

EFFECT OF TECHNOLOGY DRIVEN EDUCATION ON SOCIETY

Dr. Tanu Yadav*

ABSTRACT

Technology is an important base for educational development of a country. Technology is the practical use of science for solving problems. Education is teaching and learning for bringing positive changes in behavior of learners. Technology Driven Education is the combined application of computer hardware, software, and educational theory and practice to promote learning. So we can say that Technology without doubt has brought remarkable transformations in education system at global level. The 21st century education system is technology-driven as technologies are included in today's curriculum design, teaching and learning processes. Technology Driven Education has affected everyone whether it is students, teachers, administrators, parents, employers and citizens. The technology-driven education is to render positive effects on the society. But still there are few negative impacts of technology-driven education. So it is important to evaluate the effects of technology based education on society. How Technology Driven Education impacts the community and the nation. Therefore, this paper studies the concept of technology-driven education, resources used in technology-driven education, factors that affects adoption of technology-driven education, social effects of technology-driven education and how can positive social effects be enhanced of technology-driven education.

Keywords: Technology, Education, Technology Driven Education.

Introduction

21st century is considered to be the times of technology. Technology has a significant role in today's life which is the base of growth of a country. A nation with lack of technology can never witness high growth rate. Technology makes any work easier and quick. The effect of technology is seen everywhere and Education sector is no exception. (Raja & Nagasubramani,2018).¹ Education is teaching and learning for bringing positive changes in behaviour of learners and Technology is the practical use of science for solving problems.

Technology Driven Education

Technology Driven Education is the combined application of computer hardware, software, and educational theory and practice to promote learning. it is the use of technology in learning and its integration in classrooms (<https://www.intel.com>)² So, we can say that Technology without doubt has brought remarkable transformations in education system at global level. The 21st century education system is technology-driven as technologies are included in today's curriculum design, teaching and learning processes. Technology Driven Education has affected everyone whether it is students, teachers, administrators, parents, employers and citizens. (Osinem, Emmanuel. 2019)³. **According to Education**

* Assistant Professor, Department of Commerce (EAFM), S.S. Jain Subodh P.G. Mahila Mahavidyalaya Rambagh, Jaipur, Rajasthan, India.

Today, 2022 ⁴ Technology has made the conduction of classes possible beyond borders or nations. It has opened the ways of education to millions of people and students, when education to them never seemed affordable according to the traditional way of classroom teaching. Educational system of 2023 and years to come has to be technology driven which tends to change teaching and learning methods globally. The traditional classroom measures of using chalkboard, books, and teacher-classroom culture has transformed and paved the way out for online classrooms

The technology-driven education is to render positive effects on the society. But still there are few negative impacts of technology-driven education. So it is important to evaluate the effects of technology based education on society. How Technology Driven Education impacts the community and the nation. Therefore, this paper studies the concept of technology- driven education, resources used in technology-driven education, factors that affects adoption of technology-driven education, social effects of technology-driven education and how can positive social effects be enhanced of technology-driven education

Review of Literature

According to Bay Atlantic University, June 2022, ⁵in the article “Technology impact on learning “ emphasized that traditional including face-to-face classes have been effective for a very long time but now CoVid-19 pandemic these old methods of learning and teaching have become less practical. And, so technological driven education is very important in imparting education in this new and challenging phase.

Kaite J. Carstens, Jamie M. Mallon, Mohamed Bataineh (2021)⁶ in their study titled “Effects of Technology on Student Learning“ **stated** about the various positive and negative impacts of technology in education field. According to the survey results, educators found more of positive results of use of technology in education than the negative impacts Brill, J. M., & Galloway, C. (2007). Perils and promises:

Brill, J. M., & Galloway, C. (2007)⁷ in the work on “Perils and promises: University instructors’ integration of technology in classroom-based practices” revealed that use of Technology do have a good impact on education along with few negative effects also. negative effects. Teachers and students can take advantage of this fact and try to achieve new heights

According to World Economic Forum ,2017 ⁸ in their study named “The role of technology in the education of the future” focused on the fact that combining of innovations with education will bring best of digital innovations which is today’s need. This will transform individual lives, businesses, societies and nations.

Factors that affects adoption of Technology-Driven Education

There are many factors that affect adoption of Technology-Driven Education which are as follows:

- **Lack of tech savvy teachers**

A lot of teachers are not technology savvy. So, they are not able to utilize resources properly . So, training has to be imparted to be teachers to use various technological resources like projectors and computers.

- **Lack of finance**

Technological resources are very expensive and so many institutes cannot afford to have these facilities. Thus, the resources are either unavailable or inadequate.

- **Lack of technology know-how**

Technology needs expertise. When this is not available, it becomes a big problem creating to major faults.

- **Inadequate Power Supply**

Consistent Power supply is needed to utilize technological devices which is a major constraint to the utilization of technological devices in education.

- **Inadequate Internet Connection**

Good internet service is a requirement of technological driven education. According to **Bransford, Brown and Cocking (2000)**⁹, reliability is a must in technical education which includes proper internet connection.

