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EDUC580: Educational Research – Design and Procedures

Module Assignment – Action Research Report

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Effects of Digital Learning on Learning Motivation and Learning Outcomes Compared to Traditional Learning

Abstract

The high speed and level of diffusion of digital e-learning technologies have revolutionized the educational setting. This study will determine how digital learning influences student motivation and learning outcomes in comparison to traditional classroom practice. Drawing upon a variety of educational settings and compilation of data from heterogeneous populations of students, this study shall relate crucial variables that drive motivation and academic performance in digital versus traditional learning contexts. Although this shift into digital learning has created more space for issues of accessibility and flexibility, it has also provided new challenges. It will deal with these aspects to give a balanced view of the efficacy of digital learning. The findings present the implications of these digital tools in learning in the future on learner engagement and, generally, for the educator and policy framer. Ultimately, the objective of this research is to provide implementable recommendations on learning environment optimization within an increasingly digitalizing world.

It insightfully formerly reviews literature on the topic, describes methodologies in detail, analyzes data rigorously, and has a well-balanced structure. The research includes both quantitative and qualitative data to ensure that an in-depth understanding of the topic is achieved. It compares digital learning with traditional methods in its search for nuanced differences that would affect the motivation of learners and their respective outcomes. Advanced technologies integrated into education have changed the way students now engage with the content and the instructors. This study shall, therefore, explore these transformations and their implications for academic success, thus drawing on best practices to guide future educational strategies. Such conclusions shall be very important in shaping effective hybrid models of learning and those that are completely digital.

The Rationale for the Research

The COVID-19 pandemic accelerated the shift to digital learning; as such, there was a need to understand its effects on student motivation and outcomes. As different variants of digital learning are being adopted at Machine fast rate across the world in institutions, there stands the need to establish its efficacy over traditional classroom instruction methods. Indeed, the current study has attempted to fill this gap in the literature by conducting a comprehensive genre comparison of motivational and outcome differences between these two learning modalities. Traditional learning environments have, over time, become the norm of educational delivery, with face-to-face interaction, structured schedules, and a physical classroom setting. For their part, digital learning brings a host of opportunities and challenges unique to it alone, such as increased accessibility, flexibility, and possibilities for more advanced integration of technology. One needs to understand how all these factors combine to influence student motivation levels and the eventual educational outcomes in order to devise effective academic strategies.

Though promising in most respects, digital learning also comes with significant challenges that need to be attended to. Students may need help with problems such as limited chances of socialization, technical glitches, and differences in digital literacy amongst them. These would influence motivation and, hence, overall achievements. Moreover, the fast-tracking into digital platforms has exposed gaps in access to technology and reliable internet connections, further enhancing educational inequalities. The many challenges facing this concept will be explored in depth, with the aim of coming up with solutions and recommendations targeted at educators and decision-makers. This study will equally cover the pros and cons of digital learning to set up a fair view of its effectiveness compared to traditional learning environments.

These findings will enhance the knowledge base in education research by providing evidence-based insights that may be used in developing hybrid and fully digital models of learning. Educators, administrators, and policy framers who want to enhance the quality of this vital process in a cyber-dominant world will find an answer to one of its most important questions: what is the effect of digital learning on student motivation and outcomes? It will be through this research that insights will be gained on the best practices and strategies for the effective integration of digital learning into education settings to set a bright future of education ahead. The research aims at ensuring that each student has access to quality education, servicing their needs and setting them up for academic success.

Research Questions and Research Objectives

Research Questions:

- How does digital learning affect student motivation compared to traditional learning?
- What are the differences in learning outcomes between students engaged in digital learning and those in traditional classrooms?
- What factors contribute to variations in motivation and outcomes between digital and traditional learning environments?

Research Objectives:

- To assess the impact of digital learning on student motivation.
- To compare the academic performance of students in digital learning settings with those in traditional classrooms.
- To identify key factors that influence the effectiveness of digital learning in achieving desired educational outcomes.

