning. E-Students Organization. Retrieved from <https://e-student.org/what-is-e-learning/>
- The Dhaka Tribune. (2021). COVID-19: Bangladesh not Reopening Schools Colleges, till May 29. Retrieved from <https://www.dhakatribune.com/bangladesh/education/2021/05/15/bangladesh-not-reopening-educational-institutions-on-may-23-24>
- Unicef. (2021). COVID-19: Schools for More Than 168 Million Children Globally have been completely closed for Almost a Full Year, Says UNICEF. Retrieved from <https://www.unicef.org/bangladesh/en/press-releases/covid-19-schools-more-168-million-children-globally-have-been-completely-closed>
- Worldometer. (2021). Bangladesh Coronavirus. Retrieved from <https://www.worldometers.info/coronavirus/country/bangladesh/>
- Zambito, V. (2020). Why E-learning is Even More Valuable Right Now. E-Learning Industry. Retrieved from https://elearningindustry.com/why-elearning-more-valuable-during-covid-19/amp#aoh=16245961257993&referrer=https%3A%2F%2Fwww.google.com&_tf=From%20%251%24s
- Zannat, M. (2019). Challenges in Implementing Virtual Language in Bangladesh. BRAC University Publisher. Retrieved from http://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/13679/14203008_ENH.pdf?sequence=1&isAllowed=y

22. The Benefits of E-Learning

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We are familiar with the word E-learning in the 21st century, particularly in the present pandemic situation. E-learning means a system of formalized teaching but with the help of electronic resources such as laptops, smart phones, tabloids and other gadgets using internet connection. E-learning can be provided either in class or off-class modes. The salient benefits of E-learning are as follows:

- E- Learning is also known as online method of learning. The greatest advantage of online education is that it can be availed by the learners at the time suited to them the most. It can be joined in the evening or even weekends. Working persons and house-wives can join the course at their convenient time.
- Contents of the e-learning can be accessed without any limit and time whereas traditional or formal education has limited reach within a classroom and strict time schedule in formal system if a learner fails to attend a lecture, he or she has to prepare the lesson in his/her own without getting any help from the teacher which is a serious problem for the learners. There is no such problem in E-learning as contents/lectures can be accessed on line any time and as many times as desired. Learners can tailor-made to specific and relevant areas of study of his interest and choice without burdening him/her unnecessary and useless extra-load.
- The e-learning content can be updated regularly which enables learners to keep abreast with the latest developments in the respective field of study.
- E-learning provides quick delivery of lessons. Thus it significantly reduces time in contrast to much time taken by traditional system of learning.
- E-learning is the best way to communicate with the targeted audience by way of a greater degree of communication in a consistent manner.
- E-learning is very cost effective in comparison with the traditional learning system. Cost is reduced in different heads such as training, travel, course material, training and accommodation.
- E-learning is environmental friendly as it consumes less power and paper material is not needed. This results in directly less carbon dioxide generation and saving of tree which is the raw material for making paper.
- It has been found E-learning has resulted retention of information for longer duration. It is helpful to the students to earn more score in the competitive examination as on line now-a-days provide ample opportunities for practice of mock-tests with the provision of correct answer to enhance the score card of aspirants.
- The scarcity/shortage of teachers is a problem all world over. The problem is more acute in a big country like India with a population of 140 crores. The huge young population of India needs education. It's not possible for the Govt. to bear the burden of huge infrastructural cost for building schools and give appointment to a huge number of highly paid teachers in an under developed country like India . The best alternative way is to resort to E-learning mode of education instead of formal system of education. The money saved thus, may be utilized by the Govt. for social and development work and at the same time younger generation will not be deprived of education.
- Last but not the least pandemic has demonstrated the need and efficacy of E-learning all world over. All formal schools, colleges and universities are closed for nearly two years. Formal

education system has suffered a lot. Keeping in mind the pandemic may continue for an unspecified period, most of the reputed and premier formal educational institutions have resorted to E-learning/Online mode of imparting lessons as well as conducting examinations. Whether pandemic stays or does not stay it is certain the E-learning is going to replace the formal system of education in a big way in the near future. Everyone should be happy to welcome the advent of E-learning rapidly at the cost of formal education.

References-

- Mayer, Clark, R. E. R. C. (2016). E-Learning and the Science of Instruction: Proven Guidelines. Wiley.
- Allen, M. (2016). Michael Allen's Guide to e-Learning (2nd ed.). Wiley.

23. E-Learning: A Miracle in Teaching Learning Process

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Introduction:

In the present context, we are facing numerous transformation due to rapid development and diffusion of information and communication technologies in all walk of life. The development in computer technology has resulted in e-learning i.e. where the students can communicate with peers and teachers through online mode. An innovative application of computer in the teaching and learning process is known as E-Learning.

E-learning is the short term of electronic learning. Electronic learning refers to that type of learning which is carried out, facilitated or supported by some or the other electronic gadgets, media or resources. E Learning is a computer based educational tool or system that enables learners to learn anywhere and at any time. E learning is facilitated by the use of an electronic media or means like microphones and listening devices or audio and visual tapes. In fact, E-Learning deals with both technologies and methodologies in learning using networking and/or multimedia.

Jay Cross (2004) has normally been credited with inventing the term e learning in 1998. **Clark and Mayor (2011)** has defined the term E-Learning in their research paper titled '*E Learning and the science of instruction: Proven Guidelines for consumers and designers of multimedia learning*' as "instructions delivered through digital devices with the intent of supporting learning."

As e-Learning is dominated by the Internet technology, a contemporary author, **Rosenberg**(2001) tried to define the term e-learning as, "e-Learning refers to the use of the internet technologies to deliver a broad array of solutions that enhance knowledge and performance."

In this way, we come to the conclusion that e-learning is mainly related to the Services of the advanced electronic information and Communication media and means like:

- >CD-ROMs and DVDs
- >Tele conferencing and computer based conferencing
- >Email
- >Live chats
- >Surfing on internet and web browsing
- >On-line reference libraries
- >Web-blogs
- >Customized e-learning

Nature of E-Learning

Nature of E-Learning is as follows:

- It includes numerous types of media that deliver texts, audio , image, animation and video.
- It also includes technology application and process such as audio and video tape, Satellite ,T.V., computer based learning as well as local internet or internet web- based learning information and communication system.

- E- learning is possible both inside the classroom or any other place if learners have internet and computer facilities .
- it is situated to distance and flexible learning
- Blended learning is commonly used.

Objectives of E-Learning:

1. Communicating text.
2. Providing equal opportunity of education to all.
3. Providing opportunity for open education.
4. Providing facility of education to local community and global community.
5. Encouraging blended media.
6. Encouraging and developing on-line education.
7. Encouraging research through online education.
8. Making higher education economical.
9. Developing learning technologies.

Characteristics of e-Learning:

1. Online learning: It is carried out through the internet or web-based technology, with no face-to-face interaction.
2. Empowered by digital technology: e-learning is pedagogy, empowered by digital technology.
3. Computer enhanced learning
4. Technology enhanced learning: e-learning includes all types of technology enhanced learning (TEL), where technology is used to support learning process.
5. More than online learning: e-learning is broader in its meaning than that conveyed through the term like “online learning” or “online education” where there is no follow up program or no interaction between the teacher and students.
6. More than Computer Based learning and computer assisted instruction: e learning conveys broader meaning than the term CBL and CAI
7. Not synonymous to audio visual and multimedia learning: Learning should not be described as synonymous to audio visual learning, multimedia learning or distance education. Although the audio visual and multimedia Technology and distance education program are based on the internet and a web service provided through computers, these are not identical but complementary. It means that they are supporting and interdependent or interrelated to each other.
8. Exclusion of non internet and non Web Technology: all types of non internet and non Web Technology are not included in learning. The entire Computer Based instruction computer managed instruction which are not delivered through the use of the internet, but are used for learning cannot be included in e learning. when these techniques delivered through the internet for instruction become e learning.
9. Confined to web-based and internet based learning: The term e- learning should be related to that type of learning which is carried out or facilitated through web enhanced instruction and internet-based communication like email, audio video conferencing and live chat. Thus we can say that e- learning is

facilitated by the internet and multimedia Technology. And students or users can benefited by this with the use of computer, laptop, mobile ICT appliances.

Thus at present the user of e-learning make use of:-

- The recorded information and knowledge of the CDs and DVDs along with the internet and web technology.
- The internet and web-technology service delivered through their computer and laptops.
- The advanced e-learning technology delivered through web TV, Cell Phones, Pagers etc.

