

Original Article

A New Dimensions and Directions of an Online Education System

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Abstract - Online education or E-Learning is not a new concept in the global world. In the year 2020, when the corona pandemic came, this learning concept was taken seriously by the education system. Data innovation has risen as a superhuman in this lockdown period. We as a whole are under house capture yet associated with the external world. Individuals are telecommuting, sharing data and jokes, learning new plans and do it yourself (DIY) thoughts, online exercises, virtual indoor long-distance races, and last yet not least, children having their online classes. Change ought to be predictable. As we are advancing towards teaching ourselves, we are strayed from its familial type, for all intents and purposes, because of the advancement of innovation. It had been a typical explanation that "Our schooling framework is flawed, broken, non-gainful." This determines disconnected or homeroom instruction where components of "commitment" or balanced connection consistently existed. What occurs during on the web classes? With the spread of COVID-19, upwards of 500 billion understudies were influenced, and their examinations went to a stop. After a long break from a commonplace course of studies, it was chosen to utilize "online stages" for continuing examinations and proceed with their stream. With online examinations at the top now and with "Google Meet," "Google Classroom," and "Microsoft Teams" as new study halls, here is a basic investigation of understudies' viewpoint on online classes. Are these extended periods of nonstop sitting before a static 15.6-inch screen justified, despite any trouble? How do we manage our cameras off and receivers on quiet? What do online classes offer?

With the web supplanting the school and our beds supplanting our seats, online classes represent a few understudies issues. The non-presence of that vibe of an actual study hall to different physical and mental issues deteriorates even before it began. This paper will focus on these burning issues which are suffered by society. It also covers that online learners are adopting as per bloom's model or not.

Keywords - Online Education, Technology, Online Teaching, Online Learner.

I. INTRODUCTION

Web-based learning is getting progressively mainstream in the present occasions. It has illuminated the quandary of individuals who can't seek further investigations because of a few individual commitments. With the assistance of web-based learning and virtual study hall, numerous understudies are getting instruction at a few times lesser expense inside the region of their homes. In the past, courses taken from online instruction were rarely viewed as satisfactory. Be that as it may, things are evolving these days, as indicated by an investigation taken directed by social government authorities, on normal understudies in web-based learning conditions performed in a better way than those who get eye to eye instruction, even though there are online schooling advantages and disadvantages to think about.

This has started a discussion about whether one should take up online classes instead of ordinary school-based courses. Frankly, there are potential gains and drawbacks to everything. There are upsides and downsides of online instruction also. If there are a few advantages of virtual study halls, there are sure drawbacks as well. The onus lies in an understudy's possession to choose if he needs to pick online training for its advantages or need to rescue for its weaknesses.

In this most recent schooling framework pattern, understudies confront various difficulties as changing from a conventional homeroom, with up close and personal educator preparing to PC based preparing in a virtual study hall makes extraordinary and troublesome learning experience them. Without well-prepared advanced offices, understudies are attempting to comprehend the exercises. Likewise, the govt is attempting to take powerful measures to check the negatives as they have, as of late, reported assistance for understudies who don't have web access. This



will have DIKSHA, a one-country, one-computerized stage office for school understudies. Issues are as yet looked at by the students and educators to finish the cycle of online courses. What's more, these issues have been affecting the value of online courses in various manners.

A. Research Objective

- To understand the existing challenges in the online learning system.
- Know your benefits of the online learning system.
- Create a new action plan for a better and more fruitful e-learning system. The colors used in each figure contrast well.

II. LITERATURE REVIEW

The improvement of online courses in advanced education doesn't occur without any forethought. The 2008 study by the National Center for Educational Statistics (NCES) found that the fundamental components impacting advanced education foundations to offer online courses included gathering understudies' requests for adaptable timetables (68%), giving admittance to school to understudies who might somehow or another not approach (67%), making more courses accessible (46%), and trying to build understudy enrolments (45%).

