



SMART LEARNING - A BLENDED PRODUCT

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ABSTRACT

Education has evolved, so have the methods of teaching and learning. In this transition phase, where traditional forms of teaching and learning are seen as old age practices in the era of technology and digitalisation, one must understand the fundamentals clearly. How important some aspects of traditional classroom teaching will always be despite changes taking place around us in any form.

This paper has two objectives-

- 1) To highlight the major challenges associated with digitalisation.
- 2) To understand how this change affects the teaching- learning relationship.
- 3) How can smart learning be seen as a solution to the problems of traditional classroom learning as well as Digital learning?

The paper gives deep insights from various case studies and research papers about the impact of digitalisation on the educational sector, teaching and learning.

The research design is based on qualitative data. Findings are based on observation and case studies. Along with that method of analysis is PESTEL analysis.

REVIEW OF LITERATURE

In order to understand the impact of digitalisation and how it is perceived by various people in the educational sector and by experts. There have been mixed conclusions about digitalisation, its impact and does it play a role in supporting smart learning or in itself considered as smart learning.

The findings from various researches and views presented in the **OECD webinar on -how digital transformation has affected the teaching- learning(benefits and risks)-**

- a) The European student union believed that focus on learning should be more which has hindered due to covid-19. It has given clear preference to face to face teacher student interaction.
- b) Terry Maguire - director of the national forum for the enhancement of teaching and learning in higher education(Ireland) presents how more focus has been given to tech and

less focus on people and pedagogies. In order to ensure learning outcomes by the teachers what's important is how digital tools are being used and implemented.

Another paper highlighting the **Impact on digitalization on education- opportunities and challenges** focuses on the advantages of digital learning in the present time. The author has highlighted various schemes by the government of India like digital india.

Skill india in order to boost skills and learning amongst students. He also focuses on how digital learning promotes smart learning and creates a generation of learners. At the end he has highlighted 3 challenges of digital learning, that would include - resistance to change, Infrastructure problem and difficulty in original content creation. Considering the similar views, another paper on **Digitalization of higher education in**

India (A boon or a Bane) focused on various upcoming trends that are associated with digitalization and how it is going to benefit teachers, students, parents as well as institutions. In this paper the author emphasised that student centered learning can be increased with the help of digital technology. Overall the paper favours the use of digital education but at the same time also highlighted a few challenges like shortage of trained teachers, issue of language and content and possible issues related to maintenance and upgradation of technology.

More advantages of digital learning are highlighted in the paper, Digital learning- A shift from traditional to smart classrooms

Impact of digitalisation of education on teachers in India - highlights how the cost of digital learning outweighs its benefits, especially for teachers. The author has suggested some ways to understand the behavioural changes in teachers and how they can be incorporated.

Popai Mondal and Sumana Pal, in their paper 'A Study on Digital Technology in Teaching and Learning of Education in India', have discussed two aspects of education technology:

- Technology in education – this refers to the hardware used as means of education or presenting information. For instance, online classes through video conferencing, use of gadgets, online exams or in general, ICT-based education.
- Technology of education – this aspect refers to the principles of modern ICT-based education, characterised by being objective, selecting suitable learning strategies, constant evaluation, and also e-courses, credit-based results, etc.

The new education policy (NEP 2020) also recommends various initiatives for digital learning, such as- Pilot studies for digital education, creation of Digital infrastructure, Virtual Labs, Availability of Courses in Different languages by synchronous and asynchronous media, Online Assessments and Examination, Digital repository, Content creation, and Dissemination, etc. This was mainly done to take quality education to all parts of the country, especially the Tier-2 and 3 cities and villages.

Starting 2020, Indian universities and colleges, which were **earlier not permitted to offer more than 20 percent of a degree online**, are now lifting the restrictions on online learning to widen access to higher education and raise the profile of Indian institutions globally.

The technology is also helping teachers connect with several students spread across several locations simultaneously. The interactive digital media also is a great **solution to the shortage of teachers in the country**. To facilitate the same, it plans to use technology to upgrade the skills of teachers through the online portal **DIKSHA**. It is a digital platform for teachers across the nation that allows them to stay equipped with

ANALYSIS OF THE LITERATURE :

With the above findings one can identify how digital learning can be seen with various advantages and challenges. What started as the need of the hour for students and teachers during Covid-19, has become the new normal as the hybrid model of education has replaced the traditional classroom education. Whereas some researchers feel digitalisation helps promote remote learning and is required in the era of technology, some researchers still prefer classroom teaching for the overall development of students and learning outcomes.

This paper closely analyses smart learning as a solution to derive better teaching- learning outcomes.

