

Digital Learning Resources' Impact on Academic Performance

Lalita Kumari

Research Scholar, University Dept. of Psychology, LNMU, Darbhanga, Bihar

Email: lalitakridbg199@gmail.com

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Abstract

In today's world, technology is widely recognized as a vital tool for enhancing educational processes. Consequently, online education has grown in importance as a resource for both students and teachers, allowing for continuous training in distant or hybrid settings. Many are worried about how students' conduct may change after making the switch to online learning, both in and out of the classroom. The effects of online education on students' academic have been the subject of mixed outcomes in the research that has examined the topic. Thus, it is essential to investigate how online learning affects students' academic achievement in order to have a more thorough comprehension of the pros and cons of this style of training. The survey results that form the basis of this article evaluate the effects of online education on students' academic. Researchers conducted the experiment using a desk approach. In its research, the study relied on data that was easily available from online journals and libraries, specifically referencing previously published studies and publications. If researchers, teachers, and lawmakers are serious about improving children's academic performance via digital learning, they should pay close attention to this study's findings. Research shows that when technology is used successfully, learning outcomes increase for both students and instructors. However, for this to happen, courses need to be well-planned and there has to be enough resources. Following the advice in this article will ensure that technology has the greatest possible positive effect on classroom instruction. The study indicated that good integration, supported by institutional frameworks and disciplined usage habits, was essential to reaping the educational benefits of digital technology.

Keywords: Technology, Learning, Resource, Classroom and Achievement

Introduction

Computer technology is now seen as normal. People who want to go to school today are expected to know how to use computers. The school field is just one of many that has been greatly affected by changes in technology. Using technology in the classroom has made getting information to people faster, easier, and more useful. Digital tools like monitors, the internet, and other tech gadgets are often used in modern classes to help students learn better. There are a lot of digital learning tools out there, and more are being added all the time. A "digital resource" is any kind of information that can be viewed from a computer that is linked to the Internet. Digital materials can be found online or locally and include many types of media, such as books, magazines, databases, websites, CD-ROMs, text, pictures, music, news, and databases. Because digital resources make it possible for consumers to obtain information that may otherwise be out of reach owing to considerations like cost, location, or other limits, they are more practical than print resources. The expansion of digital technology has greatly altered the landscape of education. In order to make education more interesting, participatory, and accessible, new digital learning tactics are supplementing and even replacing traditional classroom techniques. The impact of digital learning materials on students' social behavior may be both positive and negative. Conversely, when these technologies are used in a structured and engaging way, children are more likely to cooperate, communicate, and develop a sense of belonging. However, students may have increased feelings of isolation, social anxiety, and screen time issues as a result of extensive or unstructured usage, depending on the context and their individual profiles.



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Address for correspondence:

Lalita Kumari, Research Scholar, University Dept. of Psychology, LNMU, Darbhanga, Bihar

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While learning online, students' social conduct may take a variety of forms. Students' ability to cooperate and pay attention in class may both benefit from well-designed interactive courses. Students who study for long amounts of time or who don't have a strategy may experience increased social anxiety, isolation, and a lack of in-person practice. Online education is not without its drawbacks.

One positive aspect is that it may facilitate kids' ability to form friendships and feel more connected to one another. A few drawbacks include the fact that some students may have social anxiety if they utilize it for an extended period of time without any kind of structure, that they may be less inclined to practice in person, and that they may feel more alone. The social behavior of students may be positively impacted by digital learning tools that are pedagogically guided, interactive, and well-designed, leading to enhanced communication, cooperation, and a feeling of belonging. Educational software, online materials, interactive whiteboards, and virtual classrooms are examples of digital learning technologies that have revolutionized contemporary education. Children are able to learn more and more collaboratively with the assistance of these technological advancements. Two examples of software used in education that personalizes lessons for students are simulation programs and adaptive learning platforms. Their desire and ability to study may be enhanced in this way. We are going to evaluate the benefits and drawbacks of online education as our investigation into this field continues to advance. We will also investigate the ways in which these systems influence several aspects of students' lives, including their academic achievement, social skills, and critical thinking abilities. In addition, we will discuss the digital gap, data privacy, and internet security, all of which are issues that raise ethical concerns. As a consequence of technical breakthroughs, data and information that were previously inaccessible are now more readily available to the public. Instead of relying just on one or two professors, kids in today's world have the opportunity to cultivate connections with educators located all over the world and get knowledge from them. It is possible that via these connections, we may get a deeper understanding of many cultures and develop as a social group.

Students may be motivated to actively participate in their learning and track their own progress with the help of these technologies, which provide adaptive tests and quick feedback (Jones & Clark, 2019). In addition, online resources are boosting the social aspect of learning. With the use of online resources like discussion boards, virtual classrooms, and collaboration software, students and teachers may stay in touch and work together regardless of their physical locations. Students' exposure to other cultures and ways of thinking has increased as a result of their ability to take part in global learning opportunities and interact with classmates from all around the globe.