Distance Learning started in the world in the 1800s when instructors and students at the Chicago University, who were at various areas, attempted to interface through correspondence programs [1,2]. A long time later, radio's advancement as a correspondence medium during World War I opened the entryway for utilizing that innovation for separation training in universities and schools; for example, the School of the Air set up in Wisconsin during the 1920s[3]. With the prevalence of TV during the 1950s, visual instruction got feasible unexpectedly among instructors and understudies who were not in similar areas. As PC and messaging innovation bloomed during the 1970s and 1980s, separation schooling started to extend significantly. The primary online course was offered in 1981, and the first online program was set up by the Western Behavior Sciences Institute in the accompanying year [4]. During the 1980s, the main online undergrad and graduate courses were started by a few colleges and schools. In the last part of the 1980s, because of a lack of instructors on math, science, unknown dialects, and so forth, some K-12 schools went to business courses offered through the then-new satellite innovation, which extraordinarily prodded still quicker development of distance learning[4,5].

The World-Wide Web (WWW) appearance in 1991 was an incredible impetus for moving separation instruction forward and was an achievement in the quick extension and development of internet educating and learning. WWW encouraged the widespread utilization of sites and the advancement of online local gatherings upheld by pages and different correspondence programming types. From that

point forward, schools and colleges both in the United States and around the globe have recently offered online courses and whole degree programs online too [6,7].

Since the extreme financial emergency of 2008, government and state subsidizing for schooling in the United States have been declining. Because of the elevated levels of somberness, an ever-increasing number of colleges and universities seem to have demonstrated expanding revenue in online training. How has online training advanced? Has it been fruitful? In what ways has it been demonstrated compelling? What stays to be done to make more prominent progress in educating and learning in an online climate? These inquiries have roused us to lead this examination checking on exploration and studies on online instruction. Fewer examinations on online instruction have zeroed in on looking at past exploration and studies, and we have directed an exhaustive audit study attempting to give a foundation of conversations to instructors and strategy creators on the most proficient method to create and convey compelling on the web programs.

There have been numerous lively discussions and exhaustive investigations on the contrasts between the web and eye to eye homeroom instructing, which isn't a focal point of this paper. All things being equal, this current investigation emphasizes looking at the positive and negative perspectives and methodologies of the web-based learning and instructing cycle and how it has been actualized effectively. The objective here is to give best practices to the individuals who want to create online courses to settle on educated choices in the implementation measure. In doing this, it is trusted that this will animate an on-going conversation of viable practices that can upgrade colleges and workforce achievement in progressing to educate on the web [8,9].

III. RESEARCH METHODOLOGY

A qualitative research design was used, based on an extensive literature review to establish the definitions, learning experiences, the problem faced and discussed. This derived the meaning and understanding of learning on the online platform.

IV. TYPES OF ELEARNING

There are generally two sorts of e-Learning: Synchronous Learning, Asynchronous Learning.

Synchronous means "at the same time," which includes the connection of members with a teacher by means of the Web progressively. For instance – VCRs or Virtual classrooms are nothing else except for genuine study halls on the web. Members associate with one another and educators through texting, visit, sound and video conferencing, and so forth, and what's all the more, all the meetings can be recorded and played back. Its advantages are the Capacity to log or track learning exercises, Persistent checking and remedy are conceivable, Conceivable

outcomes of world-wide network and cooperation openings among students, Capacity to customize every student's preparation. Examples of synchronous learning have shown in fig. 1[10].

Asynchronous, which means "not at the same time," permits the members to finish the WBT (Web-based preparing) at their movement, without live communication with the educator. Essentially, it is data that is open on a self-improvement premise, all day, every day. The bit of leeway is that this sort of e-Learning offers the students the data they need at whatever point they need it. It likewise has collaboration among members through message sheets, notice sheets, and conversation gatherings. These incorporate PC based training (CBTs) modules on CD-Rom's, Web-based preparing got to through intranet (WBTs) or elegantly composed articles and other reviews. Examples of asynchronous learning have shown in fig. 2[10].

Another type of learning known as Blended learning (Mixed Learning) is rising. As the name recommends, it is a combination of simultaneous and offbeat learning techniques. Utilizing both internet preparing through virtual study halls and giving CDs and study material for self-examination is currently being progressively favored over any single sort of preparation.