INTRODUCTION -

Today we all see a buzz about digitalisation, everyone is talking about technology, digital classrooms, e-learning, internet of things, artificial intelligence based Chat GPT. Most of us have started seeing technology as an integral part of our lives. We can't imagine our lives without our smartphones, laptops, tablets etc. We often try to justify how important and necessary it is to have access to these tools all the time, even if it is not. Digitalisation indeed is a revolution taking place, it indeed going to bring us a future we could never imagine 50 years before, but is it the only change that is helping us move towards a better future? Most of the time, young children who have access to smartphones and tablets (especially post covid-19) are either scrolling to some social media post or some reels on instagram or youtube. Are they really making use of the technology for what most of us refer to as smart learning?

In order to understand this nature of digitalisation as smart learning or not and its impact on teaching-learning relationship, it is important to learn some basics of classroom learning and digital learning or E- learning.

What is classroom learning?

Classroom learning is a traditional mode of learning often called the chalk and blackboard learning, in which the learning environment is created within the physical

walls of a classroom. In this type of learning physical presence on teacher and student is important.

What is digital learning?

When learning is facilitated by the use of electronic tools or digital tools, like laptops, smart phones, tablets, softwares and apps, then it is called digital learning.

What is Smart- learning?

Smart learning refers to a learning based on holistic development of knowledge and skills. It can be done via different ways, either by interacting with the students in a physical classroom environment or including digital

CHALLENGES OF DIGITALISATION :

No universal applicability - disciplines like social science can't be dependent on digital learning only, it needs experiences that are usually the result of physical interactions, Even in physical sciences some experiments need to be conducted on field or generally in labs, that would again require interaction with the physical environment.

Authenticity of information - Easy availability of any type of information also creates apprehensions about the credibility of data, accuracy of data can also be questioned. Availability of a plethora of information does not necessarily mean that the information is authentic. Search results on the internet are usually organised on the basis of rankings and not the authenticity of the information. Besides, the internet being such an open space grants everyone the access to upload information regardless of its credibility.

Given the vast mass of information available online, it becomes challenging to figure out what is genuine and what is not.

Rising apprehensions in cyber space- With increased use of technology and internet, students are also getting exposed to various unknown sites, which shouldn't be accessed, which sometimes lead to data leak, privacy issues and various scams.

Lack of technical skills - Switching to e-learning during the covid pandemic wasn't a choice but a need of the hour. Many teachers didn't have the technical know-how required to use digital platforms, due to which course time increased as well as teachers' motivation took a backseat as they found it difficult to transfer knowledge using ICT platforms.

Lack of Cognitive skills -Reliance on the internet for information leads to poor learning habits among students as the internet becomes an easy way out for their problems.

Students thus spend less time applying their analytical skills for problem-solving and instead become dependent on the internet for instant solutions.

Lack of Discipline- Discipline is the core and the most integral part of a student's life. One must understand that digital learning might make remote or distance learning really easy and accessible but there is no shortcut or an easier way of growing the personality of a student. Most of the time a student doesn't wake up on time for the class or might be doing other things while taking the class that of course a teacher can't have a track on. All the core values like punctuality, uniformity, obedience, etc, shaping a student may have no room for development.

Losing out on Soft skills- Students have also begun to lose their soft skills and public speaking skills. Now, they find it intimidating to face an audience and give presentations as they are no longer used to it. This has severely affected their confidence.

Expensive -Keeping up with technological advancements and innovations can prove to be a costly affair.

How overdependence on digital learning impacts teacher- student relationship?

Erosion of value system - With students considering digital learning as a new way of learning, the basic values like respect, that are required to build a strong teacher- student relationship are slowly getting eroded as it's becoming difficult to understand how important a teacher is, when it comes to building a path and guiding a student throughout.

Internet over teachers- They perceive the internet as the major source of all information. So instead of looking for a teacher while in doubt and understanding things, they don't consider that help as a teacher might not be available all the time but an internet is. Similarly it's not just the students, teachers even in order to create a work life balance might not entertain students all the time as with technology there is no physical boundary or space. Teachers are seen to be accessible all the time which is not true in reality. They also have an increased burden, especially the females.

Lack of face to face interaction - In a physical classroom environment a teacher understands the potential of a student by understanding her behaviour, body language, whereas we

Parting ways- There has been a huge disregard in terms of empathy and the bond that both used to share. Students and teachers have slowly have started losing empathy towards each other

Lack of individual attention- With the camera switching on and off and no real attention to the class, most of the time neither student is bothered nor the teacher sometimes.

