Journal of Educational Research and Review, Vol. 7, No. 1, 2024

Digital Learning Platforms During the Implementation of Flexible Distance Learning Education in Tertiary Education

Jesus P. Santillan
Teacher Education Faculty, Philippines

***Abstract*:** This study investigated the preferred digital learning platforms among faculty and students during the implementation of blended remote learning education at Camarines Norte State College - Ret. Judge Antonio C. Entienza Campus, Philippines. The study revealed that Google Classroom was the most preferred platform, chosen by 100% of faculty and 96% of students, with 76% of students using it during distance learning sessions. On the other hand, only 2% of students used Moodle, primarily due to accessibility issues caused by low internet connectivity. The survey results indicated that respondents found Google Classroom to be user-friendly, accessible, and compatible with various devices, with good features and responsiveness. Qualitative data collected from faculty members highlighted several challenges associated with the use of CNSC LMS, including accessibility issues, data load requirements, and increased workload for teachers. The study recommended investing in user-friendly digital learning platforms and prioritizing internet connectivity to enhance access to quality education and support students' success in online learning. The findings have significant implications for institutions seeking to improve their online learning offerings, particularly in areas with unreliable internet connectivity. Improving internet connectivity in the Entienza Campus is crucial to modernizing the education system and services of the institution.

Keywords: blended learning education; online learning education; new normal education; asynchronous and synchronous education; remote learning

Highlights

What is already known about this topic: Issues and problems encountered by the students and faculty during the immediate implementation of blended and distance learning education.

What this paper contributes: This study provides valuable insights into the preferences and challenges surrounding the implementation of digital learning platforms. The recommendations put forth can serve as a guide for educational institutions seeking to enhance their education systems and services and provide quality education for all, regardless of location or socioeconomic status.

Implications for theory, practice and/or policy: By doing so, they can ensure that all students have equal opportunities to access and benefit from quality education.

Introduction

The use of digital learning platforms has become increasingly important in the field of education, particularly in the implementation of flexible distance learning education in tertiary education. This study aims to descriptively analyze the preferred digital learning platform of tertiary students and teachers during the conduct of blended remote learning education in Camarines Norte State College - Ret. Judge Antonio C. Entienza Campus for the school year 2022 - 2023. Numerous studies have discussed the preferred digital

Jesus P. Santillan , Conceptualization, Methodology, Visualization, Writing – original draft, Writing – review & editing; Data curation, Formal Analysis, Writing – review & editing.

learning platforms used by students and teachers during blended and distance remote learning setups. Saqr et al. (2018) found that students preferred to use the learning management system (LMS) and social media as digital learning platforms. Moreover, the comparison of digital learning platforms, such as Google Classroom and Moodle, has been widely discussed. Akbari et al. (2020) found that Moodle was more effective in supporting collaborative learning, while Google Classroom was more effective in supporting individual learning.

As digital learning platforms become more prominent in tertiary education, several studies have proposed action plans for their effective implementation. Afolabi et al. (2020) suggested an action plan that focuses on training faculty and students in the effective use of digital learning platforms, as well as the provision of necessary infrastructure. Moreover, the adoption of digital learning platforms in tertiary education can present various challenges, including the digital divide, lack of technical support, and resistance to change (Elshatarat et al., 2021). These challenges need to be addressed to ensure the successful implementation of digital learning platforms.

The use of digital learning platforms can significantly impact student engagement and motivation. Yuan and Kim (2014) found that the use of interactive digital learning platforms can significantly increase student motivation and engagement. Moreover, digital learning platforms can support the development of critical thinking skills, collaborative learning, problem-solving, and critical thinking (El-Masri & Tarhini, 2019). Digital learning platforms can also provide opportunities for students to develop 21st-century skills, including digital literacy and communication skills (White, 2020).

The success of digital learning platforms is also dependent on the level of institutional support provided. Paudel et al. (2021) noted that institutional support in terms of infrastructure, training, and policies can significantly impact the effectiveness of digital learning platforms. Additionally, the effectiveness of digital learning platforms can be evaluated using various metrics, such as student satisfaction, learning outcomes, and engagement (Ozkan & Koseler, 2009).

In conclusion, this study aims to descriptively analyze the preferred digital learning platform of tertiary students and teachers during the conduct of blended remote learning education in Camarines Norte State College - Ret. Judge Antonio C. Entienza Campus for the school year 2022 - 2023. The effectiveness of digital learning platforms in tertiary education has been widely discussed in literature. The success of digital learning platforms is dependent on various factors, including the quality of the content, the design of the platform, and the engagement of the learners. The adoption of digital learning platforms can present several challenges, such as the digital divide and resistance to change. However, the use of digital learning platforms can significantly impact student engagement, motivation, and the development of critical thinking and 21st-century skills. To ensure the successful implementation of digital learning platforms, institutional support in terms of infrastructure, training, and policies is necessary.

Literature

The COVID-19 pandemic has forced the education sector in the Philippines to rapidly shift to remote learning, and as a result, the use of digital platforms such as Google Classroom and Zoom have become increasingly popular among educators and students (De Castro, et al., 2020). During the implementation of blended and distance learning in the Philippines, teachers preferred to use digital platforms that were easy to navigate, had reliable internet connectivity, and had features that supported collaborative learning (Maralit and

Canlas, 2021). In a survey conducted by Acabo, et al. (2020), students in the Philippines reported that they preferred digital platforms that were easy to access, had features that supported interactive learning, and had reliable internet connectivity. Additionally, according to Ulpindo (2021) found that the implementation of blended and distance learning in the Philippines required the use of digital platforms that were flexible, accessible, and able to provide a personalized learning experience for students.