V. BLOOMS DIGITAL TAXONOMY

Information on the periodontal Bloom was recently revamped, as shown in fig. 3. Otherwise called the Bloom's Revised Taxonomy hypothesis, it portrays new conduct. Activities and openings that develop with innovation progressions, in which Bloom's Revised Taxonomy portrays customary study hall conduct and activities. In any case, doesn't clarify new cycles and activities related to web-based media or web 2.0 innovation that is turning out to be increasingly far-reaching. The ethane sequential both customary and modification scientific classification by Anderson and Krathwohl, the two of which don't zero in just on the psychological space or intellectual area. It is viewed as helpful to experts in the homeroom but didn't specify different exercises that ought to be executed in the class. Subsequently, the Digital Taxonomy isn't restricted to the psychological space or intellectual area, and more than that, Digital Taxonomy additionally incorporates psychological components, techniques, and instruments[11]which can be utilized in class.

Nonetheless, in Bloom's hypothesis, there are various degrees of information that represent the learning cycle, but it isn't evident that the student must be beginning learning at the most reduced level. All in all, learning can start anytime first. Be that as it may. Ordinarily, learning starts at a lower level than previously. Moreover, with different information levels, the learning cycle is additionally influenced by a coordinated effort. (Coordinated effort) which impacts realizing which will help encourage the computerized media. Furthermore, make more computerized study halls [12].

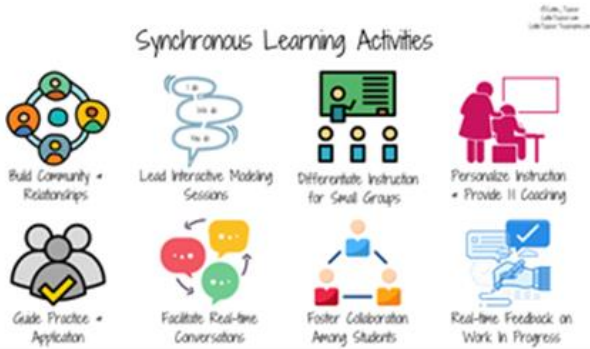


Fig. 1 Synchronous learning



Fig. 2 Asynchronous learning

Its favorable circumstances are:

- Accessible 'without a moment to spare' for moment learning and reference.
- Adaptability of access from anyplace at whenever.
- Capacity to all the while arrive at a boundless number of representatives.
- Consistency of substance and one-time cost of creation.



Fig. 3 Blooms new digital taxonomy

VI. CHALLENGES

A. Extensive use of Mobile and Computer

Exorbitant utilization of cell phones and computers may cause different medical problems like migraine, diminished consideration, and brevity of temper, rest issue, and discouragement uncommonly among adolescents. While it likewise builds disease danger and impacts our sensory system seriously.

In any case, eye fatigue from computerized classes is a significant wellbeing worry for understudies because of extended periods on the web. The PC screen's extraordinary utilization can likewise prompt eye inconvenience, weariness, obscured vision, migraines, dry eyes, and different side effects of eye fatigue. Going to classes online without a break is supposed to trigger issues like dry eye condition, consuming impression of eyes, and union deficiency. Prolonged perusing on the versatile screen and survey it intently may bring about these kinds of problems. Doctors likewise said eye aggravation might happen because of helpless tear appropriation over the eye because of decreased squinting. They exhorted continuous screen clients should flicker frequently or all the while the same number of times as they press the PC's enter catch to forestall eye strain.

B. Infrastructure

Smooth learning with an online platform required proper infrastructure on both sides, i.e., speakers and learners. It includes sitting area, device, headphones, camera quality etc., which affect the learner in their routine classes. Obviously, it creates an extra cost to the parents, and if you have more than one dependent, this will be a great challenge for the middle-class family.

C. Cost of Internet

Without the internet, we cannot imagine online learning. Few countries like India have low-cost data, but in most countries, data is a big challenge. Apart from the school fee, parents have to bear this internet cost. This is again a burden for middle-range income people.