Less contribution of teachers to the overall development of a student- while traditional methods consider teachers not just as someone teaching in a classroom but also involved in recreational activities, that would help them evolve their students and track progress

IS DIGITAL LEARNING SAME AS SMART LEARNING?

What is Smart- learning?

Smart learning refers to a learning based on holistic development of knowledge and skills. It can be done via different ways, either by interacting with the students in a physical classroom environment or including digital tools, technologies or creating a virtual classroom, thus promoting remote learning.

But generally people perceive it similar to digital learning. It is seen as learning based on use of digital tools and softwares, in order to increase efficiency and learning. Does making use of technology is the only way to enable smart learning? Does it mean students who are the product of classroom learning aren't that efficient in learning new skills? Do students really become smart just by having access to digital tools and equipment? Let's just try to answer this question and understand the concept of smart learning more carefully with the help of the table below.

Actually Not. In reality smart learning is more comprehensive, broader and problem solving. It tries to bring cognitive skills to students and also tries to make teachers more updated and change driven with Smart learning. Getting explored to digital platforms or having accessible internet connections, smartphones, do not define the level of smartness. Smart learning is much more than that, digital learning can be seen as an aspect of advancing it but not the sole responsible factor promoting it (as also suggested by . There are so many other aspects that a student learns while being in a classroom environment that are required to develop the overall personality traits of a student.

Some of the most basic values of our belief system like empathy, sharing is caring, respecting elders, discipline, compassion, that most of us relate to come from that classroom learning experience we all had while we were students of the same system.

CLASSROOM LEARNING	DIGITAL LEARNING	SMART LEARNING
Use Chalk and board	Use of digital tools	Use of digital as well as classroom methods
Physical presence of teacher and student is mandatory	No physical presence. Allows virtual presence only.	Can be done via two ways - physical presence of teacher and students but using digital tools to make sessions more interactive
Could result in teacher centric education if teacher doesn't change ways as per the requirement of the students	More eye pleasing and attractive due to use of Powerpoint presentations, Documents , word, thus help in seeking attention quickly but again there might exist an uncertainty of how long can it catch the attention,if it starts getting boring without student's participation.	-Virtual presence of both with interactive sessions 2-3 days in a week so that the physical interaction and touch is not faded away.
Physical interaction and social interaction is possible, thus help in building good relationships with peer groups and teachers	Only digital presence, social needs are compromised.	Using technology for seeking attention and interacting with students in a physical environment to discuss what they learnt,is more student centric

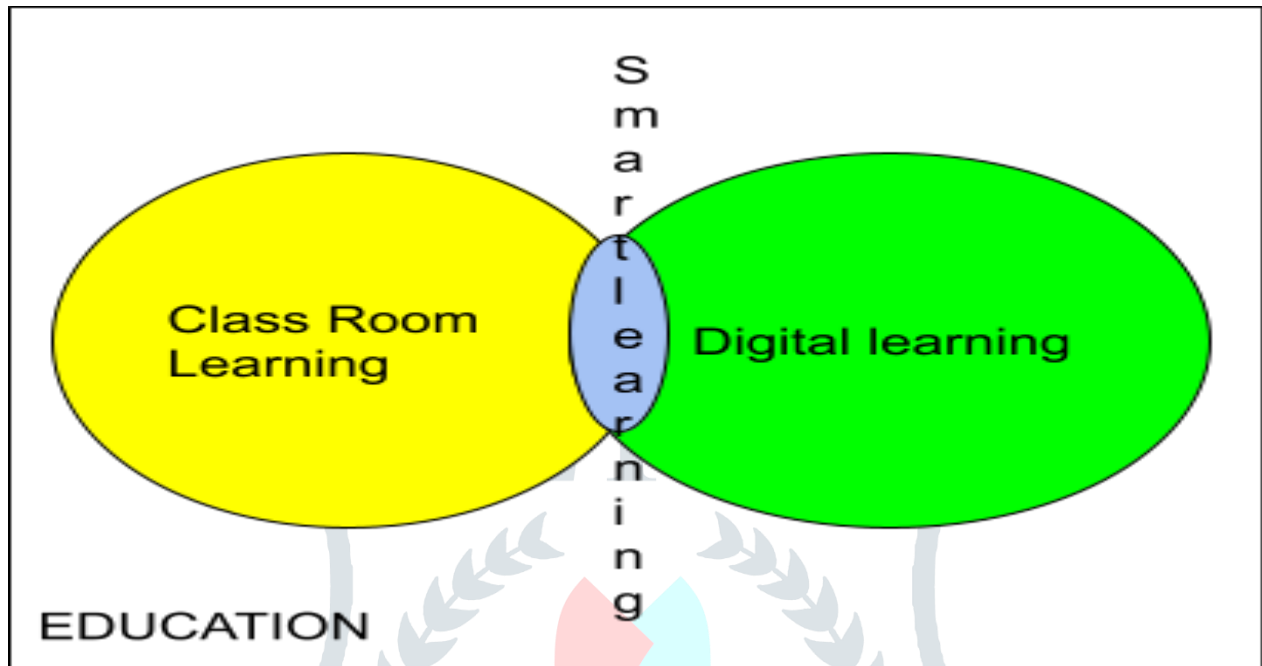
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that classroom learning experience we all had while we were students of the same system.