MODES / STYLE OF E LEARNING

Blended learning:

In this blended learning mode, combination of traditional and ICT enhanced e-learning practices are used. The teaching-learning process are so planned and executed as to present a happy combination of both the traditional class room teaching practices and e-learning based instructions. According to the need of students and for realization of predetermined objectives, teacher can provide knowledge of particular subject through the use of lecture cum demonstration method and as per need of students use ICT enhanced e-learning practices also. Thus, one can received the benefits of both the practices of traditional and e-learning. It is predicted that blended learning will enhance the student learning experience, at the same time it also expects that the teachers should be trained as online facilitator.

Complete e-learning:

In this complete e-learning mode, the traditional class room teaching-learning process is totally replaced by the online or virtual classroom teaching-learning process. In this mode, there is no existence of class rooms, schools and teaching-learning environment as happens in the traditional setup of school education. The learners are free to join the learning tasks independently with the help of properly designed e-learning courses or module based courses through which students can learn according to their own pace.

Most of the learning activities are executed entirely on-line, but at the same time, they may have also provided recorded information and learning packages which is available in the form of CD-ROM, DVD, etc. Therefore, e-learning activities may have two distinctive communication styles , which is as follows:

Asynchronous communication style:

In this communication style, teacher and student do not interact with each other at the same time. Students can learn, when they feel comfortable to do so. The information regarding different courses or learning experiences are provided to the learners through e-mail, discussion forum, Web pages, Web logs, wikis or through the recorded CD-ROM and DVD, or through module based teaching learning process. It means that the teachers and learners do not interact simultaneously. And also students can learn according to their own pace.

Synchronous communication style:

Here the communication between the teacher and students directly take place in an online chat room or through live audio-video conferencing. In the present context in covid-19 pandemic period ,the educational institutions, Universities, Schools, colleges, private tuitions all are taking help of this audio video conferencing or live chat to provide learning experiences and knowledge of their subjects to this student. Because during the lockdown period, physical presence in school or university is not possible to

avoid infection of Coronavirus, so the whole world is taking help from this synchronous and asynchronous style of teaching and learning process. Only because of Internet and Computer technology, education and many more activities are possible in this period and e- learning is one of them.

Benefits of E-Learning:

1. **Easy access:-**People can access e-learning anywhere at any time. Those who may not have time and resources for getting access to traditional class bound learning experience get it now easily at their convenience in the form of e learning. Here, there is no need for a classroom or any specific time . They can learn while earning. So it is very beneficial for those type of learners who want to learn but because of their poor family background , they are forced to leave their education in between of the courses.
2. **Individualized Instruction:-** E-Learning provides individualized instruction. It means students can learn according to their own needs. It gives preference to individual differences. Users can learn according to their abilities and by the use of a preferable learning style which suits them. E-Learning is very helpful as It takes care of the interest of the learners so they can learn at their own pace and receive sufficient knowledge.
3. **Self-paced learning:** Modules based e-learning allow students to work at their own pace. They are provided recorded lectures and assignments which they have to submit during allotted time. It is very beneficial for those learners who are not available at day time due to their job commitments.
4. Students may have the option to select study materials that gather their level of information and awareness.
5. Class work can be planned without compromising on work and family.
6. **Time saving:-**It is cost effective and save time, Reduces travel time and travel costs for off-campus students. There is no need to go anywhere, users can benefitted by e-learning at their own place.
7. Students can study according to their freewill wherever and whenever they have a computer and Internet connection
8. Ease to attend debate in the bulletin board threaded discussion areas at any hour, or visit with classmates and instructors remotely in chat rooms.
9. E-learning fosters more interaction among students and instructors than in large lecture courses. It has unique feature of arranging and access to same quality of the content that a full-time student has and also best educational content knowledge and opportunities are available through e learning.
10. E-learning can accommodate different learning styles as it use multiple senses and make possible learning through a variety of activities. And also promote collaboration among students from different localities, cultures, regions, state and countries.
11. **Development of confidence among learners:** Successful completion of online or computer-based courses boosts confidence and encourages students to take responsibility. In present context knowledge of ICT appliances is in demand. So e-learning proves to be beneficial for them, as it will help learners in their career.
12. **Helpful in acquaintance of new skill:** Students can test and concentrate on learning new skills. E-learning helps them in becoming experts in some of the skills of computer by providing them practical knowledge, how to prepare power point presentation, work on MS Word, knowledge of excel ,work on Google sheets, how to conduct video conferencing, webinar or interactive sessions.
13. It may also provide opportunities for evaluation regarding the learning outcomes of the learners through auto instructional devices and software available with the online reading material

through internet and mobile phone facilities. it may also provide the proper feedback and needed Diagnostic and remedial teaching to the learners.

14. E-Learning also acquaint learning experiences via simulated and gaming techniques which may provide benefits of new learning experiences through play way spirits and learning by doing to the students .

Limitations of E-Learning:

- ▶ Costly:-E-learning tools and equipment are very expensive.
- ▶ Lack of equipment:-It requires technology infrastructure which may not available.
- ▶ Adverse effect on health:-E-learning adversely effects some parts of body.
- ▶ Lack of co-curricular activities:-Co-curricular activities are neglected in e-learning.
- ▶ Technical defect:-E-learning is based on technology when the technical defect occurs e-learning stops.
- ▶ Practical or lab work is difficult to be carried out in a virtual classroom
- ▶ Teacher or professor may or may not be available when students have any query.

Conclusion:

Although there are some limitations regarding e-learning as a system of school education and classroom instruction but in this current pandemic period, it proves to be very beneficial in continuation of education of students of all levels i.e., school, college and university level learners are benefited by e-learning system. In conclusion, we can say that e-learning is an innovative technique which can be carried out, facilitated and supported with the use of internet and Information and Communication Technology. It is very useful as it provides learning experiences and valuable information to the students through online mode, in the same way as e-banking, email e-booking and e-commerce are facilitating our lifestyle.

References:

- Clark, R. C., Nguyen, F., & Sweller, J., (2011) *"Efficiency in learning: Evidence-based guidelines to manage cognitive load."* John Wiley & Sons,.
- Clark, Ruth C.; Mayer, Richard E. (2011). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (3rd ed.). John Wiley & Sons.
- Cross, Jay (July 2004). "An Informal History of eLearning". *On the Horizon*. **12** (3): 103–110.
- Galanouli, D., C. Murphy, et al. (2004). "Teachers' perceptions of the effectiveness of ICT-competence training." *Computers and Education* 43(1-2): 63-79.
- Gerven, P. W., Paas, F., Merriënboer, J. J., Hendriks, M., & Schmidt, H. G.,(2003) *"The efficiency of multimedia learning into old age,"* *British Journal of Educational Psychology*, 73(4), 489-505.
- Gill, N.S.,(2000) *Essentials of computer and network Technology*, Delhi : Khanna Book Publishing Co.
- Kumar, Santheesh. J and Sagy, John(April 2008) *E-Learning Possibilities in Education*, Edutrack, Vol. 7, No. 8, P.8.13
- Mayer, R. E., & DaPra, C. S.,(2012) *"An embodiment effect in computer-based learning with animated pedagogical agents."* *Journal of Experimental Psychology: Applied*, 18(3), 239.
- Mayer, R. E., & Moreno, R.,(2003) *"Nine ways to reduce cognitive load in multimedia learning."* *Educational psychologist*, 38(1), 43-52,.
- McLaren, B.M., DeLeeuw, K.E., & Mayer, R.E. (2011). *A politeness effect in learning with web-based intelligent tutors*. *International Journal of Human Computer Studies*, 69, 70–79.
- Rosenberg, M.J (2001) *E-learning*, New York: Mc Graw Hill.
- Turroff Murray. *Designing a Virtual Classroom*, Department of Computer and Information Science, New York N.J. : New Jersey Institute of Technology, retrieved from Murray@cies.njit.edu
- Venkataiah, S.,(2004) *Education via Internet*, New Delhi : Anmol Publication.

24. Problems in E-Learning System Faced By the Students

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ABSTRACT: In today's world e-learning is the most effective application. In this Covid pandemic situation e-learning is the only way where teaching-learning programs can progress. When students cannot go to their educational institutions, they can continue their educational process online. But they face some problems when they switch their traditional education program to the online education program. In this article I have discussed to some of the problems of e-learning and some possible remedies.

KEYWORDS: E-learning, Problems of e-learning, Remedies of the problems regarding e-learning.

INTRODUCTION:

The development of e-learning is connected to development, technical improvement, and also better affordability of computers. New programs were created not only to teach but also to allow communication between the teacher and the student. Already in the late eighties and the nineties of the last century the first form of electronic education computer-based training (CBT) was born. This is considered the cornerstone of today's e-learning. (Eger, 2005). So, the term e-learning has only been in existence since 1999. Other words also began to spring up in search of an accurate description such as online learning and virtual learning.