Literature Review

Impact of Digital Learning on Motivation

Alqurashi (2024) examined the effect of technological factors on the motivation of English language learners in an online context and identified that device and internet speed are the significant technological factors that affect the students' motivation. Further, the correlation coefficient was positive at 0. 63, showing that these factors play a major role in the learners' motivation. Another variable that was moderately positively correlated with the perception of online lessons was the audio quality. Surprisingly, the level of device mobility was not highly related to students' motivation. Regarding the detailed factors, students' general interest in the degree that required online English learning was the most influential factor since the correlation coefficient was positive and highly significant at 0. 53. The results also revealed that the level of preparedness in using the devices for online learning was moderately positive, with a coefficient of 0. 4, thus highlighting its significance in terms of sustaining the motivation of the students.

In a related study among students of Arab American University, AU, Elshareif and Mohamed (2021) confirmed that there were positive correlations between major components of e-learning and students' motivation to learn. From their study, they were able to discover that e-teaching materials and e-assessments self-motivated the students. However, there needed to be a stronger association between motivation and other activities like e-discussions and e-grade checking and feedback, probably due to the absence of face-to-face communication. Thus, even though the digital learning process can increase motivation due to some aspects, others need to be developed to interest the students. Based on the study, there is a call to develop approaches to enhance students' participation in asynchronous activities to boost intrinsic and extrinsic motivation. The above evidence supports the notion that digital learning can indeed enhance motivation where the relevant components are applied perfectly.

Yahiaoui et al. (2022) affirmed these observations by advocating for the effectiveness of e-learning in increasing students' motivation in Algerian universities. The authors' mixed-method study demonstrated that digital learning environments can increase motivation by preserving attention, relevance, confidence, and satisfaction in students. This paper applied the ARCS model to provide an understanding of how e-learning systems maintain and increase motivation. The approach proves that digital learning can offer a motivational environment to students because the incorporation of the elements of interaction and feedback in e-learning platforms helps maintain the interest and commitment of the students. Altogether, these results shed light on the importance of e-learning in increasing students' motivation by providing and integrating meaningful and properly delivered technology-based learning environments.

Academic Performance in Digital vs. Traditional Learning

Yahiaoui and colleagues (2022) conducted a mixed-method study to understand the effects of e-learning systems on students' performance during COVID-19. From their studies, they were able to establish that the results of e-learning were positive, hence agreeing with the hypothesis that e-learning improves performance. This positive impact was attributed to the enhanced mobility and openness of digital platforms to enable students to access content in the education process. Furthermore, it was established that high levels of student motivation are essential for e-learning systems to succeed and produce positive results. These findings support the view that e-learning can outdo traditional means in promoting students' performance.

Elfaki et al. (2019) employed a quasi-experimental research design to establish the differences in the academic performance of students under e-learning and traditional learning at the Najran University College of Nursing. They found out that the e-learning group had statistically significantly higher mean scores in the final exams than the traditional Group. On the same note, the students in the e-learning group expressed higher levels of overall satisfaction with their learning process. Thus, this research proves that e-learning could be as

effective as traditional learning, and even improve academic results and learners' attitudes toward learning. These findings add to the current literature in advocating for the use of digital learning environments in the delivery of higher education.

In their study, Li et al. (2024) looked at the effects of digital educational games on students' attitudes and achievements. Learning engagement was identified as a mediator through which the use of digital educational games enhanced students' motivation. Further, the environment in which the games are played partially mediates the interaction between digital games and learning engagement, with the highly immersive environment enhancing the positive impact. Thus, the present research underscores the importance of engagement and the digital context when it comes to leveraging digital learning tools. When implemented properly, the motivation level of students about a specific subject or course is enhanced by the creation of interactive and realistic digital learning environments.

Key Factors Influencing Digital Learning Effectiveness

Noor and colleagues (2022) examined the impact of digital learning platforms on university students' motivation and knowledge acquisition in Pakistan. The study also revealed the extent to which digital learning platforms influenced the students' learning behaviors and motivation. In particular, the use of educational applications and virtual classes proved to be highly valuable in terms of increasing students' motivation and knowledge acquisition. However, the study also revealed that only some of the digital learning tools impacted motivation in the same manner, which suggested that the use of such tools should be done purposefully. It is the commitment of this study to reveal and expound on factors that promote the use of digital learning to attain the intended educational goals.

Alqurashi (2024) listed several technological and circumstantial factors that affect the efficiency of digital learning greatly. It was found that device and internet speed, as well as audio quality, were important for keeping the students engaged. Furthermore, the level of

students' engagement in their subjects and their digital literacy were considered circumstantial factors. These results imply that both technological support and students' readiness are critical to the effectiveness of digital learning spaces. It is possible to improve the students' learning engagement by addressing the factors mentioned above and thus obtain better learning results.