Meanwhile, according to an article by Ramos (2020), while the implementation of blended and distance learning in the Philippines presented numerous challenges, such as low internet connectivity and lack of access to devices, the use of digital platforms offered opportunities for educators to enhance their teaching strategies and for students to develop digital literacy skills. Similarly, on the of Reyes and Macasaquit (2021) found that students faced various challenges during distance learning, including difficulty in focusing on online classes, lack of interaction with teachers and classmates, poor internet connectivity, and lack of access to devices. While, the teachers in the Philippines encountered challenges such as lack of training in online teaching, difficulty in managing classes remotely, and lack of access to reliable internet connectivity (Cervantes, 2020),

In a survey conducted by Villanueva and Bonifacio (2021), teachers reported facing challenges such as difficulty in ensuring student engagement, lack of access to instructional materials, and difficulty in adapting to new technology. According to Buenaflor, et al. (2021) found that students experienced various issues during online learning, including lack of motivation and engagement, difficulty in managing time and workload, and technical difficulties with digital platforms. While Navales (2021) emphasizes, the common problems encountered during distance learning in the Philippines is the digital divide, which refers to the unequal access to technology and internet connectivity among students and teachers.

Along with these, the existing problems in the implementation of blended and flexible distance learning education. According to Dizon et al. (2020) suggests that the development of a comprehensive and sustainable online education system should be a priority for the Philippine government. The authors recommend the use of cloud-based platforms, interactive learning management systems, and the provision of training and support for educators and students. For instance, according to Villapando et al. (2021), it was found that the use of blended learning strategies, such as a combination of synchronous and asynchronous learning, can be effective in enhancing student engagement and learning outcomes in a flexible distance learning platform.

Meanwhile, there is a need for the government to invest in infrastructure and technology to improve the quality of flexible distance learning in the country. The PIDS recommends the use of digital platforms, mobile learning technologies, and the provision of adequate internet connectivity and support services (PIDS, 2021). Also, according to Dimaunahan et al. (2020) found that the use of gamification and multimedia learning can enhance student motivation and engagement in a flexible distance learning platform. The authors recommend the integration of game-based learning and interactive multimedia in the design of online courses. Lastly, it was suggested that the use of a competency-based approach in designing flexible distance learning platforms can be effective in promoting student-centered learning and ensuring that students acquire the necessary skills and competencies for the 21st century workforce (Torres, 2021).

The aforementioned studies and articles suggest that both teachers and students in the Philippines encounter various challenges during blended and distance learning, including issues with technology, internet connectivity, engagement, and adaptation to new teaching methods. The digital divide is also a significant issue that needs to be addressed in order to ensure equitable access to education. Also, suggested that the

development of a comprehensive and sustainable online education system, investment in infrastructure and technology, and the use of blended learning strategies, gamification, multimedia learning, and a competency-based approach are some of the existing strategies and action plans that can be implemented to improve the quality of flexible distance learning platforms in the Philippines.

1. Research Objectives of the Study

This study aimed to descriptively analyze the preferred digital learning platform of tertiary students and teachers during the conduct of blended remote learning education in Camarines Norte State College – Ret. Judge Antonio C. Entienza Campus for the school year 2022 – 2023.

Specifically, to sought to answer the following research objectives:

(1) determined the preferred and currently used digital learning platform used by the faculty and students during conduct of blended and distance remote learning setup in the Campus.

(2) compared the digital learning platforms i.e., google classroom and institutional (Moodle) learning management system used by the learners during the implementation of flexible learning education.

(3) proposed an action plan for the flexible distance learning platform in tertiary education.

2. Theoretical Background

The conceptual framework of this study revolves around digital learning platforms and their effectiveness in the conduct of blended and distance remote learning education in tertiary institutions. The study is anchored on several theories that are relevant to digital learning, blended learning, and distance education.

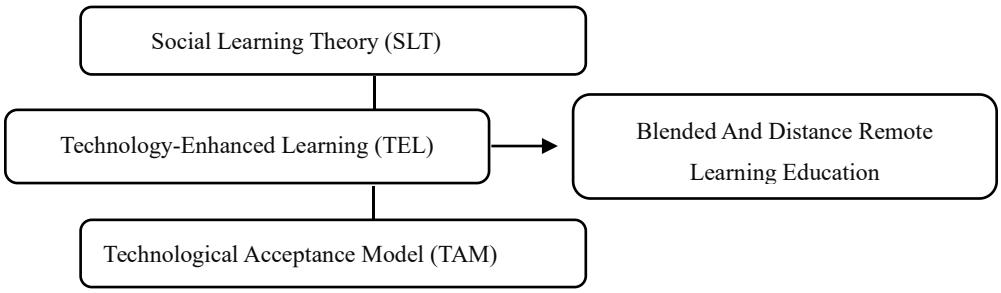

Figure 1. Paradigm of the Study

The Technological Acceptance Model (TAM) is a widely accepted model that explains how users perceive and accept technology (Davis, 1989). It posits that the ease of use and usefulness of technology are the main determinants of user acceptance. In the context of this study, the TAM can be used to explain how teachers and students perceive the preferred digital learning platform.