SMART LEARNING -



ADVANTAGES OF SMART LEARNING

For teachers -

- 1) Work life balance will be easier with a few days online and few days offline.
- 2) Can track the progress of students easily and more efficiently.
- 3) No more dependence on technology in order to teach. No technical barriers as physical presence would be equally important.

For students -

- 1) Discipline will be the key especially in schools.
- 2) More social interaction would help them learn behaviours and deal with real life situations and presentations.
- 3) Respecting the Teacher- student interaction.
- 4) Channelise skills in the right manner, with proper guidance and knowledge of a teacher in a technical environment.

PESTEL ANALYSIS - SMART LEARNING (A PRODUCT OF OLD PLUS NEW METHODOLOGIES)**POLITICAL**

As smart learning would also include use of digital tools and technology one must also understand the possible rights associated with it. Article 21A of the Indian constitution grants the right to education as a fundamental right. This right shall be interpreted in a broader sense as the **right to smart education** to ensure that accessibility is no more a problem.

ECONOMIC

Smart learning can help in overall development of students as well as teachers, as that would help provide more opportunities and human resources. Teachers who were not exploring technical knowledge, as it wasn't felt required much, are now taking interest in learning the new normal, which is not just helping them be dynamic but at the same time opening themselves to a completely new era, thus helping with career advancement. Similarly for learners and students it is going to create a wave of knowledge which is accessible as well as outcome based, again helping them with new opportunities.

SOCIAL

It will help in the work-life balance of teachers and will help students to interact with the physical world as well, as they would not be just dependent on just the internet for building up their skills as many skills can't be taught through technology.

TECHNOLOGICAL

Using digital platforms for learning was already there before covid, but the push that digital learning

had witnessed during covid was something unimaginable. It wasn't a transition but a push towards digital learning because physical classrooms were out of question due to social distancing and lockdown. It is seen as new now. But post covid-19 one thing that can't be ignored is the zeal and enthusiasm everyone had to go back to the classroom learning. Therefore smart learning can be seen as a solution to both, in fulfilling the need of social interaction as well as going forward with technological change.

ENVIRONMENT -

why this blended method should become even more popular because over usage of technology would include use of more laptops, smartphones and all new gadgets. And the pace at which a technology changes now a days is incomparable, thus also creating

LEGAL-

Smart learning is a solution that must be backed up with the right policy or law in order to ensure proper implementation is there. Therefore, with the government trying to switch to digital technology, with NEW EDUCATION POLICY 2019, it must also consider the possible issues to ensure the right to equal access. Digital divide in schools is significantly higher than in higher education institutions. The Budget too talks about bridging the digital divide in government and private schools, which is another area that needs improvement. On the same lines, provisions of IT ACT 2000 and Data security bill (soon to be an act) must be inclusive of digital learning to protect students/ learners/ teachers/ educators from the threats of cyber space.

WAY FORWARD

Transition, not push- In order to reap the real benefits of smart learning, understanding technology is also important, therefore proper training and knowledge building webinars and interactive sessions should be built for both teachers and students.

Building infrastructure - Both digital as well as physical. Digital infrastructure would include access to internet facilities, tools, equipment. Physical Infrastructure would include training centres for teachers to upgrade with the latest syllabus and methods.

CONCLUSION

Technology can never over power man, as technology itself is the product of brilliant human minds working together to lead us to a better future. It can be a way to increase efficiency but not the only way to lead us.

Similarly e-learning or digital learning is just one aspect that can promote learning and knowledge building more efficiently and increase accessibility for students who can't have access to a physical classroom environment. At the same time it must be the responsibility of teachers too while teaching in a physical classroom shall not resort to rigid ways and must involve students and try to make sessions as interactive as they can. Therefore smart learning can be seen as the solution of the current education system, which is modern as well as help us be connected to the roots at the same time. So As we say 'Change is the only constant' smart learning is the change that is required to be implemented holistically that means advantages of digital learning as well as traditional form of learning should be implemented together in order to derive the best results.