In the era of globalization, no one is deprived from learning and knowing because of their geographical location. Students of different countries and communities can achieve their desire knowledge or diploma or degree by using online. E-learning creates a bridge between teachers and students. E-learning means conducting a learning process with the help of electronic resources via the Internet.

Nowadays e-learning became very important to us and we are going to very much dependent on it day by day. In the COVID pandemic situation, e-learning is the only medium of conducting the educational process. In this situation when students cannot reach their educational institutions and even they cannot able to communicate with their teachers in the classroom situation. But through e-learning, it is possible to interact with teachers and can continue the educational process.

APPROACHES TO E-LEARNING:

Synchronous Method: Synchronous means "at the same time" which means online learning includes video conferencing, teleconferencing, live chatting, and live-streamed lectured that must be viewed in real-time. Here teachers and students are not physically connected.

Asynchronous method: It means "not at the same time". In which students can complete their learning at any time without live interaction with the instructor. They are free to decide when they want to study the course work.

Virtual learning: Here learning process going on through online mode. Students can communicate with their teachers through video conferencing, audio and chat.

Blended method: It is a kneading of synchronous and asynchronous learning methods. It is a combination of traditional learning and e-learning.

OBJECTIVES: 1.To identify the problems faced by the students using the e-learning program.

2. To find out the remedies to the problems faced by the students using the e-learning program.

PROBLEMS OF E-LEARNING: Although e-learning is very useful to us and it is the only way when we go through the Covid pandemic situation we can interact with each other through online mode. But there are some problems while using the online method for e-learning. Some of the problems faced by the students while they use e-learning are mentioned below:

1. Problem of adaptation: Some problems arise when students are moving from traditional classes to online platform, some of them cannot adopt the new learning process. The learning experience is entirely different for them because they do not use to learn from computer-based learning. So it takes time to get adjusted to the methods of computer-based education. They have to read and understand the course content on their own capacity.

2. Technical problem: Many students are not provided with the strong connection that online courses require, and because of poor connection they find difficulty in downloading some information related to the course content. As a medium of instruction teachers may use Google meet or Zoom or Teachmint and often each has a very different way of organizing their google classroom, which can lead to confusion among students and if there are any technical mistakes in the middle of the live session students become helpless.

3. Lack of Knowledge about digital resources: Although students are generally tech-savvy and thus they are able to manage computers well. Lack of computer knowledge is a major issue for today's students. Many of them cannot operate basic programs such as Microsoft Word and PowerPoint and therefore are not able to handle their file.

4. Problem regarding time Management & distraction: Time management is a difficult task for e-learners, as online courses require a lot of time and intensive work. Sometimes social media distract students' mind from main activities, as a result some fail to meet homework deadlines and this leads to stress and frustration for learners.

5. Lack of Self-Motivation: It is an essential requirement of an e-learner. Some teachers cannot explain course content clearly. Once students encounter difficulties in e-learning, they gradually lose their motivation. In the real classroom teachers know how to motivate students but it is not possible online.

6. Lack of awareness: One of the major problems of e-learning is the lack of awareness. Learners could not understand the effectiveness of e-learning.

7. Problems regarding clearness of course content: Sometimes provided content is not structured and not clear to the students. They cannot be able to understand the content clearly and also they are unable to learn proper information from the teacher.

8. Proper evaluation problem: It is one of the major problems in the present situation. Now the whole learning process is conducted on an online platform and teachers cannot be able to understand whether their teaching is effective or not. Evaluation in this system is done through online process. In this system when the examination is conducted, students have to upload their answer sheet in proper time. But the rural students who cannot get proper internet connection might face the problem of downloading questions paper and upload their answer sheet in time.

due to their remote location. The negative thing about this evaluation is students can search their answers according to the questions from the internet and give the answer to those questions without any content knowledge. So, most of the students are not being evaluated according to their merit.

9. Problems of disabled students: Disabled students can access the e-learning platform but not to contents, resources, activities, collaboration, and interaction tools. E-learning for learners with disabilities there are a variety of barriers that interfere with their effective use. For example, those in charge of supporting and deploying e-learning generally do not confirm ahead of time whether newly purchased academic software is compatible with adaptive software that reads what is on the screen to individuals with print impairments. PowerPoint presentations in class, if not posted online ahead of time, can cause difficulties for students with visual and other disabilities requiring adaptive software to read and follow the presentation. Video clips posted on a course website with no captioning can pose problems for students with hearing impairments. The website can pose problems for students with learning, visual, and neuromuscular disabilities even when they use adaptive software such as screen magnification, screen reading, and dictation software (Burgstahler, Corrigan, & McCarter, 2005; Bohman, 2007; Roberts & Stodden, 2005; Sharpe, Johnson, Izzo, & Murray, 2005)

10. Cyber risks of e-learning: E-learning takes place via the internet, every element in an online learning system can be a potential target of hacking or cyber-attacks. This may lead to unauthorized modification and/or destruction of educational assets. (Zuev, 2012) Online learning must consider the inherent security risks on the internet, such as identity theft, impersonation, and inadequate authentication (Ayodele, Shoniregun, & Akmayeva, 2011). Many educational institutions did not have proper cybersecurity measures in place, putting online classrooms at increased risks of cyberattacks. Educational institutions were also at increased risk of data breaches and violations of student privacy. Another risk of using an online learning platform is phishing which is one of the oldest and most popular forms of cybercrime.

Besides the above mentioned problems, students may also face some problems like they may fail to stay in touch with their teachers and do not get guidance from their teacher when they need. So they may experience feelings of isolation and get faded up.

REMEDIES OF THE PROBLEMS REGARDING E-LEARNING:

1. Adaptability: Students need to mindset to accept the new learning environment with an open mind. They have to understand the benefits of e-learning.

2. Solution of technical problem: Students have to know where is the high-speed internet connection at their home. What problems arise when they use the technology, according to their problem they can take some technical support so they can fix their problem. Students have to update their software and apps from time to time. If Students cannot solve the technical problem on their own they can take help from the teachers, parents and other classmates.

3. Using digital resources: Teachers have to encourage their students to self-exploration. So, they can explore the digital resources on their own. Besides this students can follow the YouTube app for learning about various functions of digital education. From this app, they can solve many technical problems.

4. Proper time Management and avoid distraction: Students should learn how to manage their time when their entire educational process going through online. They have to know what is more important for them. They should follow their online class regularly and on time. They have to avoid distraction. In-class time they should avoid unnecessary phone calls and chat.

5. Self–Motivation: Students should be open minded and always stay positive in the online class. They should prepare their mind to know new things and gain knowledge.

6. Awareness: Students have to know the benefits of e-learning. Teachers can raise the awareness of the students about e-learning.

7. Clearness of Content: When teachers provide information to the students, they should give feedback to the teachers. If they cannot understand what the teacher trying to mean, they should let the teacher know about their problems. So, the teacher can take the proper method for giving information. And teachers should try to give information in various ways like using charts, Animation, diagrams, Pictures, etc.

8. Effective Evaluation: Teachers should get feedback after every completion of the unit so they can understand students are ready or not for giving tests. When the test will be conducted through online mode there must be enough time for downloading questions paper and uploading answer sheets. Teachers should send the questions paper via WhatsApp, Messaging App, and Email so that Students can download it wherever they feel easy to get. Students should keep another device during their exams. So, if they face any problems they can use the device to overcome the problems. If it is not possible whenever they face the problem, they inform their teacher. So, he/she can help them. To avoid online exam cheating there are some ways:

- While conducting online exams students have to on their front camera.
- 50% of the questions should be based on higher order thinking.
- Mixed format including multiple-choice, true-false, matching, and open-ended questions.

9. Solutions for disabled Students: To reduce the e-learning problems among disabled students some steps can be followed:

- Give clear and proper headlines of the content. The font size must be noticeable to all.
- Split a large sentence.
- While presenting any images, Shapes, or Graphics there must be included alternative text and audio clips.
- Use a contrast background color and use a simple table structure with a specific row and column.
- Avoid using Italics.

Teachers and Parents always keep in touch with the students for overcoming problems faced by them.

10. Cyber Security: To secure from cyber attacks some steps can be followed:

- Keep software up to date.
- Install anti-malware and anti-virus software.
- Make a strong password.
- Avoid clicking the link without knowing.
- The teacher will aware of the students about cybersecurity.
- Students should avoid giving their phone or computer to any stranger person and If any OTP (One-time password) comes in their device they should never share it with anyone.

CONCLUSION: In this age of technology the use of e-learning is expanding rapidly. It is a very effective application for teaching-learning process. Although there are some drawbacks of using e-learning but there are also more advantages of e-learning. If we can overcome these drawbacks then it will be very helpful for us. It can be said that e-learning is our future prospects of our education system.