D. Cost of Electricity

Twenty-four hours of electricity is required for online learning. So electricity is a major concern in most rural areas. When students are doing his classes from home, they need fan, air-conditioned, light and these objects need extra light which we can save when they are going to school or college for their studies

E. Lack of Interaction

Online learning platforms deliver one too many working styles. When the class size is more and time is constrained, all participants could not interact with the resource person, so doubts remain unclear. Interaction always creates interest among the peers. Lack of interaction also occurs due to the weak infrastructure like the internet.

F. Time Zone

Online classes are connected with the global world, and the global world has different time zone. This is also a major challenge among the students and resource person. This challenge cannot be resolved so if students want to join the good courses with prestigious.

G. Peer Interaction

Teenagers lost the interaction with their friends. We have a facility to chat and making friends, but this is just the virtual. Here we are not connecting personally, and we are not learning the good habits from each other. A friendship bonding is missing in this culture.

H. Lack of Practical Exposure

We will pass up the research center and field trip involvement with an instance of online schooling. If you need to get a degree where there are viable and involved as a center necessity, at that point, you may escape from work. If the course you need to seek after has a great deal of involvement and research center meetings, at that point, you should need to try out a full-time school-based course

I. Parents Training

Initially, no one took it seriously when online classes started, not even parents, because they never imagined this situation. Sometimes they became frustrated and transferred his anger to colleges, teachers, or students. Gradually they started to understand and supported organizations. This situation arises because of a lack of training or unawareness about the technology. Parents can create an environment for the learners, so counseling or parents' training is the most important part of online education success.

J. Reading Habits

This has been observed that online system of education reduces the necessity of hard copy of books. This also reduces the reading habits among teenagers. This is also the grey area where we have to focus and promote the learners to read the books every day

K. Writing Skills

This is the biggest challenge in the online education system because all items are available in electronic content. In the surveys, students have very bad handwriting due to the extensive use of mobile and computers. They cannot spell properly because memory capacity has also degraded. We should encourage them to write every day. Online education requires a lot of discipline approach; otherwise, this will be very harmful in the future.

L. Emotional Development

There are additional fears about kids getting unreasonably subject to devices and influencing their character improvement. The pandemic has kept the kids from enjoying outside games and mingling. The

responsibility of parents and has been increased. Proper counseling sessions are required to motivate them and add them to the mainstream of society.

M. Class Size

Class size is also a matter for the online education system, mainly for teenagers. Effective interaction between teacher and student may be possible if they have standard class size; otherwise, they cannot pay attention to every student, and hard work will be useless. This is also a very important component to make an effective and successful online education system

N. Health Issues

Most understudies are feeling the strain. For some, that strain starts with the eyes. Those not used to squinting at inadequately changed PC screens in suboptimum encompassing lighting are exposed to eye fatigue that can have enduring impacts. Ophthalmologists suggest taking breaks from screen perusing like clockwork and changing room lighting to dodge glare and reflections.

All results are shown in fig 4 as per data analysis.

