



Impact of Modern Technology on the Performance of the UG & PG Student's

Vidhya Sadhu Kshirsagar*

D. Y. Patil Deemed to be University, School of Management, Navi Mumbai-400614, Maharashtra, India.

vidhya.kshirsagar@dypatil.edu

Abstract

The foundation of a developing economy is education. As a result, we must constantly improve the educational system. India has had moderate but consistent growth. Smart board classes have replaced the traditional classroom setup. In addition, this Pandemic has demonstrated that the classroom of the future may be online or may be replaced by artificial intelligence. This paper attempts to study the impact of technology on the performance of the students studying in Undergraduates and Post Graduates level. With a sample size of 150 students, data for the current study was gathered from numerous colleges close to Mumbai and Navi Mumbai. Chi square test is used to find the association between modern technology and Performance of the students studying in the Undergraduates and Post Graduates level. Findings demonstrate that the effectiveness of Modern Technology significantly influences on the Performance of the students in Undergraduates and Post Graduates level.

Key Words: Students' Performance, Undergraduates and Post Graduates level, Classroom, Modern Technology

DOI Number:10.14704/nq.2022.20.8.NQ44528

NeuroQuantology 2022; 20(8): 5023-5028

5023

Introduction:

Nowadays, Technology has become basic need of human being. It is very difficult to sustain in market without technology. 21st century is considered as an era of technology. The effect of technology we can see in every field. Education is the one of the field where usage of technology has increased. The result of usage of technology is more effective as compare to other resources. Modern technology helps to create more engaging teaching and learning environment. Additionally it enhances collaboration, integrates diverse learning styles and helps students learn at their own pace. There were not too many tools available to teachers in the pre-technological age to improve their instruction. The blackboard and the chalk were primarily used to facilitate and enhance

the students' learning. Teachers delivered lectures while students sat silently in the back of the room, being the main source of information. However, as technology advanced, classrooms shifted from being teacher-centered to being student-centered.

Modern Technology & Education:

The use of contemporary equipment, technology, and tools results in increased student learning and interactivity, according to the most recent research on how precisely modern students of today choose to use technology and how using it affects their learning. When technology is used to help, they find it to be much more interactive and full of intriguing places. It becomes very simple, convenient, and effective to convey knowledge. This indicates that we now have a tendency to think more quickly while using



modern technologies, whether it be in education or any other area of life. These days, even in schools, universities, and colleges, it is impossible to escape becoming dependent on an innovation that only makes life a simple, pleasant journey. Technology has changed the roles of teachers and students since COVID-19. The new technological adventure in the sphere of education has increased the interest level of the learning and knowledge-sharing processes. The shift in our worldview is where contemporary technology has had the biggest impact on education. Technology is responsible for our thinking's obvious shift from local to global. Therefore, we are concentrating on the current state of education with these novel concepts that can benefit the following generation and assist them manage and sustain education with technology. Modern technology has made classrooms more digitally advanced, equipped with smart boards. A common person nowadays can quickly access a wide range of learning resources that are available online, including books, audio, video, photos, and more, at the touch of a button thanks to the internet. We are taking webinars, development programmes, awareness programmes, and other online information from all across the country as a result of this technology in the field of education. Only the teacher can accomplish this with the aid of cutting-edge methods for all students. Modern technologies has not only made students and teachers lives easy but also beneficial in terms of getting online degrees to the students, providing useful knowledge to teacher and learner, easy to store information, digital classrooms, sharing and learning made easy, eliminated restrictions on time and space.

Modern technology and Performance:

Technology has the ability to improve education's quality and relevance while also increasing access to it. According to Tinio (2002), Technology has a significant impact on education in terms of knowledge acquisition and absorption for both teachers and students. Modern technology has been acknowledged by educators as a useful tool for facilitating lessons and improving the

entire learning process. Learning has changed from being passive and reactive to being active and participatory since technology has entered the scene, or rather, the classroom. Compared to a standard classroom setting, visual explanation of any subject matter makes it more engaging and encourages student participation. With the eradication of geographical boundaries brought about by technology, the phenomena of "distance learning" has also brought the world closer, especially during the COVID-19 pandemic. With the advent of online degree programmes, attendance in person in class is no longer required. For study and certification, a number of foreign colleges and educational institutions provide online degrees to students around the world. Additionally, it fosters a positive environment of collaboration and cooperation between students and teachers from various cultural backgrounds, assisting kids in developing their communication abilities and global awareness. The idea of online degrees is growing in popularity and awareness among working students who want to learn at their own speed and are seeking for flexible learning options.

Literature Review:

The literature sites number of studies in this field. A brief analysis of this studies conducted in this area has been discussed in the following paragraph.