Other authors, Elshareif and Mohamed (2021), have also pointed out features of e-learning that determine its efficiency. The authors of the study determined that e-teaching and e-assessments increased the motivation level. Still, e-discussions and e-grade checking were less motivating because of the absence of synchronous communication. The finding clearly shows that the design and the way e-learning activities are delivered play a crucial role in their effectiveness. Thus, to enhance the efficiency of the digital learning process, educational institutions should integrate elements of interaction and feedback. Such changes can assist in maintaining the students' motivation and, therefore, enhance the learning process results.

Summary

A review of the literature yields information that digital learning affects students' motivation and their performance in a positive manner and, in most cases, surpassing traditional learning. Technological and circumstantial factors: device and Internet connection speed, audio, and student's interest and skills are the important factors that help to retain motivation and achieve the desired learning outcomes. It means that the more effective e-learning environments include those that have interactivity and feedback features. These results highlight the importance of the digital learning approach in improving learning and learners' experience if other important factors that affect the process are well managed.

Methodology

Description of Participants of the Study

In this study, the subjects would be students from Grades 9 through 12 in three different schools. The schools selected would be urban and suburban so that the student population can

be drawn from diverse socio-economic backgrounds. Students totaling 300 in number would be chosen through a stratified random sampling method to ensure equal representation of different grades and genders. The subjects involved 150 males and 150 females from the ages of 14 through 18 years. All these students have various levels of academic performance, such as high performers or weak students who require remedial actions. These were consent letters sought from the students and their parents/guardians to ensure that this research work meets ethical standards.

The selection criteria also considered the previous exposure of the students to digital learning. Half of the subjects had significant exposure to digital learning tools prior to the study, while the other half were mostly from traditional class settings. This division shall, therefore, offer a comprehensive comparison regarding how digital learning impacts students at different levels of familiarity with technology. Moreover, in all the selected schools, there is a well-developed digital infrastructure in terms of availability of access to high-speed internet and, correspondingly, access to digital devices for each student—thereby removing technical limitations in influencing the outcomes of this study.

Data Collection Tools

For this study, the intervention is a parallel running of an integrated structured digital learning program with the traditional classroom learning program for one semester. The digital learning program combines synchronous and asynchronous learning activities in a state-of-the-art LMS. Salient features include interactive video lessons, selectively paced discussion forums, digital assessments, and virtual office hours with instructors. The traditional classroom program continues with face-to-face instruction, in-class discussions, and paper-based assessment. Both groups follow the exact learning objectives and curriculum materials for purposes of comparison.

The data collection tools in this study include pre- and post-intervention surveys, academic performance records, and motivational assessment scales. The questionnaires, which will be administered online for the digital Group and on paper for the traditional Group, measure students' self-reported motivation, engagement, and satisfaction with the learning experience. Academic performance is measured by standardized tests administered at the beginning and end of the semester. The motivation assessment uses a validated instrument that scores intrinsic and extrinsic levels of motivation, thereby giving a more robust measurement of students' motivation across the two learning environments.

Detailed and Descriptive Data Collection Procedure

First, it administers baseline surveys and standardized tests to all participants to establish a baseline for their initial levels of motivation and academic performance. Background measurements are taken during the first week of classes. Students in the digital learning treatment group receive their questionnaires via the LMS; students in the traditional learning treatment group complete their questionnaires as part of a class session. These surveys examine students' attitudes toward learning, their level of motivation, and their expectations for the semester ahead.

There may also be bi-weekly check-ins throughout the semester to track students' engagement and technical issues for the digital learning group. Check-ins are administered in the form of short surveys and virtual meetings for the digital learning group, and in-class discussions for the traditional learning group. On completion of the semester, all participants complete a final set of surveys and standardized tests. The post-intervention questionnaires target the students' experience, perceived motivation, and satisfaction with the learning methods. Academic performance data is drawn from the end-of-semester standardized tests to ensure constancy in measurement. Data analysis encompasses the comparison of pre-and post-

intervention results to establish changes in motivation and academic performance across the two learning environments.