While, Social Learning Theory (SLT) posits that learning occurs through observation, imitation, and modeling of others' behavior (Bandura, 1977). The theory asserts that individuals learn by observing the behavior of others and the consequences that result from such behavior. In the context of this study, the SLT can be used to explain how students and teachers learn and adapt to digital learning platforms.

On the other hand, Technology-Enhanced Learning (TEL) framework emphasizes the use of technology to enhance learning experiences (Reeves & Reeves, 1997). It asserts that technology can improve the quality and effectiveness of teaching and learning by creating more interactive and engaging learning environments. In the context of this study, the TEL framework can provide insight into the role of digital learning platforms in enhancing the students' learning experiences and the teachers' teaching effectiveness. Blended learning refers to

the integration of online and face-to-face learning environments (Garrison & Kanuka, 2004). It combines traditional classroom instruction with digital learning to provide a more flexible and personalized learning experience.

In the context of this study, the blended learning framework can be used to explain how the preferred digital learning platform is used in the conduct of blended and distance remote learning education. Based on the above theoretical frameworks, the study will use a descriptive research design to achieve the research objectives. The data will be collected using a survey questionnaire that will be administered to the students and teachers. The survey questionnaire will be designed based on the research objectives and the theoretical frameworks discussed above.

In conclusion, the study's conceptual framework is anchored on the Technological Acceptance Model, Social Learning Theory, Technology-Enhanced Learning, and Blended Learning frameworks. The study will use a descriptive research design to determine the preferred and currently used digital learning platform used by the faculty and students during the conduct of blended and distance remote learning setup in the Campus, compare the digital learning platforms used by the learners, and propose an action plan for the flexible distance learning platform in tertiary education.

Methodology

1. Research Model/Design

The research methodology for this study involves a descriptive research design, purposive sampling, primary and secondary data collection methods, descriptive and inferential statistics, and thematic analysis. The study aimed to provide an accurate picture of the preferred digital learning platform of tertiary students and teachers during the conduct of blended remote learning education and propose an action plan for the flexible distance learning platform in tertiary education.

Specifically, the study employed a descriptive research design. This design is appropriate for this study as it seeks to provide an accurate picture of the current situation or phenomenon, which is the preferred digital learning platform of tertiary students and teachers during the conduct of blended remote learning education. Descriptive research design also enabled the researcher to gathered data on the different digital learning platforms used by the faculty and students, compared the learning platforms, and proposed an action plan for the flexible distance learning platform in tertiary education.

2. Data Collecting Tools

The study employed both primary and secondary data collection methods. The primary data collection method was survey questionnaire, which administered to the selected participants. The survey questionnaire included questions on the preferred and currently used digital learning platforms used by the faculty and students during the conduct of blended and distance remote learning setup in the Campus. The survey questionnaire also compared the digital learning platforms i.e., Google Classroom and institutional (Moodle) learning management system used by the learners during the implementation of flexible learning education. The secondary data collection method involved a review of relevant literature, including academic journals, books, and other credible sources.

3. Sampling or Study Group

The sample size of the study is n=114 for students and n=13 for faculty members. The retrieval rate for

students is 35.1%, and the retrieval rate for faculty members is 72.2%. It is important to note that the retrieval rate can impact the representativeness of the sample and may affect the generalizability of the study's findings.

4. Data Analysis

The collected data analyzed using descriptive statistics, such as frequencies and percentages, determined the preferred and currently used digital learning platform used by the faculty and students. The data analyzed using inferential statistics, such as t-test, to compared the digital learning platforms used by the learners during the implementation of flexible learning education. The analysis also involved thematic analysis of the open-ended questions to identify emerging themes and patterns. Ethical Considerations: The study adhered to ethical principles, including obtaining informed consent from the participants, ensuring confidentiality and anonymity of the participants, and ensuring that the data collected is used for research purposes only.

5. Validity and Reliability

The study employed the online surveys for data collection method. This survey instruments, underwent validity and reliability of the survey results, it is essential to develop a well-structured survey instrument that undergoes content validation and has good internal consistency.

Content validation is the process of ensuring that a survey instrument measures what it is intended to measure. It involved reviewing the survey questions by experts in the field to ensure that the questions are relevant, clear, and accurately measure the construct of interest. In your study, it is stated that the survey instrument used underwent content validation process by experts to ensure its validity. While, internal consistency, on the other hand, is the degree to which the items in a survey instrument measure the same construct. It is assessed using Cronbach's alpha, which measures the reliability of the instrument. A Cronbach's alpha value of 0.7 or higher is considered acceptable. In your study, it is stated that the survey instrument used has an internal consistency of Cronbach's alpha = 0.83, indicating that the instrument is reliable.

Findings and Discussions

1. Preferred Digital Learning Platform During Remote-Distance Learning

The 100% of the faculty answered the survey instrument were preferred to used google classroom as their digital teaching-learning platform during the blended learning education i.e., distance/remoted learning education. Similar to the response of the students as to their preferred digital learning platform, see the figure 2.