Ashneet Kaur (2020) analysed in their study on impact of Modern Technology on the student performance in Higher education. The main objective of the article is to study the changing scenario of education. Data was collected from 112 students of higher education followed by random sampling technique. The results of the study indicate that Performance was significantly impacted by the utility of smart lessons, then by self-efficacy. Additionally, it should be highlighted that user annoyance has a detrimental effect on a student's performance.

Md. Shamim Talukder et al (2015), Conducted a study on the Impact of ICT on students' performance: a case study on undergraduate university students. This study emphasized on the relationship between student's use of ICT



on academic and non-academic purpose and their performance. The performance of students is based on their cumulative grade point average (CGPA); a greater CGPA indicates higher performance, and a lower CGPA indicates lesser performance. Performance comparison of the students was calculated by using correlation analysis. The results of the study indicate that Educational institutions need to take the lead in introducing ICT to students by emphasising how it can significantly improve their academic achievement. This would significantly increase the relevance of using ICT for academic assignments.

Jeong Kim, Hong, and Deok Song (2019) examined the contributions of educational engagement and digital preparedness to students' success in university e-learning environments. His study's main goals are to evaluate how students view e-learning based on their own experiences and the roles of educational engagement and digital preparation within the framework of an Associate in Nursing e-learning environment at a university. In addition to a pedagogic approach that emphasises self-reliant learning for educational action in a university e-learning setting and the educational engagement that mediates the connection between e-learning use and educational action. This study claimed that students who actively adopt e-learning and have confident attitudes still need to be forced to be committed and put forth the effort to be told how to use digital materials.

Students today inhabit a technological environment. The majority of students regularly utilise technology, such as texting, social networking, and web browsing. Students view these tools as both incredibly helpful and pleasant. These same children will be comfortable using technology in the classroom because they are acclimated to it. They will achieve academic success if their learning environment reflects the ways in which they interact with the outside world (Christen, 2009). With the use of technology, the classroom may become a collaborative learning space.

Kevin C. Costley (2014) emphasized on The Positive Effects of Technology on Teaching and Student Learning. The data in this research demonstrates that technology influences student learning expectations and outcomes in a favourable way. There is evidence that both public and private schools are increasingly integrating technology. All age groups have been found to benefit from technology integration, which has also been demonstrated to be beneficial for students with unique learning needs.

According to Kurt (2010), Technology may be utilised to create engaging projects that encourage kids to think critically and solve problems. Technology can be utilised to remodel the classroom and create a space that encourages the growth of higher-order thinking abilities. The benefits of integrating technology in classroom learning have been demonstrated by numerous studies.

Technology is always evolving, changing how all people live and work. In many schools, the internet is increasingly being used as a tool for learning (Açkaln, 2009). This involves offering each student a worthwhile educational experience. Educators today have numerous chances to use technology are improving how pupils study.

Research Objectives:

1. To study the importance of modern technology in the class room teaching.
2. To study the impact of modern technology on the Students' performance.

Hypothesis:

H₀₁: There is no association between modern technology and classroom teaching.

H₁₁: There is association between modern technology and classroom teaching

H₀₂: There is no relationship between modern technology and students' performance.

H₁₂: There is relationship between modern technology and students' performance.

Research Methodology

Both quantitative and qualitative data collection methods were used in this investigation. Through quantitative surveying, the essential data is gathered. Given the goal of the study, it was necessary to conduct a survey of students studying in Undergraduates and Post Graduates level who are using



modern technology to improve the performance in the academics. The information has been collected from the students studying in UG & PG level by using questionnaire.

Sampling Design:

- **Type of Universe:** The Universe of sample is Students who are using modern technology for study in UG & PG level from Mumbai and Navi Mumbai region.
- **Sample size:** The Sample size is 200UG & PG level students using modern technology for study to improve the performance in the area of Mumbai and Navi Mumbai region.
- **Sampling type:** Random sample technique is used in this research.

Scope and Significance of the study:

Observed Values:

Count of level of score of Modern Technology and Classroom teaching	level of score of Modern Technology and Classroom teaching			
	Upper	Lower	Medium	Grand Total
Undergraduate	4	24	72	100
Post graduate	32	8	60	100
Grand Total	36	32	132	200

5026

Expected Values:

Level of score of Modern Technology and Classroom teaching

Levels	Upper	Lower	Medium	Grand total
Undergraduate	18	16	66	100
Post graduate	18	16	66	100
Grand Total	36	32	132	200

Chi-Square Value: 15.42 (Calculated value)

Table Value: 5.99

The table value of chi square for 2 d.f. at 5% level of significance is 5.99. The calculated value of chi-square is much more than the table value. Therefore, the null hypothesis is rejected and alternative hypothesis is

The data used in the study will be definitely help for researchers, Undergraduates and Post Graduate Schools. Undergraduates and Post Graduateschools can take an advantage of this study for creating awareness of modern technology in the classroom and its impact on the performance of the students. The study will also helpUndergraduates and Post Graduateschools to get better understanding about connection occur between usage of Modern technology and Performance of the students.