Therefore, if we can adopt and implement the e-learning program properly then teaching-learning process will be more up to date and effective.

REFERENCES:

1. Barik, N., & Karforma, S. (2012). Risks and Remedies in E-learning system. *International Journal of Network Security & Its Applications (IJNSA)*, Vol.4, No.1, January 2012. DOI: 10.5121/ijnsa.2012.4105
2. Fatma, S.F. (2013). E-learning trends Issues and Challenges. *International Journal of Economics, Commerce and Research (IJECR)* ISSN-2250-0006 Vol.3, Issue 2, Jun 2013,1-10
3. Fichten, C.S., Ferraro, V., Asuncion, j.V., Chwojka, C., Barile, M., Nguyen, M.N., Klomp, R., & Wolforth, J. (2009). Disabilities and e-learning Problems and Solutions: An Exploratory Study. *Educational Technology & Society*, 12 (4), 241-256.
4. Gugliman, E. (2010). E-learning and Disability: Accessibility as a contribute to Inclusion. <https://www.researchgate.net/publication/221549754>
5. Hubackova, S. (2015). History and Perspectives of Elearning. *Procedia- Social and Behavioural Sciences* 191(2015)1187-1190 DOI:10.1016/j.sbspro.2015.04.594
6. Venkataraman.S. (2020). Problems Of Online Classes. *International Journal Of Academic Research Reflector*, ISSN-2277-7342 Vol.9, No.6, pp.1-3., Nov.-Dec., 2020
7. <https://blog.commlabindia.com/elearning-design/challenges-and-solutions-of-elearning>
8. <https://www.embibe.com/exams/online-learning-challenges-and-solutions/>
9. <https://elearningindustry.com/5-common-problems-faced-by-students-in-elearning-overcome>
10. <https://www.educationcorner.com/learning-apps-helping-hurting-education.html>
11. <https://www.slideshare.net/coursehelp911/the-top-6-challenges-facing-by-online-students>
12. <https://granitebaytoday.org/distance-learning-presents-challenges-to-student-education>
13. <https://www.irrodl.org/index.php/irrodl/article/view/1632/2712>
14. <https://securelist.com/digital-education-the-cyber-risks-of-the-online-classroom/98380>
15. <https://elearningindustry.com/tips-promote-digital-literacy-tech-skills-elearning>
16. <https://support.microsoft.com/en-us/office/make-your-powerpoint-presentations-accessible-to-people-with-disabilities-6f7772b2-2f33-4bd2-8ca7-dae3b2b3ef25>
17. <https://terranovasecurity.com/cyber-security-and-going-back-to-school>
18. <https://www.slideshare.net/AshwinKumar24/elearningppt>

25. Educating School Mass through E-learning in the wake of Pandemic: The Boon and Bane

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Abstract

Educational Scenario in the wake of the pandemic has witnessed a lot of modifications, among which digital education was one. E-learning has received a tremendous boost due to the restricted movement of teachers and students, which promoted the creation of online teaching and learning experiences. Schools being shut for months and even a year has made the stakeholders of education rethink the pedagogical approaches which would differ from the ones used in the traditional classroom setting. Therefore, this paper deals with the changing educational scenario, the attitude of teachers and students towards e-learning, the boon and bane of e-learning to understand and analyze its effectiveness and sustainability in long run.

Keywords: E-learning, School Education, Pandemic, Boon and Bane

School as a 'miniature of the society, though lacked its charisma in recent times during the pandemic but it couldn't let go its connotation entirely. The students who emblemize the different sections of the society, belonging to a different class, caste, religion, socio-economic background remain the priority and holds the limelight. It is them, whose behavior modification, which is the goal of Education, stays unperturbed. Kothari Commission too emphasized upon the destiny of the nation is in the hands of these young minds whose behavior and progress in learning would help our nation to progress as a whole. Shaping these young minds and channelizing total development of their personality, is indeed the job of a teacher and therefore the teacher steps up as a facilitator helping the students to grow and take interest in learning.

For years, the National Policy of Education, even NEP (2020) has endorsed the use of Information and Communication Technology in the classroom for personalized learning and optimizing the learning outcome. Teachers had often found it problematic and requiring effort, which made it stand alone in papers but not in practicality. It is during this pandemic, that the virus had made teachers and students connect more through technology than in person, thereby making the stakeholders of learning to embrace digital literacy by hook or crook.

E-learning, in the context of school education, is the utilization of educational technologies to carry forward the school curriculum outside the traditional school classroom. The notion of e-learning that evoked fear in the teachers who followed the traditional method of learning is that electronic learning comprises knowledge about technology like the engineers possess. Educational technology had always differentiated between the hardware approach and software approach in learning, where hardware relates to knowledge about technology and software the usage of pre-cooked technologies to enhance learning. It is this software approach which deals with the modification of behavior and therefore making e-learning easier for teachers to adopt and adapt.

Youth of today, on the other hand, are prone to technology and driven by its usage. Multimedia which encapsulates the usage of various mediums appeals to these youth. Fleming and Mills (1992), identified four types of learners-visual, auditory, reading/writing, and kinaesthetic (VARK). These four

types of learners were found to perform better with the help of Multimedia which appealed to all. Therefore, it was on the part of the teachers who lacked the courage to embrace it.

The government during this pandemic has taken several initiatives to promote e-learning in school education and also higher education. The Union Budget 2021-22, allocated Rs. 54,873.66 crore for the Department of School Education and Literacy. India even joined the United Nation's E9 initiative, which emphasized on creation of innovative digital learning and skills and targeted marginalized children and girls, along with Bangladesh, Brazil, China, Egypt, Indonesia, Mexico, Nigeria, and Pakistan. The COVID 19 pandemic, has made Indian National Commission for Cooperation with UNESCO (INCCU) work online and carry forward the mandates of the respective Sub Commissions, the goal being to promote digital education with equity. It came forward with DIKSHA, e-pathshala, SWAYAM, SWAYAM Prabha, National Repository of Online Educational Resources (NROER), and many more.

Learning online, using multimedia or e-learning though has become a suitable pedagogical design at present, but the impact and sustainability of it are the matters to gauge. So both the boon and bane of e-learning are to be analyzed, for empowering pedagogical changes to be made in the field of education in the coming years.

Boon of E-learning

The entire world turning online, be it the field of trade, commerce, politics, religion, or health, couldn't leave alone the field of education. The pandemic though distanced people physically but made them come closer socially and electronically even more. If the increase in usage of technology is considered, the Digital India campaign would seem to be a huge success even in the field of education. The digitalization of learning and e-learning has been beneficial for both learners and teachers. The following highlights those;

- **Accessibility:** E-learning had made learners access learning from any time, anywhere around the world without any issues, which might appear due to travel and the location of the school.
- **Availability:** E-learning had made lessons available anytime, with recorded lectures that overcome the barrier of time zones.
- **Quality:** Quality of learning is another aspect of school learning as was mentioned by Rashtriya Madhyamik Siksha Abhiyan, which refined even more with e-learning which provides updated content, quick delivery of lessons, several online platforms to learn and evaluate self-learning.
- **Consistency and scalability:** Teachers often lack the same enthusiasm to teach the same lesson to different classes due to fatigue or other issues in a school environment. The morning class is found to be more engaging than the evening one. E-learning has proved to be beneficial in this regard, as technology unlike humans won't falter. The consistency in lessons delivered, accommodating the need of the learners is a salient feature of e-learning. Moreover, its power of scalability to suit the need and pace of the learner has proved to be quite fruitful.
- **Effectiveness:** As e-learning is self-paced and personalized, the mastery of learning as compared to the regular classroom setting is found to be higher in many cases. Learners can attend live real-time lectures when convenient, recorded lectures, participate in an interactive session, and also receive immediate or late feedback (real-time or else in discussion forum comment section).
- **Cost-effectiveness:** E-learning is found to be 50% cost-effective than regular school learning where travel, enrolment, uniforms, miscellaneous activities within the school premise might charge monetary contributions apart from the annual tuition fees. It is also seen that Open School learning costs less even in terms of tuition fees.