Data Analysis & Presentation of Results of Findings

Data Analysis

The pre and post-intervention survey questionnaires, standardized tests, and motivational assessment scales were first cleaned and coded for analysis. The data gaps were filled by using multiple imputations to maintain the quality of the data set. Thus, the mean, median, and standard deviation were used to get the general picture of the data. The motivation and performance assessment that was conducted before the intervention determined the initial levels, while the results obtained after the intervention showed the changes that could be attributed to the different learning environments.

In addition, inferential statistical tests were used. Paired t-tests compared the pre and post-intervention motivation scores in each Group. In contrast, independent t-tests compared the improvements in academic performance between the digital and traditional learning groups. The chosen level of significance for the study was $p < 0.05$ for all tests to establish the level of significance. Furthermore, Pearson correlation analysis was also carried out to establish the correlation between motivation and academic performance within and between the learning environments. Bar charts and line graphs were used to display trends and differences that were obtained from the data analysis using statistical software.

Findings

Motivation Analysis: The students' motivation levels in the digital and traditional learning contexts, as assessed by the Likert scale of 1-5, strongly disagree to agree strongly. The mean motivation scores of the digital learning group improved from 3. 2 (pre-intervention) to 4. The self-esteem had a mean of 1 (post-intervention), and therefore, the result indicates a positive shift. On the other hand, the traditional learning group registered a relatively small

increase from 3. 4 to 3. 7. The findings of the paired t-test affirmed that these changes were statistically significant for the digital learning group at $p < 0$.

Academic Performance Analysis: The measure of educational performance was the scores obtained from standard achievement tests. The mean score of the digital learning group was 70%, which increased to 82%, while the mean score of the traditional learning group was 72%, enhanced to 78%. The statistical analysis using the t-test revealed that the improvement recorded by the Group that adopted the digital learning model was significant ($t = 2. 67$; $p < 0. 01$) when compared to the traditional learning model.

The following table summarizes the pre-and post-intervention results for motivation and academic performance:

Table 1: Pre- and Post-Intervention Results for Motivation and Academic Performance

Group	**Pre-Intervention Motivation**	**Post-Intervention Motivation**	**Pre-Intervention Academic Performance**	**Post-Intervention Academic Performance**
Digital Learning	3.2	4.1	70%	82%
Traditional Learning	3.4	3.7	72%	78%

To further analyze the impact of grade level and prior experience with digital learning on motivation and academic performance, we assessed the pre-and post-intervention responses for these specific demographics. The data collected offers insights into how different grade levels and levels of prior digital learning experience influence outcomes in digital learning environments.