Data Analysis & Interpretation:

H₀₁: There is no association between modern technology and classroom teaching.

H₁₁: There is association between modern technology and classroom teaching.

accepted. Hence, we conclude that there is association between modern technology and classroom teaching

H₀₂: There is no relationship between Modern technology and students' performance.

H₁₂: There is relationship between Modern technology and students' performance.

Observed values:

Count of level of score of Modern technology and students' performance	level of score of Modern technology and students' performance			
	Upper	Lower	Medium	Grand Total
Undergraduate	8	16	76	100
Postgraduate	32	12	56	100
Grand Total	40	28	132	200



Expected values:

Level of score of Modern technology and students' performance

Levels	Upper	Lower	Medium	Grand total
Undergraduate	20	14	66	100
Post graduate	20	14	66	100
Grand Total	40	28	132	200

Chi-Square Value: 9.02 (Calculated value), Table Value: 5.99

The table value of chi square for 2 d.f. at 5% level of significance is 5.99. The calculated value of chi-square is much more than the table value. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. Hence, we conclude that there is association between Modern technology and students' performance.

Recommendations:

1. Modern technology should be used in classrooms because it boosts student motivation, engagement, cooperation, and hands-on learning possibilities. It also enables learning at all levels, boosts student confidence and improves technology skills.
2. Incorporating technology into the curriculum gives students the chance to advance their knowledge and achieve academic success while also preparing them for life after graduation.
3. Classrooms should adopt modern technology as many of the Undergraduates and Post Graduate schools students feel that Modern technology is the simplest way of communication between teacher and students.

Findings and Conclusion:

The main purpose of the reading was to identify the association between Modern technology and classroom teaching with respect to Undergraduates and Post Graduate schools students. The findings of the learning conclude that there is positive impact of Modern technology on classroom teaching with respect to Undergraduates and Post Graduate schools students. This study also found that there is association between Modern technology and students' performance.

This learning also concludes that technology influences education in a beneficial way, but it

also has potential drawbacks. Teachers and students should make use of this in a positive way and remove the obstacles that prevent many students and schools from attaining excellence. Therefore, it is now necessary for every nation to establish a more technologically advanced education sector in the future.

Limitations and suggestions for future research:

1. Study is limited to only Mumbai and Navi Mumbai; Future research may include wide coverage.
2. Study is limited to Sample size of 200 only; larger sample size will give accurate results.

References:

1. Açıklın, M. (2009). Pre-service elementary teachers' beliefs about use of the Internet in the social studies classroom. *European Journal of Teacher Education*, 32(3), 305-320.
2. Amarender Katkam(2021), Impact of modern technology on education, Hans News Service
3. Ashneet Kaur (2020), Impact Of Modern Technology On The Student Performance In Higher Education
4. Christen, A. (2009), Transforming the classroom for collaborative learning in the 21st century. *Techniques: Connecting Education and Careers*, 84(1), 28-31.
5. Diana Bajraktari (2020), Modern Technology in Education.
6. Kenya, Mary Wan Gari Mw Angi,(2010), The Effects Of Modern Technology On Pupils/Student Academic Performance A Case Study Of Selected Primary And Secondary Schools In Thika Municipality, Thika District.
7. Kevin C. Costley (2014), The Positive Effects of Technology on Teaching and Student Learning, Arkansas Tech University



8. Kurt, S. (2010). Technology use in elementary education in Turkey: A case study. *NewHorizons in Education*, 58(1), 65-76
9. Malabika Hazarika, Impact Of Modern Technology In The Field Of Education, *International journal of Advanced Science and Technology*
10. R. Raja & P. C. Nagasubramani (2018), Impact of modern technology in education, *Journal of Applied and Advanced Research*
11. Shamim Talukder, Jahangir Alam & Md. Ariful Islam Apu (2015), The Impact of ICT On Students' Performance: A Case Study On Undergraduate University Students, *Manarat International University Studies*, Volume 4, Issue 1.
12. Vijeta Chaudhary(2022), Impact of Modern Technology in the Field of Education
13. Yogesh Kumar(2020), Impact of Modern Technology in Higher Education and Students Engagement,, *International Journal of Engineering Research & Technology (IJERT)*,Volume 8, Issue 10,ISSN: 2278-0181, ENCADEMS - 2020 Conference Proceedings