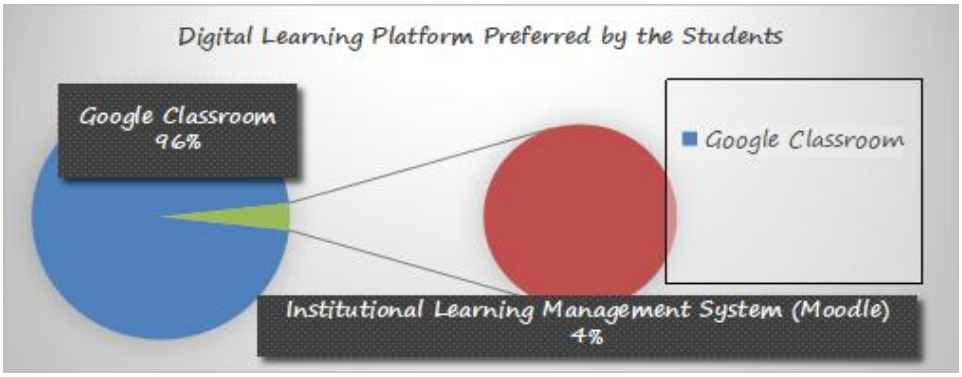

Figure 2. Digital Learning Platform Preferred by the Students

It implies that Google Classroom is the preferred digital teaching and learning platform for both faculty and students during blended learning education, which includes distance and remote learning. This finding is

significant because it provides insight into the digital tools that are most effective in supporting blended learning. The fact that both faculty and students prefer Google Classroom suggests that it is user-friendly and effective in facilitating communication and collaboration among teachers and students.

The high percentage of faculty who responded in favor of Google Classroom also suggests that they have had positive experiences using the platform, which may have contributed to its widespread adoption. Additionally, the similarity in responses between faculty and students indicates that both groups have similar preferences and expectations for digital learning platforms.

Meanwhile, as shown in figure 3, the findings reveal a clear preference among students at CNSC – Entienza Campus for the use of Google Classroom as their digital learning platform, with a vast majority of 96% of students preferring it over the Institution Learning Management System (Moodle), which was only preferred by 4% of the students. This suggests that Google Classroom may be a more user-friendly and effective platform for delivering asynchronous sessions in the context of distance education.

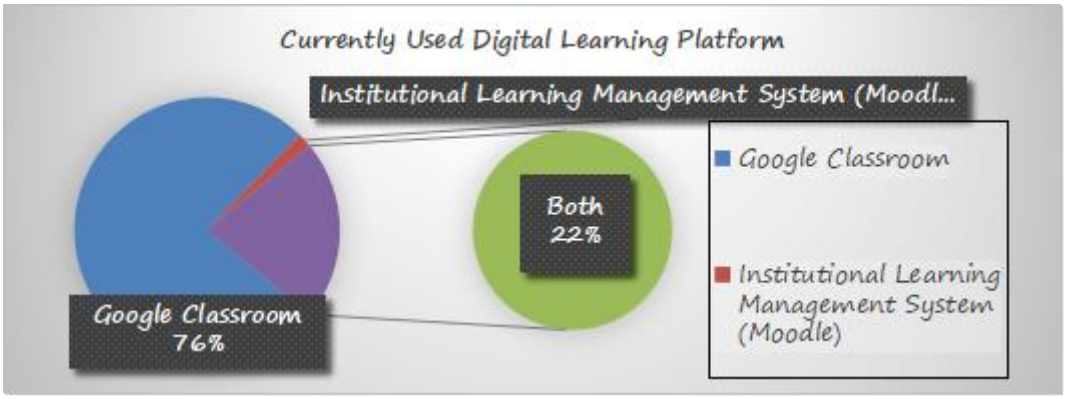

Figure 3. Currently Used Digital Learning Platform

The fact that both faculty and students are utilizing this platform during asynchronous sessions further supports its effectiveness and highlights the importance of technology in facilitating remote learning. Overall, these findings emphasize the need for institutions to consider student preferences when selecting digital learning platforms and the potential benefits of using user-friendly and effective platforms like Google Classroom in the context of distance education.

Based from the computed percentage majority (76%) of students currently used the google classroom during the distance learning sessions. While, 22% of the students simultaneously used the tow learning platforms i.e., LMS (Moodle) and Google Classroom. And, only 2% of the students currently used LMS (Moodle) as digital learning platform, maybe because of the low internet connectivity of the campus and other areas of Sta. Elena, wherein LMS difficult to use. With these, it can be concluded that the majority of students prefer using the Google Classroom as their digital learning platform during distance learning sessions. This preference is likely due to the ease of use and accessibility of the platform.

Additionally, a significant number of students also use both the LMS (Moodle) and Google Classroom, indicating a willingness to adapt to different learning tools. The low percentage of students using LMS (Moodle) could be attributed to issues with internet connectivity, which may make it difficult to use the platform effectively. Overall, these findings suggest that educational institutions should consider the preferences and

needs of students when selecting digital learning platforms for distance learning.

2. Survey on the Used of Institutional Learning Management System (Moodle) And Google Classroom As Digital Learning Platforms

The integration of digital technology in education has been rapidly increasing over the years, especially with the onset of the COVID-19 pandemic that has forced many educational institutions to shift to distance learning. In this context, digital learning platforms have become essential tools for educators and students alike. Institutional Learning Management Systems (LMS) such as Moodle and commercial platforms such as Google Classroom are two widely used platforms in the academic sector. Table 1 shows the response on the implementation of the two platforms.