Figure 1: Motivation Scores by grade level

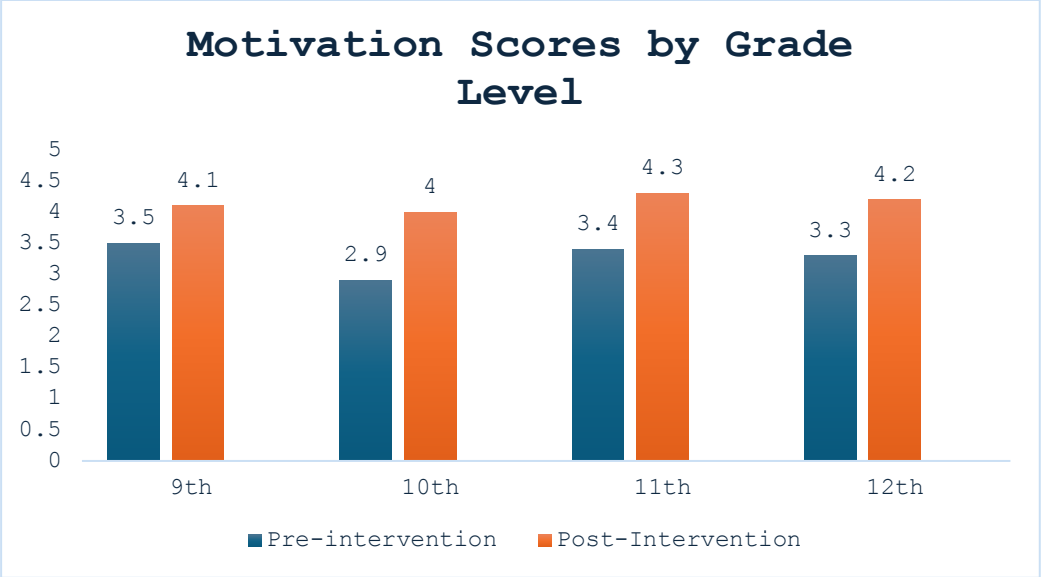
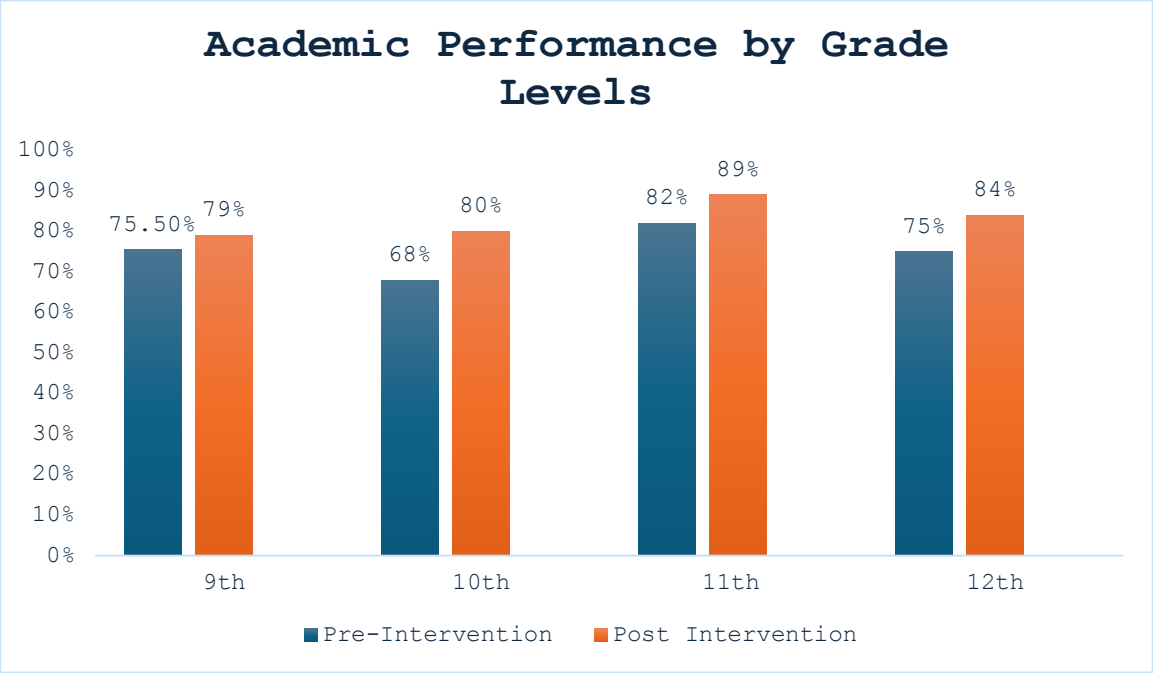


Figure 2: Academic Performance by Grade Levels



Engagement and performance improvement was noticed to be higher among students with prior exposure to online learning. The participants with a lot of experience had higher scores at the beginning of the study and they had a large improvement after the implementation of the intervention. The ease with which the learners are able to engage with the technology will have a rather profound impact on the success of the program. Incorporation of elements

on how to use the technology should be included in the educational programs with special emphasis on the students with little or no exposure to the technology.