- **Environment friendly:** E-learning has brought an era where 'paperless' evaluation and learning has become relevant and easy to access and deal with. Turning the classroom organic is indeed benefiting nature, where usage of paper, pencil, eraser, and the like, has reduced in ratio.
- **Inclusive learning:** Inclusivity is an essential feature of educating the nation, especially in the case of our India which represents utmost diversity. The Right to Education (2009) has the clause of providing education to all irrespective of class, caste, religion, creed, or any other issues. The Ministry of Education has launched several online platforms to remove these barriers like DIKSHA, which was meant to promote inclusive learning, providing education to even the most vulnerable. The PM E-Vidya platform for classes 1-12 which is under the scheme of 'One Nation-one tap' is another way of offering to learn to all. Swayam Prabha DTH Channel too airs courses for school and out-of-school children.
- **Self-paced and self-controlled:** If the online learning platforms are observed, be it Byju's, Vedanta, Udemy, Khan's Academy; learning can be seen as self-paced where the students have control over their learning pace based on their progress, which they can measure through the mock tests and quizzes designed for each lesson sectionally. It is said that 'power' is a very crucial thing that helps any person to stay motivated. So the power of learning being in the hands of the learners to a great extent, indeed increased their participation level and interest in learning.
- **Facilitation of robust discussion:** E-learning has rendered an opportunity to redistribute knowledge that used to be transacted within the school premises. So it is always the duty of the teacher as well as the learner to carry forward the same classroom discussion on the online platform, be it synchronous or asynchronous, like Google Classroom, Zoom, Whatsapp, and the like. Since the discussion forum is open to all and they can pose questions anytime, expecting clarifications, the richness of discussions that can take place is deep. The learners get time to reflect and comment, even the introverted learners can also come up with their questions and share their thoughts.
- **Collaborative work:** This age of digital India has seen an upsurge in blended learning. Even the Learning Management System helped in bringing transparency and accountability in teaching and learning. Not just the stakeholders of school education within the classroom are responsible for knowledge dispersion but also the administrative section. E-learning during pandemics has knit all the threads and made them work together.

Bane of E-learning

Even though E-learning has given an excuse to rethink the pedagogical design, but hasn't been rendered flawless. The following delineates the conundrum.

- **Restricted Accessibility and availability:** E-learning though has been the torch-bearer of 'anytime, anywhere' learning but sudden unavailability of internet or electricity power might put the learners out of the flock. In a country like India, the major population belongs to the rural setup. Therefore, expecting them to have a 24x7 internet connection and electricity is mere imprudence. The Annual State Education Report conducted by Pratham and National Achievement Survey in 2020, showcased that 5.3 percent of rural children between 6-10 years have not enrolled in school, compared to the year before the pandemic.
- **Quality:** Aristotle once talked about the total development of the personality of the child. Education should create 'a sound mind in a sound body'. E-learning has allowed creating a sound mind but the latter has stayed unnurtured due to this pandemic. So, in a way, the quality education which learners receive nowadays has failed to meet the standards of real education as defined by eminent scholars and philosophers.
- **Difficulty in personalizing instructions:** To maintain equity in learning, personalizing instruction is a necessary action to be performed by teachers. Keeping in mind the level of learners and also

their multiple intelligences, it is very difficult to frame instructions for every learner online. The online instructions promote equality and not equity.

- **Lack of Personalised Attention and Care:** A school is a second home for children. The teacher not just teaches them but also helps them to grow. In the online platform, it is easy to deliver knowledge to many but paying attention to everybody is not possible. Therefore, the students are deprived of the care and attention needed for them to realize the importance of learning.
- **Going back to the chalk and talk method:** Teachers delivering lectures and students turning their video off and muting their audio has made it a kind of going back to the traditional method of teaching. The teacher is barely able to keep track of learners' attention. Some students often go off to sleep, some keep themselves busy in other works apart from learning. Teachers and students are left in isolation, from where the teacher-student relation that creates an effective learning experience, falters.
- **Professional Development of Teachers:** Tech-based learning would surely demand tech-savvy teachers which seems to lack in the current scenario. It will take much time for all school teachers, be it urban or rural to adopt and adapt to these emerging technologies.
- **Threat to privacy:** Breaching data has become trendy nowadays, where the dependency on online platforms has made our personal information available. The moment one creates an account he or she becomes vulnerable because of the hackers. The privacy of the children and also the teachers here remains under threat.
- **Lack of emotional intelligence:** Emotional intelligence which has become a burning topic in today's world, seems to fall short when the classroom is turned online. Peer interaction, play, group work, collaborative and cooperative activities, empathy, social skills, all have been extremely affected due to e-learning taking the upper hand during the covid crisis.

Conclusion

The conflict between e-learning, online classrooms, and offline classrooms can only be stopped by blending both, as our National Policy of Education fostered. This crisis has called to mind the notion of 'new normal'. People have started living with the 'new normal' already, so as teachers and educators, the new normal should be adopted by all to sustain education. E-learning has its' flaws but it has opened up new avenues towards pedagogical approaches and practices. This recasting paradigm in teaching and learning has allowed all the stakeholders of education to reflect, practice, and rectify. A society progresses with positive change and so does the nation with positive changes in the educational arena. Teachers and learners must collaboratively work together in making these inevitable changes fruitful, regarding education and its goal; total development of personality.

References

- Dr. Sharma, D. & Singh, A. (2020). E-Learning In India During covid-19: Challenges And Opportunities. *European Journal of Molecular & Clinical Medicine*, 7(7), ISSN 2515-8260
- Education and Training Industry In India (2021). Indian Education Sector in India Industry Report.
- Gaikwad, A. & Randhir, V. (2015). E-Learning in India: Wheel of Change. *International Journal of e-Education, e-Business, e-Management and e-Learning*, Doi: 10.17706/ijeeee.2016.6.1.40-45
- Gupta, S. (2017). 9 Benefits Of eLearning For Students. Retrieved from <https://elearningindustry.com/9-benefits-of-elearning-for-students> on 16th June, 2021.
- Hubalovska, M. (2015). Implementation of E-learning at Primary School Education. *Recent Advances in Educational Technologies*, ISBN: 978-1-61804-322-1
- Imran, S.M. (2012). Trends and Issues of E-learning in Education in India: A Pragmatic Perspective. *BJIS, Marília (SP)*, 6(2), 26-45, ISSN: 1981-1640

- Joshi, P. & Dr. Dewangan, S. (2021). Impact And Development Of Online Education (E-Learning) In India. *Journal of Contemporary Issues in Business and Government*, 27(1), P-ISSN: 2204-1990; E-ISSN: 1323-6903
- Kant, R. & Laako, M. (2016). A Preliminary Study On Building an E-Education Platform for Indian School-Level Curricula. *International Conferences ITS, ICEduTech and STE*, ISBN: 978-989-8533-58-6
- Karyala, P. & Kamat, S. (2020). Online education in India – the good, the bad and the ugly!, *Policy, Teaching And Education*, India-Bioscience
- Khanam, N. (2021). E-Learning & the fate of Right to Education in India. Bar & Bench, Retrieved from <https://www.barandbench.com/apprentice-lawyer/e-learning-the-fate-of-right-to-education-in-india> on 17th June, 2021
- Kong, S. C., Chan, T.-W., Griffin, P., Hoppe, U., Huang, R., Kinshuk, Looi, C. K., Milrad, M., Norris, C., Nussbaum, M., Sharples, M., So, W. M. W., Soloway, E., & Yu, S. (2014). E-learning in School Education in the Coming 10 Years for Developing 21st Century Skills: Critical Research Issues and Policy Implications. *Educational Technology & Society*, 17 (1), 70–78.
- Mathivanan, S.K., Jayagopal, P., Ahmed, S., Manivannan, S., Kumar, P., Thangam Raja, K., Dharinya, S. & Prasad, R.(2021). Adoption of E-Learning during Lockdown in India. *Int J Syst Assur Eng Manag*, Springer, <https://doi.org/10.1007/s13198-021-01072-4>
- Menon, S. (2020). Education in India needs an overhaul. *State of education in India pre-COVID-19*, India Development Review
- Redempta, K. (2012). “An E-Learning Approach to Secondary School Education”:E- Readiness Implications in Kenya. *Journal of Education and Practice*, 3(16), ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)

26. Complications with E-Learning of school children

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Abstract

The basic concern of education is to help the children attain sense of life and develop their own potential. Here the role of a teacher is as a facilitator and guide. NCF-2005 has given a framework which mainly addressed the problem of existing curriculum load on children. This document also says how the curriculum should be made what are the probable ways of delivering the knowledge and what are the requirements for the student's holistic development. From 21st century we have been seen the huge advancement of technology. As a blessing education is also a part of this. We cannot deny the enhancement of education using technology. But after Covid-19 pandemic all children are confined within their own space. In this situation, for them school, playground, teachers, friends are a big 'NO'. Now their school is totally running on e- learning mode. This article is mainly focusing on what are the impacts of this version of teaching learning? How the basic purpose of education is being shifted from the original because according to NCF-2005 only physical resources cannot be the indicate the quality of education.