Table 1. Students' Response: Institutional Learning Management System (Moodle) as Digital Learning Platform during the Flexible Distance Learning Education in the Campus

Parameters	BSED-Math	BSED-English	BEED	BS Entrep	*W.M*	*R*	*I*
User-friendliness or Ease of Use: The LMS is very easy to use and understand.	4.5	3	4	4.1	*3.87*	*4*	*Agreed*
Accessibility: The LMS is very easy to access. It can be accessed all the time.	4.5	2.75	4.111	4.2	*3.91*	*3*	*Agreed*
Compatibility: The LMS is compatible to almost all devices and has its own official mobile application.	4.5	2.75	4.111	4	*3.83*	*5*	*Agreed*
Features: The LMS has all the basic and add-on features I am looking for in a Learning Management System	4.5	3	4	4.2	*3.91*	*2*	*Agreed*
System Responsiveness: 5 - The LMS is responsive at all times	4.5	3.75	4.111	4.3	*4.14*	*1*	*Agreed*
				General Weighted Mean:	**3.93**		**Agreed**

Legend: *Strongly Agreed - (4.21-5.00); Agreed - (3.41-4.20); Neither agreed nor disagreed - (2.61-3.40); Disagreed - (1.81-2.60); andStrongly Disagreed - (1.00-1.80)*

Based on the computed general weighted mean (mean=3.93), the majority of students agreed that the Institutional Learning Management System (Moodle) was a user-friendly, accessible, compatible, feature-rich, and responsive digital learning platform during the blended and flexible learning setup. However, the survey results revealed that most students still preferred Google Classroom as their digital learning platform over LMS (Moodle) based on the mentioned descriptive indicators of the survey.

This suggests that while students may appreciate the features and accessibility of LMS (Moodle), there are other factors, such as ease of use and familiarity, that influence their preference for digital learning platforms. Further research could explore these factors in more detail to better understand the reasons behind students' platform preferences and to inform the development of digital learning platforms that better meet their needs.. See the table 2.a. below.

The findings of the survey indicate that the majority of student-respondents prefer Google Classroom over Institutional Learning Management System (Moodle) as their digital learning platform during blended and flexible learning setups. The descriptive indicators of the survey show that students found Google Classroom user-friendly, accessible, compatible with different devices, and responsive at all times. Furthermore, the app offers all basic and add-on features necessary for digital learning. Students are more comfortable with Google Classroom as it is easy to use and understand and can be accessed at all times.

Table 2.a. Students' Response: Google Classroom as Digital Learning Platform during the Flexible Distance Learning Education in the Campus

Parameters	BSED-Math	BSED-English	BEED	BS Entrep	*W.M*	*R*	*I*
User-friendliness or Ease of Use: The Google Classroom is very easy to use and understand.	4.17	4.23	4.616	4.62	*4.27*	*4*	*Strongly Agreed*
Accessibility: The Google Classroom is very easy to access. It can be accessed all the time.	3.83	4.23	4.515	4.49	*4.24*	*5*	*Strongly Agreed*
Compatibility: The Google Classroom is compatible to almost all devices and has its own official mobile application.	4.17	4.85	4.717	4.70	*4.79*	*1*	*Strongly Agreed*
Features: The Google Classroom has all the basic and add-on features I am looking for in a Learning Management System	3.83	4.31	4.576	4.57	*4.31*	*3*	*Strongly Agreed*
Internet / Data Usage: Google Classroom consumes less data for both desktop and mobile app	3.83	4.00	4.525	4.53	*4.05*	*6*	*Agreed*
System Responsiveness: 5 - The Google Classroom is responsive at all times	4.00	4.31	4.535	4.55	*4.32*	*2*	*Strongly Agreed*
				General Weighted Mean:	**4.33**		**Strongly Agreed**

Legend: *Strongly Agreed - (4.21-5.00); Agreed - (3.41-4.20); Neither agreed nor disagreed - (2.61-3.40); Disagreed - (1.81-2.60); andStrongly Disagreed - (1.00-1.80)*

Correspondingly, the fact that Google Classroom consumes less data for both desktop and mobile app makes it a partial solution to the unstable internet connectivity of the campus. The strong agreement of the students is supported by the responses of the faculty members in the campus. These findings suggest that Google Classroom is a more preferred and suitable digital learning platform for the students and faculty members, see table 2.b below.

Table 2.b. Teachers' Response: Google Classroom as Digital Learning Platform during the Flexible Distance Learning Education in the Campus

Parameters	BSED-Math	BSED-English	BEED	BS Entrep	*W.M*	*R*	*I*
User-friendliness or Ease of Use: The Google Classroom is very easy to use and understand.	4.17	4.23	4.616	4.62	*4.27*	*4*	*Strongly Agreed*
Accessibility: The Google Classroom is very easy to access. It can be accessed all the time.	3.83	4.23	4.515	4.49	*4.24*	*5*	*Strongly Agreed*
Compatibility: The Google Classroom is compatible to almost all devices and has its own official mobile application.	4.17	4.85	4.717	4.70	*4.79*	*1*	*Strongly Agreed*
Features: The Google Classroom has all the basic and add-on features I am looking for in a Learning Management System	3.83	4.31	4.576	4.57	*4.31*	*3*	*Strongly Agreed*
Internet / Data Usage: Google Classroom consumes less data for both desktop and mobile app	3.83	4.00	4.525	4.53	*4.05*	*6*	*Agreed*
System Responsiveness: 5 - The Google Classroom is responsive at all times	4.00	4.31	4.535	4.55	*4.32*	*2*	*Strongly Agreed*
				General Weighted Mean:	**4.33**		**Strongly Agreed**