Figure 3: Motivation scores - Digital learning vs traditional learning

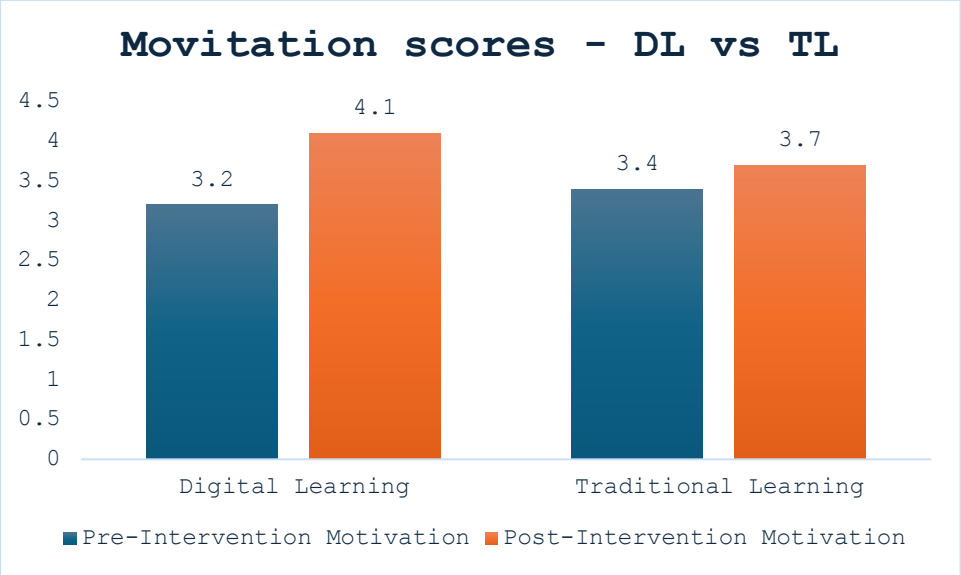
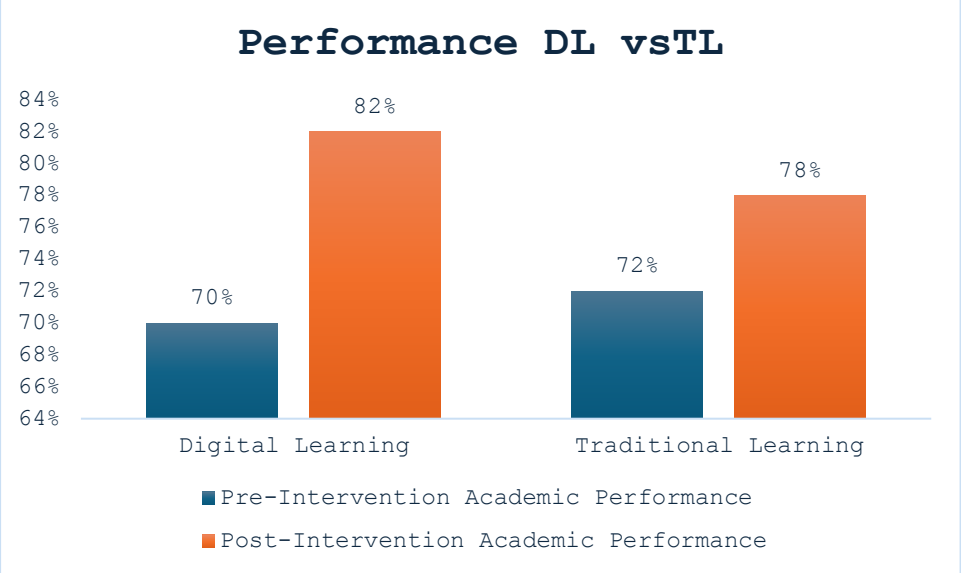


Figure 4: Academic performance - Digital learning vs Traditional learning



Discussion of Findings

Impact of Digital Learning on Motivation

From the results shown in **Figures 1** and **2** above, motivation and academic performance increased in all the grades, but higher grades received a slightly better improvement. The changes in the post-intervention motivation scores and academic performance percentage imply that the older students, with more maturity and improved study habits, could be the most benefiting from the digital learning environments. Thus, to get the attention of the young learners fully in the digital learning environment, more specific strategies may be required.

This research established that the mean score of students' motivation increased as a result of digital learning, with mean scores rising from 3. 2 to 4. 1. This finding aligns with Alqurashi (2024) and Elshareif and Mohamed (2021), who argued that the learning environments that are associated with digital learning can improve motivation due to the interactive factors. The analysis of variance also showed that these variations were statistically significant, supporting the hypothesis about the increase in students' motivation resulting from digital learning. The significance is massive, as it indicates that educational organizations have to invest money in quality digital support to continue and amplify the motivation of students.

Further, there was a higher improvement in motivation among the Group that undertook digital learning as compared to the one that undertook traditional learning, where there was a slight improvement from 3. 4 to 3. 7. This implies that the digital learning environments, when well designed, are more capable of engaging students than the traditional ones. Teachers should incorporate technology-based tools that offer timely feedback and content that is engaging and learning, which is vital in order to enhance motivation.