Objective

To present a summary of the digital education tools.

To analyze students' academic performance as influenced by digital learning.

Significance of the Study

In order to provide students with the skills necessary for success in the modern world, it is essential to adjust to the ever-changing technological landscape. Kids will have a better chance of succeeding and making a difference in the world if this is implemented. Everyone from students to educators to school administrators stands to benefit from the subject at hand, as it has the potential to revolutionize the educational system. Academic achievement and conduct are significantly impacted by an individual's level of engagement with school, which is defined as their passion and excitement for learning. The study found that students' pleasure and academic progress were both greatly enhanced by participating in online social interactions. Online communication tools and deeper peer interactions are more likely to be used by students who prioritize the social component.

Online Educational Materials

Any educational activity that uses electronic devices to spread and retain information is called "digital teaching-learning" or "digital learning". Thus, a digital teaching-learning resource is any gadget or technology that assists instruction or student learning. E-books, digital books, computers, TVs, radios, iPods, tablets, cameras, digital repositories, discussion forums, blogs, e-content, e-learning, m-learning, e-mail, chat, MOOCs, OERs, LMS, online learning, online teaching, podcasts, simulations, Second Life, virtual reality, social networking services, webinars, tel. Electronic texts, videos, simulations, assessments, LMS modules, and applications are merely a few examples of the diverse types of digital learning resources. In this context, digital learning refers to any form of education conducted through digital means, whether it is entirely online, delivered via a hybrid approach, or accessed on a mobile device. This more comprehensive category encompasses digital educational materials. Movies, simulations, interactive platforms, electronic texts, and online courses represent only a few examples of the various formats that digital learning materials can assume. A digital learning environment is one in which students have a degree of autonomy regarding their schedules, locations, course selections, and pace of progress, facilitated by technological advancements. In numerous instances, these resources may be encountered during the exploration of online, hybrid, or mobile learning methodologies. Examples of resource materials that may be employed for educational or independent study encompass textbooks, articles, films, podcasts, animations, and electronic publications. There exists an abundance of digital resources accessible to educators today that have the potential to enhance their classroom instruction. Allow me to provide an example to facilitate your understanding. Consider, for a moment, that the teacher's purpose is to introduce the concept of various types of mechanical energy to the students. In such cases, the instructor may assign students a

collaborative project that examines the distinctions and commonalities between kinetic and potential energy. Once that is completed, he or she may then proceed to present a YouTube video to the children. The distinction between potential and kinetic energy is clearly illustrated in this child-friendly film.

Online chat rooms allow users to gather virtually and have one-on-one or small group conversations. A "chat room" is any kind of online meeting place where people with similar interests may talk to one other in real time. People often have chats in chat rooms, either alone or in small groups. Chat rooms are already known to be the most popular way for people to send each other text messages. These days, however, chat rooms also let people share media files like videos, music, and more. With some talking devices equipped with cameras, users may even see each other in a chat room. In this case, the teacher is going to utilize a digital app to show a scientific concept. Teachers' creativity and planning determine the extent to which digital tools may be used in the classroom. Blogs allow users to keep private online blogs or diaries. The public may see blog entries in the order in which they were published. One great thing about blogs is that they allow teachers to easily share and distribute instructional resources to their pupils. You are free to contribute whatever you choose, including text, music, video, and other multimedia components. Blogs are another platform that students may use to share their original academic writing, such as essays, project reports, and literary pieces.

Students' Academic Outcomes and Digital Learning

The availability of previously recorded movies might be a contributing element to the enhanced performance. So that they could learn at their own pace and review material as needed, students had the option to access historical classes whenever it was most convenient for them. The individuals' time management skills and understanding of the challenging material they were studying both improved. One of the most crucial things that helped the pupils succeed academically was having access to computers and a stable internet connection. Digital literacy and competence have a positive and causal relationship with academic performance. Improved self-efficacy, more relaxed approaches to digital learning, and more precise evaluations of online resources are the means by which this is accomplished. Several studies have shown that there are small to moderate benefits to using digital learning materials like multimedia modules or electronic textbooks. Students are better able to remember and apply what they have learned when the material is both engaging and assessed.

The use of digital learning materials in tandem with efficient pedagogical practices and proficiency with digital tools makes this claim more compelling. There is a small but significant correlation between students' use of digital learning tools and their performance in the classroom. The effects become more noticeable as students acquire skills in self-regulation and digital competence, and when the resources are organized and aligned with the course material. Most surveys have depended on students' responses, even though there is no standardised method for assessing students' performance before and after they engage in online learning. Students' academic performance was unaffected by their involvement in online learning, according to most of the research that were reviewed. Our findings provide validity to the assumption that online learning improves students' grades, which is backed by previous studies. According to meta-analyses, educational technology improves achievement. Students get better results when technologies like adaptive practice, simulations, and feedback systems are purposefully used. Less fortunate students may do even more with the support of resources and guidance. Digital literacy is directly correlated with enhanced goal planning, monitoring, and resource appraisal skills. Enhanced digital literacy is directly correlated with higher levels of academic accomplishment. Several viewpoints, including student skills and motivations, attitudes and beliefs, and different online learning environments, have investigated students' ongoing goal of participating in online study. Researchers have just scratched the surface of the factors that influence students' decisions to enroll in online courses and how these factors interact with one another.