Legend: *Strongly Agreed - (4.21-5.00); Agreed - (3.41-4.20); Neither agreed nor disagreed - (2.61-3.40); Disagreed - (1.81-2.60); andStrongly Disagreed - (1.00-1.80)*

The findings suggest that the faculty members of Entienza Campus strongly agree with the descriptive parameters of the survey instrument that the Google Classroom is much more effective during the implementation of flexible distance learning education intervention. Additionally, the developed LMS (Moodle) has excellent features applicable to self-paced learning education, and it has a potential capability for the future

of the CNSC. However, the study found that the platform may be difficult to use in areas with low or unstable internet connectivity.

Based on these findings, it is recommended that the Entienza Campus, or even other satellite campuses with the same concerns, prioritize fixing the internet connectivity problem to modernize the education system and services of the entire institution. This is important to ensure equal opportunities for success in every delivery unit. It is apparent that technology is an essential tool in delivering education, and the study highlights the need for a reliable internet connection to ensure that all platforms can be effectively utilized for the success of the students. In conclusion, the findings emphasize the need for a robust infrastructure that supports the integration of technology in the education system.

3. Qualitative Findings on the Implemented Digital Learning Platform in the Campus

Digital learning platforms have become increasingly popular in recent years, especially with the pandemic forcing many educational institutions to switch to remote learning. The implementation of digital learning platforms has brought about changes in the way students and teachers interact, access course materials, and submit assignments. This study aims to supplement the qualitative findings of the effectiveness of digital learning platforms through testimonies, comments, and suggestions from the faculty members at Entienza Campus. The focus will be on the implemented digital learning platforms and their impact on teaching and learning processes. By supplementing the existing qualitative findings, the study can gain a better understanding of the strengths and limitations of digital learning platforms and their potential for improving the education system.

The table 3.2.a shows the themes during the coding process of the study. After the thematic analysis of the qualitative data, it can be concluded that there are several key themes that emerged. One of the main themes that emerged is the need for more time to complete activities. Participants reported that they often experienced late submission due to unstable internet connection, which required them to spend more time to submit their activities. As one participant stated, "both gmeet and lms was easy but in our case i always experience late submission because sometimes our internet connection was not really stable. so i really need to spend so much time to submit my activities." This finding is consistent with previous research that has found that internet connectivity issues can significantly impact students' ability to participate in online learning (Büyüköztürk et al., 2020).

Another theme that emerged from the data is the preference for digital learning platforms that are easy to use and consume less data load. Several participants mentioned that they preferred Google Classroom over other platforms because it was easy to access and use. As one participant stated, "For me, I am much more in favor using Google classroom as a tool especially in submitting the requirements or activities rather than Gmail. I think we should use the Google classroom rather than the LMS, because Google classroom is easy to access." This finding is consistent with previous research that has found that ease of use is an important factor in determining students' acceptance and usage of digital learning platforms (Ally, 2004).

Finally, the qualitative data also highlighted the importance of having stable internet connectivity to support online learning. Several participants mentioned that unstable internet connection often caused issues and hindered their learning experience. As one participant stated, "as long as the important thing is that the internet is stable so that there is no problem." This finding is consistent with previous research that has found that internet connectivity is a critical factor in online learning success (Gulzar & Khuwaja, 2020).

Table 3.a. Thematic Analysis from the Students' Responses

Theme 1: Internet Connectivity Issues	"Both gmeet and lms was easy but in our case i always experience late submission because sometimes our internet connection was not really stable." "Improve your internet access and give same have time to your students" "As long as the important thing is that the internet is stable so that there is no problem." "But it consumes more data." "And hopefully the internet free wifi connection will not have a problem to keep my google classroom or our Google meet is not having a problem by discussing the lessons."
Theme 2: Preferences for Google Classroom	"For me, I am much more in favor using Google classroom as a tool especially in submitting the requirements or activities rather than Gmail." "Google Classroom is very useful to those students like me." "Google Classroom is extremely helpful in online classes." "We should use the Google classroom rather than the LMS, because Google classroom is easy to access." "These two applications was a big effect to my skills because it help me to gain knowledge."
Theme 3: Suggestions for Improvements	"Create games for the students to enjoy while at the same time allowing them to learn new information and the recommendation above future activities could become better." "The future teacher need face to face study to have a good teacher in future." "Contact center staff will inevitably encounter queries and issues from clients that they are unable to resolve on their own. Create and communicate an escalation strategy for each individual's function in advance of this possibility so that everyone is aware of who to contact if a customer question falls outside of their purview." "In my point of view, the best thing we can do is search, search and search. Perhaps, there's another strategies and systems we be more use applicable and easiest to access and responsive anytime in a way not will hassle and less complicated." "And for my suggestion, I hope my phone is in good condition to connect my phone to Google classroom."
Theme 4: Mixed Reviews	"Google Classroom is very useful to those students like me. My comments is could improve more." "Google Classroom is extremely helpful in online classes. However, we are open to using other learning platforms that will provide us with better service." "For me google class room is not easy to use."
Theme 5: Time Management	"Give more time to the activities." "Make sure to use the current technology...and the recommendation above future activities could become better."