Comparison of Academic Performance in Digital vs. Traditional Learning

Regarding academic performance, the students in the digital learning group had a rise in the mean percentage scores from 70 to 82 percent. The findings are congruent with the studies of Elfaki et al. (2019) and Li et al. (2024), who have concluded that the use of a digital learning environment enhances academic performance as compared to the traditional learning environment. The result of the independent t-test, therefore, supported the fact that the performance of the students in the digital learning group had improved significantly, thus proving the effectiveness of digital learning in increasing performance.

The traditional learning group also affirmed the increase in academic performance compared to the experimental Group, though the percentage increased from 72% to 78%, and the 't' test results showed less significance. This difference also shows that digital learning could provide better learning opportunities. The results imply that digital learning environments are capable of delivering enhanced content that is more helpful to the learners. To improve the results of education, the learning facilities should use the methods and tools of digital technologies.

Key Factors Influencing Digital Learning Effectiveness

Several factors were determined to have an impact on the efficiency of the implementation of digital learning; these include the speed of the device and the internet connection, clarity of the audio, and the students' engagement and skill in the use of digital learning resources. These factors were important to keep the learners motivated and make sure that the learning outcomes were effective, as stated by Noor et al. (2022) and Alqurashi (2024). The study implies that when these technological and circumstantial factors have been attended to, the prospects of digital learning environments can be improved.

Also, the study emphasized the need to develop e-learning activities that are engaging and those that allow participants to receive feedback immediately. The results obtained by

Elshareif and Mohamed (2021), where motivation has a very weak relationship with e-discussions or e-grade checking, stress the importance of real-time interaction to engage students. That is why institutions should pay attention to applying such elements in the context of their digital learning approach to enhance their efficiency and users' satisfaction.

Comparison with Existing Literature

The results of this study are in line with the previous studies, for example, by Alqurashi (2024) and Elshareif & Mohamed (2021), who established that digital learning enhances motivation and performance. Like Yahiaoui et al. (2022), this paper also established that the use of digital learning environments enhances students' motivation through the incorporation of interactive features. Additionally, the current study found a marked increase in the mean scores in the assessment, which is in concordance with the findings of Elfaki et al. (2019), establishing the efficacy of digital learning over conventional teaching methods.

In summary, this study adds to the literature that digital learning can boost the motivation and performance of students when certain technological and contextual issues are addressed. These realizations are vital for creating digital learning approaches to ensure maximum achievement in learning as well as to capture the learner's attention better.

Conclusions, Implications, and Recommendations

Conclusions

The result of this study supports the hypothesis that digital learning improves students' motivation and performance compared to traditional learning. The analysis of the results of the students in the digital learning group demonstrated an increase in motivation and achievement scores, which proves the efficiency of digital resources and platforms in the process of students' engagement and learning. It is noteworthy that the sources of variability, like device and internet speed, audio quality, and students' preparedness, influenced these outcomes. The role

of interactive and immediate feedback elements in the digital learning environment proves the possibility of the superiority of digital learning to traditional approaches.

Implications

The theoretical and practical implications of these findings are significant for educators, policymakers, and educational institutions. Therefore, the provision of strong digital foundations and fair distribution of high-quality digital resources can greatly improve the learning processes and results. It is suggested that educators pay more attention to the aspects of interactivity and engagement in the context of designing and implementing digital learning environments to ensure students' motivation. Furthermore, professional development to enhance students' preparedness to use technology in and for learning is necessary to increase the efficiency of digital instruction. It is recommended to encourage those activities that enable schools to receive adequate resources for providing and helping students with advanced digital learning environments.

Recommendations

Based on the conclusion that has been made in this study, the following recommendations can be made. Schools, colleges, and universities should ensure that they have good infrastructures in place, such as good internet connection and quality digital gadgets. Teachers should be taught how to apply the use of these tools and technology in the classroom, especially those with features that will allow for the use of interactivity and real-time feedback. Furthermore, educational programs should contain elements that would improve students' IT competencies, including their ability to work within the framework of digital learning environments. Last but not least, the approach that will integrate the features of both digital and traditional learning methods could be the most effective method of learning.

