# FROM PASSIVE TO INTERACTIVE- THE POWER OF TECHNOLOGY IN EDUCATION –BENEFITS AND CHALLENGES

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## ABSTRACT

This paper discusses the benefits of technology in education and highlights the need for policy interventions prioritising to meet the challenges.  Technology's power in education is transforming the whole learning experience. Technology in education has enabled personalised learning by expanding access to vast global resources.  It has been fostering interactive learning by creating engaging environments and equipping learners with digital skills which are crucial for their future careers. Technology in education supports in accelerating learning, facilitate in addressing learning gaps and prepare students for a tech driven work force. Students can gain a broader understanding of the world through digital connections and technological resources. Technology in education also beneficial for educators providing learning resources and tools for administration data driven insights into student progress and their overall professional development. The challenges of digital divide, lack of trained professional faculty , chances of  social isolation  , issues of data protection and security  , lack an integrated strategy   , lack of academic integrity etc often pose threats to broader incorporation of technology in education . There is a need to prioritise through policy interventions and frame a clear cut strategy for implementation of technology into curriculum.

**Key words:** technology in education, benefits and challenges

**INTRODUCTION**:

The technology in education has several advantages for students , educators and academic institutions. The incorporation of technology has become more important after the COVID -19 pandemic.

**The benefits of technology -** The benefits of technology in education can be classified as

1. Benefits for Students

2. Benefits for academicians and Educators

3. Benefits for Administrators and educational institutions

1. **Benefits for students**-  The technology in education benefits students through support from personalised leaning.  They now are open to learning ways and resources which is personalised and which offers them opportunities to explore the subjects with their own learning style. An interactive learning platform supports students to earn at their own style and pace. It also supports students to gain access to  a wealth og digital information and expertise across the globe. It helps learners to have collaborative learning means it facilitates team work and interaction between students and teachers across the globe. This also supports in skill development, A learner is open to opportunities of various global standard learning tools. This provides him in problem solving critical thinking digital learning skills and technology expertise.

2. **Benefits For academicians and educators**- the use of technology in education supports educators in managing tasks like grading , feedback and tracking student progress more efficiently. Educators can use data from digital tools to understand students' performances and can fine-tune focusing on the student's lapses in academic performances. Educators can create, modify and share educational materials adapting their teaching methods to meet student's learning styles and learning needs. Besides, online platforms provide access to resources and opportunities for teachers to enhance their own skills.

3. **Benefits for educational institutions**- Technology in education system provides increased access to a host of learning resources. It is beyond global and geographical barriers, one can access knowledge from across the globe. Technology in education has the power to break down barriers and allow unlimited access to learning tools from anywhere and everywhere. Technology in education supports in accelerating learning , facilitate in addressing learning gaps and prepare students for a tech driven work force. Students can gain a broader understanding of the world through digital connections and technological resources. National Digital Library Of India has helped students to access learning resources digitally from across the world.

**Challenges of technology in education-** even though there are several benefits of technology in education , there are several challenges as well which are not only serious but also demand serious thinking.

| 1. | Digital divide |
|----|----------------|
| 2. | Lack of trained professional faculty |
| 3. | Chances of social isolation |
| 4. | Issues of data protection and security |
| 5. | Lack an integrated strategy |
| 6. | Lack of academic integrity |

These challenges pose a serious threat to achieving the academic integrity.

1. **Digital divide** – The primary challenge of incorporation of technology in education is the challenge of digital divide. A significant portion of the population especially in rural India lack access to the necessary technology devices and uninterrupted internet connectivity. Frequent power fluctuations disrupt the use of digital learning tools continuously. The cost of purchasing upgraded versions of hardware and software are beyond affordability. Not all educational digital applications come for free. The cost of acquiring superior quality of Education technology services is very high and cannot be afforded by all. Sometimes , even though the parents are ready to support their children with modern learning applications and gadgets , school authorities will not permit them to use during school hours. There are prohibitive restrictions on the usage of digital equipments. This prevents the consistent usage of digital academic tools. The case of Urban India is different from rural India. Hence this digital divide gap needs to be filled at the earliest.

2. **Lack of trained professional faculty**- education technology needs professionally trained personnel. Majority of the teachers do not have adequate training or professional development knowledge to use these modern technology gadgets in classroom. There is a lack of high quality digital resources and a significant lack of e-content in Indian regional languages . All the educational e content is in English language while rural and regional learners feel the

scarcity of learning resources in their mother tongue language. This limits the accessibility of educational tools to enthusiastic students.

3. **Chances of social isolation**- another bigger challenge for adaptation of education technology is the issues of excessive reliance on technology limits the learners' natural learning capabilities. But observing from the social point , excessive reliance on technology would lead to over indulgence which in turn leads to gradual social isolation and depression. As technology limits the students' exposure and involvement in physical activities like sports , physical exercises , and natural mobility, a student becomes isolated and gradually looses social skills. This becomes so traumatic that students start drifting towards depression and psychological despondency. These types of learners are prone to suicidal thoughts and end up in fatalities.

4. **Issues of data protection and security**- The most dangerous aspect of using technology in education is the question related to dealing with issues of data management and data security management. There are always chances of learners accessing inappropriate and damaging content in the name of educational resources. There are also chances of learners making inappropriate copying the e-content, plagiarism , and stealing the original data. Breach of copy rights , patent violations are on the rise. Besides the loss of privacy is always there. Issues with unreliable hardware and outdated soft ware can disrupt learning. Technology gadgets require updated version of software for proper running . But most of the schools and colleges run with old outdated soft ware which disrupt easy consistent learning also halts regular learning. Heavy use of technology while learning can mislead students as they are always attracted to seeing non academic content and lose focus in haste.

5. **Lack an integrated strategy** - It is also observed that some educational institutions lack a clear cut and integrated strategy for maintaining educational software in their institutions . There are lapses of serious breach in accessing academic data. There needs to be a clear cut strategy for implementation of technology into curriculum , into teaching nd into student career provisions.

6. **Lack of academic integrity**- Finally , the academic integrity is at stake as the students can cheat the authorities during assignment writing , minor projects, report writing ,research writing etc. Students who are well versed with technology usage can drift towards cheating in exams and might go a longer mile in cheating the authorities with assignment marks, scoring and performance indicators. It is known that the Higher education sector has failed to create employment to graduates. The employability rates of Indian graduates are estimated at between 33-53%. 48 % the educated graduate youth are partially employed or unemployed. It is reported that 19% of the urban technical graduates are under employed 32 % the rural graduates are working in urban cities as day labourers. Higher education institutions can come up with initiatives which can address these challenge sand lead to secured academic learning environment.

## CONCLUSION-

Thus, technology in education has several challenges which needs to be addressed through timely policy interventions. There needs to be a clear cut strategy for implementation of technology into curriculum and need for data management policy becomes all the more imperative.

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