The research looked at how people's opinions on online education changed over time, as well as how their desire to take part in online courses related to their personality characteristics, social learning capacities, and worldviews. Students' propensity to participate in online learning was substantially affected by variables connected to their learning aspirations, according to research investigating theories of learning motivation. According to the idea of ECT and fairness, there are a number of elements that impact students' intents to participate in online learning. These aspects include students' perceptions of their own worth, the value they place on their accomplishments, the fairness of their interpersonal communication, and the justice of their interactions.

Review of Literature

- An individual's motivation and enthusiasm for school, known as student engagement, has a substantial influence on academic performance and behavior. Participation in online social interactions significantly increased both students' enjoyment and their academic achievement, according to the research. According to Cidral et al. (2018), students who focus on the social component are more inclined to use online communication tools and form deeper relationships with their peers.
- Affixing concepts such as "education" and "digital learning," In their 2019 study, Rodrigues et al. combed through 99 academic papers published between 2010 and 2018. Using qualitative methodologies, they conducted a text analysis to comprehensively review a variety of publications. Students' actions, educational systems, learning

topics, and technology for online education were the four main takeaways from the facts. The use of e-learning, whether in or out of the classroom, has the potential to be a successful teaching tool and learning environment, according to research. Recognizing how this condition affects kids' grades is crucial.

- The mental effects of pupils' usage of digital media are investigated by Subrahmanyam and Greenfield (2020). Warning that spending too much time in front of a screen may cause problems with deep learning due to cognitive strain, decreased attention span, and multitasking. Although digital technologies have many benefits for learning, their research shows that if not used properly, they may cause distraction, impaired focus, and even academic failure. By highlighting the significance of digital discipline and conscious technology usage among college students, this offers a critical contrast to the literature.

Conclusion

It is crucial to remove obstacles that hinder students from actively engaging in online learning if it is to realize its maximum potential in improving academic attainment. The development of methods that might enhance the social and interactive aspects of online learning, as well as its long-term effects on student engagement and performance, should be the primary goals of future research. Future research should do this. By altering students' social behaviors, identities, and relationship frameworks inside educational communities, digital education has changed their social norms and identities, according to the sociological aspects. The use of online learning platforms is evidence of this. When we increase our social presence and include cooperative interdependence, our peer status changes from dominant to collaborative. There is a chance that online classrooms might cause a sea change in the way people learn. Although they have many positive effects on improving learning experiences and results, they also bring significant challenges that must be carefully considered and addressed. Because of the importance of giving them significant thought, this step is essential. By resolving these issues and using these opportunities, we can create digital learning spaces that are more fair, efficient, and inclusive for all students. Digital learning causes significant changes in the social, psychological, and communicative dynamics of students. The use of collaborative tools and interactive technology in online learning, on the other hand, opens up the possibility of more engaging and tailored learning experiences for each individual. On top of that, it provides students with opportunities to enhance their digital literacy, think creatively, and adapt to new situations as they study. In this way, digital learning tools are defining what it means to succeed in school in the future, not just supplemental help.

Implication

Concerning the implementation of education, the results of the study have important implications. Teachers should seriously consider incorporating more digital resources into their classrooms because of the potential positive effects on students' communication skills, comprehension of difficult concepts, and problem-solving abilities. However, a more comprehensive strategy that incorporates both digital and physical activities is necessary since the digital group reported lower levels of overall activity.

References

1. Ali, W. (2020). Online and remote learning in higher education institutes. *Educational Research International*, 2020, 1–10.
2. Clark, R. (2019). *Digital Pedagogy in Higher Education*. Sage Publications
3. Cidral, W. A., Oliveira, T., Di Felice, M., & Aparicio, M. (2018). E-learning success determinants: Brazilian empirical study. *Computers & Education*, 122, 273–290.
4. Mayer, R. E. (2020). *Multimedia Learning* (3rd ed.). Springer
5. Rodrigues, H., Almeida, F., Figueiredo, V., & Lopes, S. L. (2019). Tracking e-learning through published papers: A systematic review. *Computers & Education*, 136, 87–98.
6. Sarfraz, M., Shah, S. G. M., Ivascu, L., and Qureshi, M. A. A. (2020). Explicating the impact of hierarchical CEO succession on small-medium enterprises' performance and cash holdings. *Int. J. Financ. Econ.* 2020:2289.
7. Subrahmanyam, K., & Šmahel, D. (2020). *Digital Youth: The Role of Media in Development*. Springer.