Introduction

As a thinker of education it is very much important to think about the perspective of school education rather than the mode of education given to students. To have a clear vision about the perspective we can depend on the documentation of National Curriculum Framework 2005. This document seeks to provide a curriculum framework within which we can get a reference to choose the plan how to facilitate the students. This curriculum also said how a curriculum should be made because curriculum has powerful impact on the students. If we focus the objectives of NCF-2005 we get to know that experience is the base for knowledge gaining. Now experience may be of different types and sources of experience are also different. In our country we are very much familiar with traditional classroom. In 21st century technology is being introduced very rapidly. Advancement of technology, e-learning based teaching learning is a blessing for us. It causes too much benefit in all purpose of our life especially on education sector. Students can cross lots of barrier like distance, resources through e-learning. But in case of school children only technology is not enough for their holistic development. Along with the positive side of e-learning there are few drawbacks of this. We will not focus on those elaborately. It is known to all of us that e-learning lacks social interaction, accessibility for all, practical activity, students feedback and so on. In this discussion main purpose is how these drawbacks are impacting on student's all round development.

Significance of this article

Education does not mean only academic achievement. E-learning mode of education can enhance the students to be academically sound. But the main purpose of education is to make one-self potential and to make a sense of life. For this holistic development only online mode of education cannot be the sufficient because physical resources cannot be the indicator of quality. So there is a need to focus how school children are being impacted and the possibility of achieving the main concerns of education since the school children are being habituated with this e-learning mode of education after this Covid-19 pandemic.

Objective

This article is based on the main perspective of school education according to NCF-2005, should be achieved to the school students. Long duration of e-learning approach, without conventional schooling may have an impact to the school children. To observe the impact this article is focusing the following objectives.

- What are the educational purposes should be the teaching learning process seeks to achieve?
- How educational experiences can be meaningfully organized to help student's holistic development?
- How the whole process of teaching learning is being impacted by the e-learning mode of education mainly after this Covid-19 pandemic.

On the basis of the above objectives the later discussions are followed:

The review of NCF-2005 addresses specifically, how the load of curriculum can be removed. That means how we increase the flexibility on delivering the curriculum. This document also emphasized on to make the sense of life and makes them potential to recognise the right and wrong. So, most importantly at the end of day their learning should be conceptualized. Making clear concept is not only based on curriculum but also based on life experiences. Without sharing students experience ultimate knowledge is meaningless. It is also true that in the classroom if student can relate the acquired knowledge with their life a constructive classroom will be achieved. A spontaneous feedback automatically comes out. Teachers act as a facilitator and guide not only demonstrate. So in this way a reflective teaching learning practice can reform the new journey of education.

Now a question is raised that can e- learning achieve all this purpose of education. Is it possible? To find out the probable answer we need to have an overview about e-learning.

When teaching learning system is carried out with the help of electronic resources, is known as e-learning. Computers, smart phone, internet are the main components of this system. With the rapid progress of technology, e- learning is become very familiar in Indian education. We cannot deny the advancement of e-learning and it is quiet required now a days. We consider that advancement of technology is one of the biggest blessings in this century. But along with these benefits we should look on the drawbacks of e-learning also.

After the Covid-19 pandemic, all the school are closed and eventually the school children are being confined in their home, no friend, no relative, no play ground, and a big no to school. In this condition the meaning of school is four walls, a laptop or smart phone and internet. Their teachers are coming in front of them through a digital medium, one by one class are going on. Every day in this way an artificial class room is being created which is totally based on e-learning mode. National Curriculum framework 2000 was initiated to address the problem regarding with school curriculum, load of curriculum on children etc. Here a concept 'learning without burden' was very much focused, means school learning should be joyful. Unless becoming happy little one is not ready to learn. At that time burden was meant by the load of books and curriculum. That's why NCF 2005 was reformed to change our perception about the curriculum and teaching learning procedure. We are trying to achieve those perception like moving from 'known to unknown', 'concrete to abstract', 'local to global' and many more . In this journey of reformation of our perception about school curriculum and teaching learning process somehow e-learning is playing a barrier. Obviously it is specifically happening after this pandemic as se of this is very much increased. We all know the basic drawbacks of online mode education as it is lacking social interaction, communication skill. E-learning is also involved with limited feedback of students and teachers both. But apart from those there are various ways by which e-learning is affecting the little mind. We need to elaborately discuss on those:

In regular schooling students face lots of experiences, challenges. Both are required to make them proper and productive. From their way of going school, classroom, teachers, different types of functions, friendship, all have a positive role for their holistic development. Yes these do not directly play any role of learning but develop a will power. All of these are absent in online mode. So gradually their interest on study become degrading.

Indian society is very much diversified in various ways like economically, socially, culturally, geographically and politically also. Perhaps it is never possible to reach the quality education to all when it is in online mode. In our country, few years ago a scheme was introduced 'Midday meal' to retain the children in school. This is meant that India is a country where a wide number of people are under poverty level. They sent their children to school not only for basic education rather than a meal. For them mobile, gadgets are so luxurious. So in our country the difference between rich and poor will be elevated which should not be because constitution of India guarantees equality of status and opportunity to all citizens. But in spite of this, what we are seeing a vast exclusion of children from basic education which is utmost needed.

Another very important purpose of education is living in harmony. Human beings are social animal. As a citizen of democratic and secular country one should be enshrined the democratic value from childhood. But unfortunately this pandemic situation is..... for this value creation. Now everyone is belonging in a disturbed and psychosocial environment which is developing a stress in every relation. Children also are part of this. Learning on e-learning mode is triggering their intolerance level of this mechanical journey. They become more confused.

According to NCF 2005, children should have a sense of the environment and they should have knowledge how to nurture the nature from their early stage of development. It is a basic curricular concern. Teachers, classroom and school play a positive role to develop the concerns into them. Practical knowledge is much more responsible to realize them how much the environment is important for our surviving and why should we protect them. But in e-learning mode of education there is less chance to develop the sense because they are far away from the nature.

Conclusion

At the end of this discussion it can be said that e-learning can enhance the teaching learning process but productive outcome cannot be achieved. For achieving that in school education, classroom should be effective. To make the classroom effective lots of factors play the role like skill of teachers, motivation level, feedback, experience etc. Somehow, imposition of using online mode only school children leads to isolation and this does not encourage them to learn new concept. Their creativity is being demobilized as creativity is an adventurous thinking and being open to experience.

After Covid-19 pandemic these basic concerns of education is being shifted away which is very much normal in this abnormal situation. After all physical resources like computer, internet cannot be regarded as the indicator of quality. With good infrastructure, motivated teachers, comfortable-learning environment are necessary precondition for quality. Teachers are also feeling constrain to inculcate their skill and aspiration. So, only online mode of transferring knowledge cannot facilitate the curricular principles such as from 'known to unknown', from 'concrete to abstract'. The reason behind this is cumulative human experience is lacking in this method.

This situation of social distancing has changed the work protocol in many sectors. For example let's take into account the functioning of IT sector. The workers used to go to their office physically before this pandemic. As of last one and half years we are witness of the culture of work from home. Once going to office was the task of the day, but now the office has entered home. The companies are saving millions

of rupees because of this new system. The huge corporate buildings are closed hence expenditure of maintenance is almost reduced to zero. This will still be very much persisted after the pandemic because the employees and employers have both gotten used to it and have also started to enjoy the process.

Similarly we are seeing that students are doing their classes from home, school buildings are closed. In our country we have both public and private schools. But like corporate sector if this culture is persisted after the pandemic that will be a great threaten for the children because school not only impact on academic education. Social interaction, achieving happiness, meaningful learning and many more are major educational concerns as school is the miniature of society. It is a matter of grave concern that after this pandemic if this present situation is proceeding for long time that will be dangerous for the future of our country because despite of getting good in academics the generation will suffer from social complexities.

References

<https://www.thetechedvocate.org/5-advantages-and-5-disadvantages-of-e-learning/>

<https://e-student.org/disadvantages-of-e-learning/>

<https://www.zandax.com/business-blog/8-disadvantages-of-e-learning>

<https://ncert.nic.in/pdf/nc-framework/nf2005-english.pdf>

27. Platform for e-learning in Higher Education

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“To learn is to change, Education is a process that changes the learners”

-- George Leonard

Abstract: This article presents an overview of available digital repositories in the field of higher education in India, which are launched by government of India and comes under open access. This article will provide information of various online platforms, courses offered by them, required criteria for getting enrolled, process of teaching and learning, assessment, credit system and the process of certification.

Introduction

we all know that education is the one and only weapon to all problems. Whether it is population, poverty, inequality in society, terrorism, unemployment environmental issues and so on the solution to all problems is always education in one way or other. Nelson Mandela in 1948 has clearly mentioned the importance of education by saying “Education is the most powerful weapon which you can use to change the world”

Education and learning are the two side of a coin. Education is the process of imparting knowledge, skills, values, attitude and learning is the outcome of education, i.e how much knowledge has been acquired. For example, a 10 grade student cannot do simple mathematical problem means that the student was involved in the process of education but learning has not taken place.