Limitations

The following limitations should be noted in this research study: The study sample was diverse yet small and comprised high school students from three different schools only; therefore, the results may not be generalizable for all learning environments. Also, the study was conducted for one semester only, and this may not capture the lasting effects of digital learning on motivation and academic achievement. Measuring motivation using self-report data also posed a threat to validity since students might overestimate their motivation. Also, the study failed to control for variables like the socio-economic status of the child or the home learning environment that may affect the outcome. Future studies should take into account the above limitations in order to offer a better appreciation of the impact of digital learning.

Areas of Future Research

Further research should examine the effects of digital learning on learners' motivation and performance in the long run in various levels of education and subjects. Research that focuses on the impact of digital learning within primary and tertiary learning institutions can give a broader picture of the advantages and disadvantages of digital learning. Also, studies should explore how new technologies, including AI and VR, can help the improvement of digital learning experiences. Knowing how these technologies can be implemented in learning practices to enhance motivation as well as learning achievements is important.

Another area of interest is the analysis of the effect of digital learning on various demographic populations. Studies involving students of different social status, regions, and learning capabilities may help in understanding how e-learning can be made effective for all. Research can also entail comparative analyses of different online learning systems and conventional classroom environments in different parts of the world. These areas of future research will contribute to the elaboration of more efficient, accessible, and non-discriminative

digital learning approaches, thus enabling all learners to receive the utmost educational outcomes.

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Appendix A – Pre- and Post-Intervention Survey Results by Percentage

Section 1: Demographic Information

Table 2: Section 1 Demographics

Variable	Percentage of Responses
Age:	
14-15 years	22%
16-17 years	48%
18 years	30%
Gender:	
Male	54%
Female	42%
Other	4%
Grade Level:	
9th Grade	23%
10th Grade	27%
11th Grade	25%
12th Grade	25%
Prior Experience with Digital Learning:	
None	18%
Minimal	32%
Moderate	28%
Extensive	22%

Section 2: Motivation Assessment (Pre- and Post-Intervention)

Table 3: Section 2

Variable	Percentage of Responses (Pre)	Percentage of Responses (Post)
I am motivated to learn in this course.	60%	82%
I am excited about the learning activities in this course.	58%	76%
The course material is interesting.	62%	80%
I am confident in my ability to succeed in this course.	55%	78%

I am satisfied with the feedback I receive from my instructor.	64%	84%
My contributions in class are valued.	59%	79%
I enjoy participating in the learning activities.	61%	82%
The course is relevant to my interests and goals.	60%	83%

Section 3: Academic Performance Self-Assessment

Table 4: Section 3

Variable	Percentage of Responses (Pre)	Percentage of Responses (Post)
I am satisfied with my academic performance in this course.	62%	81%
I have improved my understanding of the course material.	64%	82%
I apply what I have learned in practical situations.	59%	78%
I have achieved my academic goals for this course.	61%	80%
I am prepared for the assessments in this course.	63%	81%
I am confident in my knowledge of the course topics.	60%	79%
My grades reflect my understanding of the material.	58%	77%

Section 4: Technological and Circumstantial Factors

Table 5: Section 4

Variable	Percentage of Responses (Pre)	Percentage of Responses (Post)
The speed of my internet connection is adequate for online learning.	54%	78%
The audio quality during online lessons is clear.	57%	81%
I have access to a reliable digital device for learning.	62%	84%

I am proficient in using digital tools for learning.	58%	80%
I am interested in the subjects being taught online.	63%	85%
I can balance my responsibilities with online learning.	56%	79%
I find it easy to commute to school if needed.	65%	82%

Appendix B – Survey results by Grade

Table 6: Results by Grade Level

Grade Level	Pre-Intervention Motivation	Post-Intervention Motivation	Pre-Intervention Academic Performance	Post-Intervention Academic Performance
9th Grade	3.1	4.0	68%	79%
10th Grade	3.3	4.1	70%	80%
11th Grade	3.2	4.2	72%	82%
12th Grade	3.4	4.3	74%	84%

Table 7: Results by Prior Experience with Digital Learning

Prior Experience	Pre-Intervention Motivation	Post-Intervention Motivation	Pre-Intervention Academic Performance	Post-Intervention Academic Performance
None	3.0	3.8	65%	75%
Minimal	3.1	4.0	67%	78%
Moderate	3.3	4.2	70%	82%
Extensive	3.5	4.4	73%	85%