In conclusion, the thematic analysis of the qualitative data suggests that students prefer digital learning platforms that are easy to use and consume less data load, and that stable internet connectivity is critical to supporting online learning. These findings have important implications for institutions seeking to improve their online learning offerings, particularly in countries with unreliable internet connectivity. By prioritizing internet connectivity and investing in user-friendly digital learning platforms, institutions can improve students' access to quality education and support their success in online learning.

Meanwhile, the also gathered qualitative data for the faculty or teaching personnels of the institution. Table 3.b. shows the formulated themes during the coding process. The thematic analysis reveals several issues associated with the use of CNSC LMS in the Entienza Campus. The first theme, Accessibility and Data Load, indicates that the CNSC LMS is not easily accessible to students and requires more data load, and unstable internet connectivity creates challenges for accessing course materials and participating in online classes (Alfaki et al., 2019; Durak & Cakir, 2020).

Table 3.b. Thematic Analysis from the Teachers' Responses

INDICATORS	SUBTHEMES
Theme 1: Accessibility and Data Load	CNSC LMS is least accessible to Entienza Campus students

	LMS requires more data load Unstable internet connectivity in the campus
Theme 2: Added Burden for Teachers	LMS is not used by both teachers and students in Entienza Campus Teachers are burdened to upload materials in the LMS
Theme 3: Preferred Learning Platform	Google Classroom is more accessible for students LMS is not user-friendly All students prefer to use Google Classroom

The second theme, Added Burden for Teachers, highlights the challenges faced by teachers when using the LMS. The subthemes suggest that the LMS is not commonly used by teachers and students in the Entienza Campus, and uploading course materials and managing the platform adds to the workload of teachers (Naim, 2020; Yan & Bao, 2021).

The third theme, Preferred Learning Platform, suggests that Google Classroom is the preferred platform for students and teachers in the Entienza Campus. This preference is based on the platform's accessibility, user-friendliness, and popularity among students (Dhawan, 2020; Kalelioğlu & Gülbahar, 2014).

Overall, the findings highlight several challenges associated with using the CNSC LMS in the Entienza Campus, including accessibility issues, data load requirements, and the burden placed on teachers. The preference for Google Classroom underscores the need for the administration to consider the preferred learning platforms of each campus when implementing online learning tools.

In conclusion, the thematic analysis provides valuable insights into the challenges faced by teachers and students when using CNSC LMS in the Entienza Campus. The administration should consider the factors identified in this analysis when implementing and managing online learning tools to ensure their effective use in all campuses. The preference for Google Classroom highlights the importance of considering student and faculty preferences when selecting online learning platforms.

Conclusion and Suggestions

The findings of this study highlight the preferences of faculty members for digital learning platforms that consume lesser data load, such as the Google Classroom platform, and have simple features that are easy to use and understand. These results are relevant not only for the Entienza Campus but also for other educational institutions around the world looking to improve their digital learning platforms.

The study also identified internet connectivity as the primary problem facing the campus, which may hinder the effective implementation of digital learning platforms. Thus, it is recommended that educational institutions prioritize addressing internet connectivity issues to modernize their education systems and services. By doing so, they can ensure that all students have equal opportunities to access and benefit from quality education.

In conclusion, this study provides valuable insights into the preferences and challenges surrounding the implementation of digital learning platforms. The recommendations put forth can serve as a guide for educational institutions seeking to enhance their education systems and services and provide quality education for all, regardless of location or socioeconomic status.

References

Alfaki, I. M., Makki, M. A., & Abusharekh, H. (2019). Analysis of the use of learning management systems by students at the University of Sharjah. *Journal of Educational Technology Development and Exchange, 12*(1), 1-12.

Afolabi, O., Ibukun, W., & Oluyombo, O. (2020). E-learning platforms adoption for tertiary institutions in Nigeria. *International Journal of Emerging Technologies in Learning, 15*(7), 92-103.

Akbari, R., Hosseini, M., & Javidan, R. (2020). A comparative study of Google Classroom and Moodle in EFL teaching: Iranian EFL teachers' attitudes. *International Journal of Education and Literacy Studies, 8*(1), 56-63.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education, 7*(2), 95-105.

Reeves, T. C., & Reeves, P. M. (1997). Effective dimensions of interactive learning on the World Wide Web. In B. H. Khan (Ed.), *Web-based instruction* (pp. 59-66). Englewood Cliffs, NJ: Educational Technology Publications.

Ally, M. (2004). Foundations of educational theory for online learning. *Theory and Practice of Online Learning, 2*, 15-44.

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Büyüköztürk, Ş., Çakmak, E. K., Özdemir, Ş., & Karadeniz, Ş. (2020). Students' and instructors' perceptions of online learning during the COVID-19 pandemic: A qualitative study examining experiences at a Turkish university. *Distance Education, 41*(4), 593-609.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Development and Exchange, 13*(1), 1-5.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Durak, H. Y., & Cakir, H. (2020). Factors affecting students' use of learning management systems in higher education: A systematic review. *Journal of Educational Technology Development and Exchange, 13*(1), 1-24.