Social Effects of Technology-Driven Education

There are many effects of Technology-Driven Education which have influence socially. But like every coin has two faces good or bad, in the same way Social Effects of Technology-Driven Education can also be positive or negative which are discussed below-

Positive Effects of Technology-Driven Education

- **No Geographical Barriers**

Technology driven education has removed any geographical barriers. There is no need of being physically present in the classroom for learning or attending classes. Anyone be it any foreign university's student can even join online degree class or course.

- **Improves Education Delivery and Process**

Technology in education improves the overall education through teaching, learning and training processes by identification of educational goals, preparation of the teaching environment, training of learning resources and educational materials, choice of learning strategies, and teaching strategies and input on teaching and learning processes. (Balalle, Himendra, Weerasinghe, Tudor. 2021).¹⁰

- **Cooperative Learning**

Cooperative learning is a way of teaching which engage students in the whole process of learning to make them understand and know the content or the subject (Slavin, 2011)¹¹. Cooperative learning is a instructional process where students work together to achieve educational targets (Abrami, Poulsen & Chambers, 2004)¹². It improves positivity for learning, improves social relations (Johnson & Johnson, 2008).¹³ Technology-driven education improves interaction between students, teachers and other stakeholders the barrier of geographical spaces thus promoting Cooperative learning.

- **Improves Research Process**

Use of technology has made the Research process far more interesting. In the earlier days people travelled long distances to gain knowledge or information for research work. But now, Data required by researchers can be gained by phones and laptops with the help of internet. Thus, technology enhances the research process.

- **Globalization**

Through Technology-Driven Education students can study with the help of video conferencing without physically present in the classroom across societies, states and nations. Some websites, online apps, online courses renders students material to learn about various things like foreign languages etc. by pairing students with a teacher of a foreign land. Wenglinski, H. (1998).¹⁴

- **Improved Teaching and Learning**

New technology of Internet offers new platforms of teaching and learning at all educational levels. (<https://www.cambridge.org/elt/blog/2020/11/20/technology-beneficial-impacts-teaching-learning/>)¹⁵ Technological developments in education like that of digital cameras, use of projectors, computers, PPT, 3D visualization tools have made teachers understand a topic in a better way to the students. (Yo'ldashev Axrorjon. September 2021.)¹⁶

Negative Effects of Technology-Driven Education

- **Problem of Internet Connection**

Internet connectivity is the foremost element required for online education. Network issues, no or less internet connection slow internet performance and frequent disruption in the network are some of the major internet issues. Lack of network access, makes it impossible to conduct or attend any online classes or meeting (onlinelearningsuccess.com)¹⁷

- **End of Socialization**

Technologically driven education, mostly referred as online education gives access to education and learning from anywhere be it home or any other convenient place. This leads to limited interaction with the teacher, families or any other social groups. Most of the discussions are done through e mail, chats or discussion groups. There is no campus environment and so no social interaction. (Jindal Aman and Chahal Bhupinder Singh. (2020).¹⁸

- **Loss of Character Education**

Prior to online education, children were inculcated with values, moral ethics, lifestyles, traditional outlook through grandparents, adults at home while spending time with them. Learning from elders and their life experiences was a part of education. But adults are largely absent in technological environments as they are not well versed with the technological tools. Children through technology are limited to only content based knowledge. Values and character building is missing. Students and the new generations must be taught these things which renders knowledge acquisition, problem solving techniques (Jolls, T., (2008)).¹⁹

- **Reduced Writing Skills**

The new technology has resulted in reduced skills of writing. The usage of online chatting and shortcut during chatting by today's young generation does not let them develop writing skills. Today's students depend on digital communication so much that they don't even know how to spell words or to use grammar or do cursive writing. (Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. (2000)).²⁰

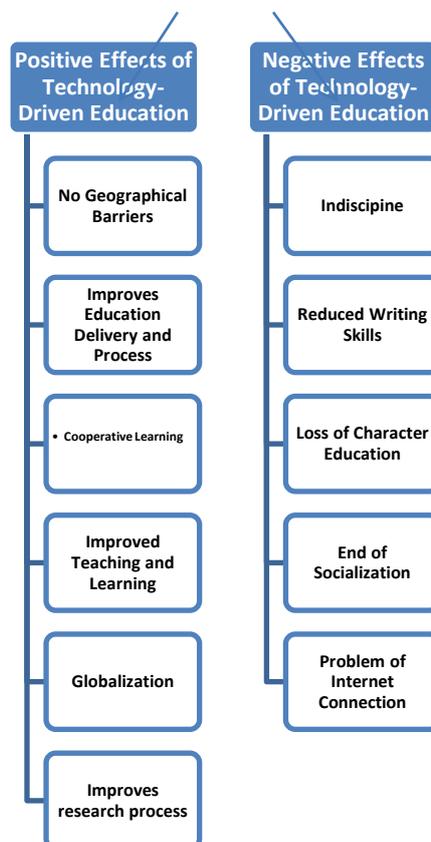
- **Indiscipline**

Technology in education has led to Indiscipline as the students can turn off their cameras or mics anytime. They are free not to respond to the teachers with so many excuses to quote. Students also show misbehavior like cheating during online exam, sleeping or eating while the classes are going on, roaming here and there during the classes, chat chatting with family members/friends, surfing social sites and so on. Thus, maintenance of discipline is a major problem related to technology driven education.