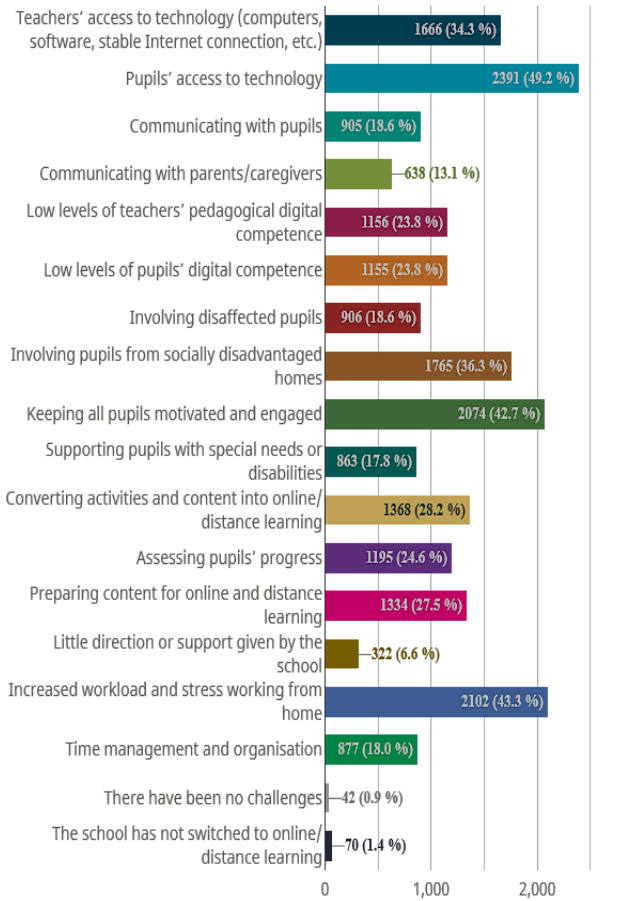


Fig. 4 Challenges faced by the teacher in the transition from offline to online.

VII. BENEFITS

A. Flexibility

Adaptability is the sign of e-discovering that snares the learners in and keeps their capacity to focus flawless! This causes learners to feel quieter. It is an agreeable understudy methodology that helps enlarge learning measures because of its dynamic setting. The understudy's weight is impressively diminished as online materials and courses are available at any hour of the day. You can learn at your movement, and gathering the information is the fundamental point of online schooling. You can likewise seek after extracurricular exercises in your available time. It instructs in its actual sense and not simply passing assessments to get a degree. It encourages an enterprising and critical thinking disposition that can assist understudies with applying the learning into business and be work prepared. Adaptable learning through e-learning modules permits the students to handle the idea at their movement. Students can replay and hold better with recorded recordings and e-notes accessible at the command of one's desires. The understudy accomplishes self-inspiration, and the exertion is self-coordinated, preparing your life.

B. Fast

IBM has discovered that members learn multiple times more material in internet learning courses utilizing interactive media content than in conventional eye to eye courses. ... They can move quicker through regions of the course they feel great with, however more slowly through those that they need somewhat more time on.

C. Option to Choose

Students today can procure any scholarly degree on the web, from a solitary profession explicit testament to a doctorate. They are not restricted by topography however can pick the program that best suits their necessities, regardless of where it is found actually

D. Cost-Effective

Internet learning is surely more cost-effective as transportation expenses, purchasing actual duplicates of course readings are killed. Establishments are beginning to zero in more on realistic learning with usage than being instructor-driven profoundly. Attributable to the setting we end up in this pandemic, e-learning has empowered instructors to give different online tests, riddles, games and perform various types of analyses to appreciate the way toward learning and simultaneously gain information.

Experiential realizing is the thing that readies the youngster for employability. Gathering study and coordinated effort on ventures outside the homeroom makes it simpler for the youngster to get away from industrial facility style study halls. You don't produce kids with group mindset yet singular masterminds. Smooth learning with an online platform required proper

E. Quality Education in Remote Areas

Rather than driving an hour to class through blizzards and storms, at that point battling to discover a parking space, online understudies just walk around the PC and turn it on. In addition to the fact that this saves time and bother, numerous online understudies likewise find significant investment funds on fuel costs, also mileage on their vehicle.

F. Networking Opportunities

The online study classroom offered by government and non-benefit associations the same work towards one shared objective: to give equivalent nature of instruction to understudies in country zones. These classroom programs are overcoming any barrier in quality training and are subsequently enabling these understudies to accomplish more with their lives. On account of these dynamic activities, understudies in provincial territories are additionally getting mindful of the assortment of vocation ways they could follow, an advantage that they'd never had.

Techniques for instructing and learning measures have a significant effect concerning training. These are also the fundamental variables answerable for the glaring difference in schooling in provincial and metropolitan territories. Online training can overcome this issue and bring to country understudies the schooling they most properly merit.