As per All India Survey of Higher Education 2019-20 the gross enrolment ration (GER) in higher education is 27.1% which is calculated for 18-23 years of age group. Sustainable development goal talks about the inclusive and qualitative education to promote lifelong learning opportunity for all. On the other hand National policy of education 2020 targets to raise Gross Enrolment Ratio (GER) to 50% by 2035. In country like India with world second largest population, and geographical diversity, cultural heterogeneity and limited resources like infrastructure, teachers etc. e learning is a boon. Where students can learn and acquire knowledge while sitting home or while doing job or any other engagement.

E learning stands for electronic learning. A platform where learning can happen inside and outside the classroom. E- learning is not restricted to mortar and brick classroom. It can be conducted anywhere with the help of internet. E- learning has eradicated many draws back of traditional learning method. Through e- learning students can have self-spaced learning, it is cost effective, it has removed geographical boundaries, the most prominent problem student- teachers ration of traditional teaching has been evaporated by e-learning. E-learning can take place in both synchronous and asynchronous environment. E-learning activities are known as various name such as Massive Open Online courses (MOOC), Web Based Learning (WBL), Web Based Instruction (WBI), Distributed Learning(DL), Mobile learning or M- learning, Remote Learning , Offsite Learning, A learning (anytime, anywhere, anyplace learning).

Objectives

The objectives of this article is to provide information about the initiative taken by govt. of India for enabling higher education accessible to all.

Methodology

In this article only those e- learning portal have been selected which deal with higher education, initiated by Indian government and have open access.

For promoting global democratization of knowledge and supporting lifelong learning as a human right Indian government has taken initiatives by providing free e-learning platforms.

SWAYAM

Study web of active -learning for young aspiring mind (SWAYAM) platform created by Government of India in the year 2014 under the national mission on education through communication and technology (NME -ICT) with the objective of access, equality and equity of education. It has been developed by joint collaboration of Ministry of human resource development (MHRD) and NPTEL, IIT Madras with the help of Google inc. and persistent system ltd. This portal provides courses from class 9th to post graduation, which includes Engineering, Science, Arts and Recreation, Humanities, Management, Language, Mathematics, Commerce, General, Library and Education. The courses are comprised of video-lecture, downloaded/printed reading material, test and quizzes for self-assessment and a online discussion forum for clearing the doubts with the help of expert.

The courses are free of cost and can be access by any age group by registering into www.swayam.gov.in with e- mail id. It can be access through website and mobile application. The courses completed on SWAYAM are valid and recognized by universities. Credit scored by SWAYAM can be transferred to academic record as UGC, credit Framework for online learning course through SWAYAM, Regulation 2016.

NPTEL

National program on technology enhanced learning (NPTEL) was initiated in 2003 by 7 IIT's namely Bombay, Kanpur, Delhi, Guwahati, Roorkee, Kharagpur, Madras and Indian institute of science (IISc). From 2014 onwards NPTEL has become has become a MOOC (Massive online open courses) and provide certificate to the participants from IITs, IIMs and IISc after completing the course successfully and qualifying the exam. This portal deals with undergraduate and post graduate courses in science, technology, engineering, mathematics and management. For getting certificate from concerned authority individuals have to appear in proctored. Certification exam with a fees of Rs.1000/- and have to secured minimum 40% marks. Overall the assessment is divided into two segments, 25% of assignment and 75% of exam score. The certificate can be use for credit transfer to universities and for enhancing growth in work place.

CEC

Consortium for educational communication (CEC) is the pioneer of digital education in India, it was set up in 1993 by university grant commission with a goal of addressing the needs of higher education through television, available information communication technology and 21 media centers along the length and breath of India. Vyas and Swayam Prabha are the free DTH television channels for broadcasting different subject material. It has its own youtube channel as well. It offers study material of undergraduate courses approved by UGC. It covers Arts/language and literature, social sciences, applied sciences, management and professional courses. All the study material are downloadable and printable, they are available in hindi and eight other regional languages. There is also provision of certification after qualify the proctored exam conducted by national testing agencies. It also provides video content which can be used for flipped classroom model of blended learning. All the services provided by CEC are free of cost.

E- Skill India

E-skill is a platform to acquire skills it was established in 2015 for providing training to over 40 crore people in India in different skills by 2022. It covers sector like agriculture, automobile, beauty, agriculture, construction, electronics, furniture, gems and jewellery, health care, hydrocarbon, instrumental, life sciences, textiles, tourism and many more. All the courses in this portal are available in Hindi and regional languages which includes Tamil, Telugu Odia, Assemese, Bengali, Kannada,

Malayalam, Marathi, gujarati etc so that all language background people with multi lingual background can have opportunity to use this platform hassle free and make their livelihood. In this E learning portal, some courses are free and some are paid. There is a provision of issuing certificate after successfully completion of course. For enrollment individual need to visit www.eskillindia.org , sign up with email ID and other information and search appropriate course to Start learning.

NDLS

National digital library of India was set up in 2018 with a goal to gather and order meta data and give full content record from a public and worldwide computerized libraries. In one word it is a collection of study material available in national and internationally in the form of article, research paper, journals, books etc. This portal doesn't provide any certificate. it is a library where learner can search and study on various topics. The website address is www.ndls.iitkgp.ac.in. There is a wide range of collection of study material from school education to higher education. It also has video recording of conferences and seminar held with collaboration of NDL India.

E-PG Pathshala

It is an Open Access portal. The objective of this portal is to meet the curriculum and course content requirement for every postgraduate learner. E model available in this portal consist of e-content, e-tutorial web- resources and self assessment. This portal can be used for self-space learning by post graduate students there is no provision of providing certificate on this platform e-learning.

NISTHA

National initiative for school heads' and teachers' holistic achievement (NISTHA) it's a platform set up by Ministry of human resource development (MHRD) for online teacher training and promoting quality education at elementary school. From these portal teachers, school heads and principals can access module for enhancing their professional skills and contributing in a meaningful and joyful learning of students. It also provides information about various teacher training activities going on throughout India. Overall it is a platform for teachers for upgrading professional skills of teachers, providing support to teacher for contextualization of content knowledge and information for make the teaching learning process effective.

E- Kalpa

It is a digital learning platform for design in India. It has been launched by MHRD. It provide e-learning program on design database for design, social networking for higher education for people involved design learning.

Conclusion

Integration of information communication technology with education sector is a bone. Learning is no more restricted to classroom education. Any person can keep on learning with the help of e-learning platform anywhere and anytime. The nothing which is required to ameliorate knowledge and wisdom is the determination and will to learn.

Reference:

<https://swayam.gov.in>
<http://nptel.ac.in>
<http://cec.nic.in>
<http://nishtha.ncert.gov.in>
<https://www.eskillindia.org>
<https://ndl.iitkgp.ac.in>
<https://epgp.inflibnet.ac.in>
<https://www.dsourc.in>
www.education.nic.in
https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/aishe_eng.pdf
https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

28. E-learning: Need of the time

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Education from the ancient times till the modern period is propagated among the generations by means of the physical presence of the teacher and learner. Beginning with gurukul culture to modern boarding schools, convents or the universities we all have witnessed the one unanimous mode of teaching learning that is physical classroom teaching. It was far beyond the imagination of a teacher or learner that one day will come when both of them will be sharing a teaching learning method in which each one of them will be absent in the physical sense. It might have been a weird notion if we would have been not surviving in this technological age of connectivity where we all are just a click away from each other.

Every phase of time in the history had placed its positive as well as adverse outcomes in the society. There are some periods in the time which we can never forget as that of this 2020 and 2021 pandemic of Covid-19. In March 2020, when it was the demand of time that we have to be in lock down and to follow the rules and obligations of social distancing so as to prohibit and control the spread of coronavirus, there was also a big question in the mind of every educationist and academician as well as student that how the education and the teaching learning will continue in such situation. Finally, the solution for this is put up by the authority that the online education system will be implemented through out the lock down and the student and teacher will be able to connect with each other by means of the online platform and the conduction of online classes begun very first time at a very large scale in Indian education system.

Every education system had tried to follow at its level best to follow this online education system. In this system there is much scope that a larger number of students could connect at a fixed time in the class. E-learning is used as a tool to connect with each and every remote possible area of the nation. There are several apps which are been used by the teachers and the learners to communicate and follow the teaching learning process for example, zoom, google meet, you tube channels, etc. Along with this some online platforms like MOODLE, SWAYMPRABHA, E-GYANWANI, etc. are used by the teachers and learners. This E-learning is proven as boon in this pandemic when everyone was struggling with the life saving aids, the education system was working in a flow which had created history and will be written in the golden words in the Indian education system about how the millions of students got educated and benefitted by means of different online platforms with the painstaking efforts of the teachers and the technical assistants of the different institutions.