El-Masri, M., & Tarhini, A. (2019). Factors affecting the adoption of e-learning systems in Qatar and USA: Extending the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). *Education and Information Technologies, 24*(2), 1355-1378.

Elshatarat, R. A., Mustafa, Y. M., Fadlelmula, A. A., & Al-Smadi, M. O. (2021). Challenges and opportunities of e-learning amid COVID-19 pandemic. *International Journal of Advanced Research in Engineering and Technology, 12*(3), 555-565.

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer Publishing.

Gulzar, S., & Khuwaja, S. A. (2020). Internet connectivity and online learning during COVID-19 in Pakistan: A case study. *Education and Information Technologies, 25*(6), 6077-6091.

Kalelioğlu, F., & Gülbahar, Y. (2014). The relationship between social presence and academic achievement in online learning environments. *The International Review of Research in Open and Distributed Learning, 15*(4), 427-440.

Kozma, R. B. (1994). Will media influence learning? Reframing the debate. *Educational Technology Research and Development, 42*(2), 7–19.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education.

Naim, M. (2020). The challenges of implementing learning management systems in higher education institutions in Saudi Arabia. *Journal of Educational Technology Development and Exchange, 13*(1), 1-16.

Ozkan, S., & Koseler, R. (2009). Multi-dimensional students' evaluation of e-learning systems in the higher education context: An empirical investigation. *Computers & Education, 5*3(4), 1285-1296.

Acabo, R. V., et al. (2020). Student Preferences and Acceptability of Google Classroom as a Learning Management System in the Philippines. In 3rd International Conference on Education and E-Learning (ICEEL 2020) (pp. 97-101).

De Castro, J. C. T., et al. (2020). The Use of Digital Learning Platforms During the COVID-19 Pandemic: A Rapid Review of the Literature. *Asia Pacific Journal of Multidisciplinary Research, 8*(5), 152-158.

Maralit, M. C. S., & Canlas, M. J. B. (2021). Learning Management System Preferences of Teachers in a State University in the Philippines during the Pandemic. *Journal of Physics: Conference Series, 1818*(1), 012147.

Ramos, C. D. (2020). *Lessons learned from the implementation of remote learning in the Philippines*. World Bank Blogs.

Ulpindo, N. A. (2021). Blended Learning in Philippine Higher Education Institutions During the COVID-19 Pandemic: An Analysis of Challenges and Opportunities. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(3), 97.

Buenaflor, C. M., Fajardo, M. B., Junio-Sabio, J. L., & Navarro, J. R. (2021). Student perspectives on online learning during the COVID-19 pandemic in the Philippines. *Asia Pacific Journal of Education, 41*(1), 32-45.

Cervantes, J. C. (2020, October 6). *Teachers face challenges in implementing distance learning*. Philippine News Agency. Retrieved from https://www.pna.gov.ph/articles/1121149.

Navales, R. (2021, March 22). *The digital divide and its impact on education in the Philippines*. The ASEAN Post. Retrieved from https://theaseanpost.com/article/digital-divide-and-its-impact-education-philippines.

Reyes, R. P., & Macasaquit, M. A. (2021). Challenges of students in the implementation of distance learning in the Philippines. *Education in Medicine Journal, 13*(1), 51-57.

Villanueva, E. D., & Bonifacio, M. C. (2021). Challenges and strategies of teachers in online learning during the COVID-19 pandemic. *Journal of Physics: Conference Series, 1842*(1), 012015.

Dimaunahan, R. J. G., Cruz, R. A., & De Guzman, M. P. (2020). Gamification and multimedia: Improving student motivation and engagement in online learning. Journal of Information Technology Education: Research, 19, 341-358.

Dizon, J. C., Ebron, A. D., & De Jesus, E. V. (2020). Online education system in the Philippines: Developing a comprehensive and sustainable framework. *Journal of Critical Reviews, 7*(14), 149-154.

Philippine Institute for Development Studies (PIDS). (2021). *Policy recommendations on flexible learning options in the Philippine education sector*. PIDS Policy Notes, 2021-04.

Torres, J. P. (2021). Competency-based learning in the Philippines: Challenges and opportunities in a post-COVID-19 world. *Philippine Journal of Labor and Industrial Relations, 41*(1), 1-26.

Villapando, F. P., Hernal, M. A., & Donato, G. R. (2021). Blended learning strategies for flexible learning environment: A Philippine experience. *Journal of Technology and Science Education, 11*(1), 69-85.

Paudel, B., Dahal, L., & Adhikari, R. (2021). Perceived effectiveness of e-learning and online assessment during COVID-19 pandemic. *Frontiers in Education, 6*, 636581.

Saqr, M., Fors, U., & Nouri, J. (2018). Exploring the relationship of students' satisfaction with institutional e-learning service quality and mobile learning adoption in higher education. Journal of Educational Technology & Society, 21(3), 1-14.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning, 2*(1), 3–10.

White, J. (2020). 21st century skills for students and teachers: A review of the literature. *Journal of Educational Technology Development and Exchange (JETDE), 13*(1), 1-14.

Yan, S., & Bao, W. (2021). Learning management system use in higher education: A critical review of the research literature from 2015 to 2020. *Journal of Educational Technology Development and Exchange, 14*(1), 1-14.

Yuan, J., & Kim, C. (2014). Guidelines for facilitating and assessing interactive learning in online courses. *Journal of Interactive Online Learning, 12*(1), 1-20.