The figure given below shows social effects of Technology-Driven Education

Figure 1: Social Effects of Technology-Driven Education

Social Effects of Technology-Driven Education



Enhancement of positive social effects of technology-driven education

Positive social effects of technology-driven education can do more additions in the process of imparting education if these points are considered:

- Internet connection should be improved to decrease the influence of digital divide
- The institutions should make sure that students are properly monitored to avoid activities like cyber bullying
- Students should be motivated to not use any short cuts so that their writing skills can be improved

Conclusion

Technology driven education is must to be successful in today's times in the twenty first century. it is of great importance and also has social impacts on individuals, societies and economies. The good effects on the society are No Geographical Barriers, Improves Education Delivery and Process, Cooperative Learning etc. while there are some negative social impacts of technology-driven education as well like Problem of Internet Connection, End of Socialization, Loss of Character Education etc. To make best out of the Technology driven education and to reduce its negative influences some measures can be adopted like educational units should institutions should have a strict monitoring system for the online activities of the students are monitored, internet access should be improved and so on. Only then the real fruits of Technology driven education can be borne.

References

1. Abrami, P., Poulsen, C., & Chambers, B. (2004). Teacher motivation to implement an educational innovation: factors differentiating users and non-users of cooperative learning. *Educational Psychology*, 24(2), 201-216. doi:10.1080/0144341032000160146
2. Balalle, Himendra, Weerasinghe, Tudor. 2021/01/01. The Impact of Education Technology in Teaching and Learning. Vol. 9 No. 1, 2021, ISSN 2056-5852. *European Journal of Research and Reflection in Educational Sciences*
3. Bransford, J., Brown, A., & Cocking, R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academic Press
4. Brill, J. M., & Galloway, C. (2007). Perils and promises: University instructors' integration of technology in classroom-based practices. *British Journal of Educational Technology*. 38(1), 95-105.
5. Jindal Aman and ChahalBhupinder Singh. (2020). Challenges and Opportunities for Online Education in India. *Pramana Research Journal*. Vol.8, Issue-4, ISSN No: 2249-2976
6. Johnson, D. W., & Johnson, R. T. (2008). Social interdependence theory and cooperative learning: The teacher's role. In R. M. Gillies, A. Ashman & J. Terwel (Ed), *Teacher's Role in Implementing Cooperative Learning in the Classroom* (pp. 9-37). New York, U.S.A: Springer. http://dx.doi.org/10.1007/978-0-387-70892-8_1
7. Jolls, T., (2008). The impact of technology on character education. Paper presented at U.S. Department of Education Character Education Symposium 2008, New York, United State of America)
8. Kaite J. Carstens, Jamie M. Mallon, Mohamed Bataineh (2021). 105 Effects of Technology on Student Learning. *TOJET: The Turkish Online Journal of Educational Technology* – January 2021, volume 20 Issue 1
9. Osinem, Emmanuel. 2019/07/10. SOCIAL IMPACT OF TECHNOLOGY-DRIVEN EDUCATION. 10.13140/RG.2.2.25473.20328. https://www.researchgate.net/publication/334363867_SOCIAL_IMPACT_OF_TECHNOLOGY-DRIVEN_EDUCATION
10. Raja, R & Nagasubramani, P.C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3 (1), 33 – 35. <https://dx.doi.org/10.21839/jaar.2018.v3S1.165ISSN 2519-9412>. Page | 13
11. Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. 2000. *Future of children*, 10(2), 76-101

12. Slavin, R.E. (2011). Instruction Based on Cooperative Learning. In R.E. Mayer & P.A. Alexander (Eds.), Handbook of Research on Learning and Instruction (pp. 344-360). New York: Taylor &Franci.
13. Wenglinski, H. (1998). Does it compute? The relationship between educational technology and student achievement in mathematics. Princeton, NJ: ETS.
14. World Economic Forum ,2017. <https://www.weforum.org/agenda/2017/05/science-of-learning/>
15. Yo'ldashev Axrorjon. September 2021.The Impact of Modern Information Technology on Education. https://www.researchgate.net/publication/354696816_THE_IMPACT_OF_MODERN_INFORMATION_TECHNOLOGY_ON_EDUCATION/citation/download
16. <http://onlinelearningsuccess.org/advantages-and-disadvantages-of-online-and-classroom-learning/>
17. <https://bau.edu/blog/technology-impact-on-learning/> JUNE 2022. Bay Atlantic University, June 2022.
18. <https://educationtoday.org.in/2022/04/04/technology-driven-education/>
19. <https://www.cambridge.org/elt/blog/2020/11/20/technology-beneficial-impacts-teaching-learning/>
20. <https://www.intel.com/content/www/us/en/education/technology-in-education-for-learning-and-teaching.html>