There are various benefits of this e- learning in education system.

1. It has given the availability of e-material on a fingertip for a learner in an easy mode.
2. The teacher and students are connected in 24 × 7 pattern with each other.
3. Different academic WhatsApp groups are being very helpful to share the related study materials to the different students as per their need and requirement.
4. The audio-visual aid is not needed to create separately as at any moment of time the teacher can share his screen to show the different videos or to make the students to listen the audio files as a very helpful teaching aid.

5. The availability of students can be captured with the connectivity of the classroom at any of the place they reside with a single electronic device.
6. The different teachers of world wide can get connected to each other to share the innovative ideas and opinions needed for the development of the learners by means of E-learning.
7. The various branches of knowledge viz, science, humanity, mathematics, music, dance, cooking can be taught and learned with the help of e-learning.
8. Researchers can do their survey with the help of google-forms for the collection of the data required for their research.
9. Learners can be evaluated for a particular topic with the conduction of online tests for which they can appear very easily and can get their exam done in the given time.
10. Different webinars on various topics can be arranged as well as various faculty development programs also be organized with an ease for all the participants residing all over the nation.

As there are advantages of e-learning there are some difficulties too, which are faced by the teachers and the students.

1. To get connected for the e-learning the basic need is that of an electronic device.
2. The students those are from poor class cannot afford for it.
3. The major issue which can be considered as the biggest hurdle in e-learning or online teaching learning is the internet network of the student or teacher.
4. Due to the poor network connection the audio and the visibility gets affected during the online class itself.
5. One more difficulty which is faced during e-learning is the distraction that is of social media.
6. Learners easily get distracted with a single beep of the message of any social media platform if they are learning with the help of their android phone.
7. The continuous use of blue screen is harmful for the health of young children and elders also as it can affect to their vision and sometimes results in headache, dizziness and nausea.

As we know that every thing has its positive as well as negative traits in the existence. One cannot fully rely on the positive as well as well negative consequences of the e-learning methods. It is very easy to find the drawbacks in any working system but its quite difficult to move ahead with the difficulties which come to our ways. But for smart teaching and learning process both the participants have to overcome the difficulties in a cooperative way so as to carry on the development in the education field which is the ultimate key for the progress of any nation.

29. E-Learning - A Positive Change For The Environment

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ABSTRACT

Online education has become one of the unavoidable education systems all around the world from the COVID pandemic era. Online education has many advantages like we can attend classes from anywhere in the world. Online education also reduces the usage of paper, electricity and can also reduce pollution. The effectiveness of the online education mainly depends on many factors like internet, technical skills, interaction between students and teachers, cost and accessibility to the internet. Through online education the learning can be made effective through animated illustrations and videos related to the topics. The presentations with pictures and videos can make the students learn and understand better. Using of technical tools helps the students to gain more knowledge. With online learning tools students get the opportunity to access and learn many useful things from the internet. Medicinal education needs more of practical and direct class more than electronic classes. But the use of online education in medicinal education and other practical studies are unknown.

Keywords: online education, internet, medicinal education, technical tools.

INTRODUCTION

E-learning has many other terms like internet or web based education, online learning, computer learning or distributed learning. Academicians and students find online education develops knowledge and improves understanding. Transfer of study materials and updating of materials is easy in online mode than in print media. The online classroom serves as an open classroom where students not only from one class but from anywhere around the world can join. The E-learning provides platform for students to interchange ideas and concepts and the teachers have multimedia platform to explain the concepts. The learners can get access to the materials from anywhere and many students can access the materials simultaneously. The learners can make a note on their progress by their own and can make improvements according to their objectives. It makes learners to deliver the lectures to many students instead of repeating in separate classes in offline education. The academicians can monitor the knowledge and skills developed through a system which is way easier. Though E-learning has many advantages but the evaluation of student's behaviour and listening is a time consuming and costly process. In medical education the role of e-learning is a big question mark as medical studies has complexity. There are issues like effective use of e-learning in medical education, implementation of online learning in preclinical and clinical studies and adaptation of e-learning to medical and clinical fields. The solutions may include use of multimedia to simplify the intricate learning, use of simulation software for practical based studies and use of developing technology by medicinal educators (Ruiz *et al.*, 2006).

TREND OF E-LEARNING

E-learning has changed the pattern of teaching and evaluation of the education system. The academicians and the students should be aware of the technologies and the internet should be easily available for them. E-learning has impacted the life of students in a different way. Apart being judged only by marks obtained by studying notes, online education has made the students to understand their potential by themselves. In e-learning the students can listen to the prerecorded voice of a teacher or a media clip as many times he/she wants without hesitation. The components of e-learning include content development, management, standardization and delivery of the content. The content must have all the details of the topic and facilities for clarification of doubts should also be included. The content can be shared in online platforms or sent through emails often with a feedback form (Ruiz *et al.*, 2006). The assignments in e-learning can be done in a paperless way like the students may send the files through emails or attach in the given space in online platform provided by the teachers. To assess the understanding of students assessments can be conducted it can be either multiple choice questions or questions can be asked for which answers can be typed, these are sent to teachers and are evaluated (Choules, 2007). In India online education mainly developed after the COVID 19 pandemic. Some of the e-portal platforms functioning in India are khan academy, byjus, coursera, indianeducation.net, meritnation, investoo, etc., In India e-learning has become a vital part in every student's life starting from kindergarten to graduation studies (Joshi & Dewangan, 2021). E-learning not only helps students it also helps to save environment to an extent by reducing the use of paper and its consequences.

E-LEARNING AS ENVIRONMENTAL SAVER

E-learning has created a positive impact on environment and many studies have been done to prove the effects of e-learning on environment. One such study was conducted in University of Georgia and the results proved that the carbon dioxide emissions were reduced by 10 tons on each semester for 100 students attending online classes. The carbon emission was reduced due to the reduction in transport. Another study was done by Stockholm Environmental Institute found that a student who studies offline created 180 pounds of carbon dioxide emission. Online student the emission was around four pounds which proved that the emission was reduced by 90%. Online education can also reduce the waste generated at schools especially plastic waste dumped by both students and others (Hung, 2015) (Vu, 2020). One of another major environmental benefit is the reduction of cutting of trees because the use of paper is reduced. School's 60% of waste is paper because it has more use of paper like books, notes, administrative sheets, newspapers, question and answer papers. E-learning provides us with a better alternate option of electronic books and materials. Building a new school or other educational institutions or renovating such institutions may require great amount of resources. So if online learning continues there will be less requirement of natural resources consumed and also petrol consumption is also less (Yoon, 2015).

CONCLUSION

We can say that e-learning can provide knowledge through internet and it is a simple way. But it has certain disadvantages like accessibility to internet, economic scenario, knowledge about software and understanding of online classes. Students may not understand certain concepts and practical classes cannot be done with satisfaction in online classes. Some of the disadvantages can be changed over a period of time along with the development of technology. Through online education students are gaining knowledge and the environment is also getting saved to an extent. Use of electronic media can reduce the need of print media and paper can be saved so that many trees can be saved. Though accessibility of internet is tougher in many places, growth of technology can solve that problem. Like a coin e-learning has both positive and negative effects. Since it has a positive effect on environment and students we can find methods to reduce the flaws and improve e-learning.

REFERENCES

1. Ruiz, Mintzer & Leipzig, (2006). The Impact of E-Learning in Medical Education. *Academic Medicine*, 81(3), 207-212.
2. Choules, A.P., (2007). The use of elearning in medical education: a review of current education. *Postgrad Med J*, 2007(83), 212-216.
3. Joshi, P., Dewangan, S., (2021). Impact And Development of Online Education (E-Learning) In India, *Journal of Contemporary Issues in Business and Government*, 27(1), 3450-3458.
4. Hung, (2015). 4 Unsung Environmental Benefits of Online Education. *Energy & Environment*.
5. Vu, (2020). Environmental benefits of online learning. *The Starfish*.
6. Yoon, (2015). Paperless: 5 ways Taking Online Classes Benefits the Environment. *Elite Daily*.

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Bibliography

- Waiting for Smile(English Novella,2019)
- A collection of Short Stories,कहानी-संग्रह (Hindi Edition,2019)
- Diamond General Studies,डायमंड सामान्य अध्ययन(Hindi,2019)
- Diamond English Grammar(English,2018)
- Two Souls of the City (English Novella 2019)

Edited Books

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- Contemporary National Issues and Their Remedies (English, Edition 2021)
- The Blossom: Motivational short stories (English, Edition 2021)
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