G. Time-Saving

Rather than driving an hour to class through blizzards and tempests, at that point battling to discover a parking space, online understudies walk around the PC and turn it on. In addition to the fact that this saves time and bother, numerous online understudies likewise find significant investment funds on fuel costs, also mileage on their vehicle.

All results that surprised the teachers in eLearning has been shown in fig. 5.

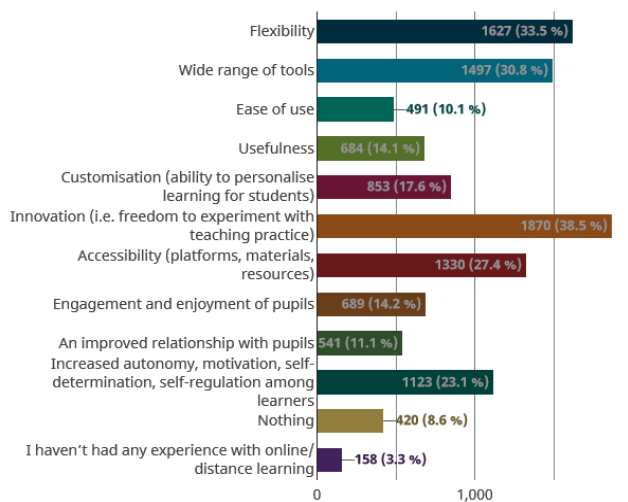


Fig. 5 Benefits faced by the teacher in online mode

VIII. RECOMMENDATION AND CONCLUSIONS

Instructors over the globe made a quick change to internet learning in 2020. Much of the time, this occurred with minimal development backing or direction, and thus, not every person made a smooth change to showing along these lines.

A few schools just utilized an online stage as a replacement for up close and personal realizing, which may have included furnishing students with filtered worksheets or understanding material and afterward anticipating that they should react on paper. This is the least level of innovation coordination. Innovation permits us to move past replacement and rethink learning. As we move into another school year, we need to reflect and consider joining a portion of the accompanying powerful web-based learning rehearses.

A. Norms of Elearning

Handling Students online is not the same as face to face and personal. As students move to this strategy for learning, instructors can examine the standards that help compelling learning. This may incorporate examining points, for example, proper clothing, when to mute/unmute, when to utilize talk, lifting your hand to contribute, utilizing foundations, how to applaud, and what to do when classes are recorded.

B. Accessible for All

Accessible content for all implies diminishing cognizance hindrances, guaranteeing that content is open to everybody, incorporating those with inabilities and who communicate in dialects other than English.

C. Strengthen Relationship

Instructors know the significance of creating important associations with and among students. When training on the web, this is as, or much more, significant. Incorporating new tools and techniques that help you and your students connect. It includes making short personal videos, adding emoji to show care, and calling for tea in online chat.

D. Know Your Tools

The instructor should have proper knowledge of the tool which they are going to use during their session. That will also create a good impression on the students.

E. Don't Reinvent the Wheel

Don't try to experiment with online material. A lot of good verified and recommended things are available on the online platform. Just focus on your methodology.

F. Foster Lively Interaction

Technology has given a lot of opportunities to nurture your classes, interactive and lively. You can play some music to create a positive environment, start a little bit early to interact, create some meaningful poll to know the

student's ideas, encourage them to put the question in char box, and many more.

G. Live with Experts

Some days apart from the routine class, call some experts to encourage them to plan their prospects. Create some counseling sessions to disseminate the general things like how the doctors are working in a corona pandemic?

H. Live with Families

Fix one day in a month to chat with families and try to under the pros and cons of the online education system.

I. Make Schedule

Online teaching demands more discipline for both teacher and learner. The responsibility of a teacher is more. They have to make their schedule like posting assignments, what time will live class start, what the office hours are, and what social time?. Students will be more comfortable and prepared.

J. Teach Digital Literacy

All teachers, not simply the custodian or innovation educator, must address the issues with the goal that students have a superior comprehension of their advanced impression, how to impart on the web adequately, tools they can utilize when they take part in computerized spaces, and methodologies for when they feel awkward or hazardous on the web.

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