HERR The Higher Education Research Review Vol 7, No. 1 (2023)
ISSN (Print): 2508-013X | ISSN (Online): 2815-2271

ACCEPTABILITY AND SATISFACTION OF GOOGLE CLASSROOM AMONG HIGHER EDUCATION STUDENTS: EVIDENCE FROM THE COVID-19 PANDEMIC

Jo Ann T. Gerada,
Violeta C. Efondo
Guimaras State University

ABSTRACT The present study aimed to determine students' acceptance and satisfaction with Google Classroom as an online learning management system during the coronavirus disease 2019 pandemic. It focused on determining the acceptance level regarding perceptions of usefulness, ease of use, and accessibility, and the satisfaction level with respect to the quality of interaction, learning process, engagement, and academic support. Descriptive correlational research was used, and 356 respondents were selected via stratified random sampling.
The results showed that acceptability was high (M = 3.99, SD = 0.73) and that satisfaction was also high (M = 3.81, SD = 0.80). Differences were statistically significant for the course but not for age and year level. There was a moderate positive correlation between acceptability and satisfaction ($r = 0.412$, $p < .001$), suggesting that those who view Google Classroom as helpful and user-friendly are more satisfied with the system. This research provides evidence for the validity of the Technology Acceptance Model and underscores the importance of usability and accessibility in determining students' perceptions. Yet, accessibility cannot be overlooked.

Keywords: acceptability, satisfaction, Google Classroom, learning management system, COVID-19

INTRODUCTION

The coronavirus (COVID) outbreak was an unprecedented interruption that forced universities around the world to shift from conventional classroom teaching to online teaching overnight. Such changes have revolutionized the very concept of education, which can no longer occur without the aid of digital media. Without physical classrooms, reliance on LMSs has become indispensable, making them the foundation of the entire process. LMS became not only a place to store learning materials but also an interaction tool that facilitated the exchange of ideas and student evaluation. Among the various LMS, Google Classroom has become one of the most popular platforms for education.

Analyzing students' perceptions of digital learning systems is crucial given their rapid and widespread adoption, and particular emphasis must be placed on acceptance and satisfaction. The term "acceptance" describes a user's level of usefulness perception, as well as perceptions of the system's ease of use and accessibility, whereas "satisfaction" is broader, encompassing students' experiences using the platform to learn, engage, and interact. Both concepts play an important role in evaluating the efficiency of LMS platforms, particularly in emergency remote learning, when students must use such technologies under duress. Unlike regular online learning programs, this approach does not allow enough time for preparation.

Google Classroom has been widely recognized for its ability to support flexible, collaborative learning environments. The platform allows students to access course materials, submit assignments, receive feedback, and communicate with instructors in a centralized digital space. Integration with popular software such as Google Docs, Google Drive, and Google Meet enhances its usefulness and makes it easier to handle academic assignments. The use of these platforms may increase student engagement and participation in learning processes (Albashtawi & Bataineh, 2020; Setiawan et al., 2021). This allows for better organization, making this tool extremely beneficial for online learning and helping students learn to handle things on their own.

In addition to helping students complete their assigned tasks, Google Classroom supports self-regulation and the development of ICT skills. It helps students manage time effectively by requiring them to be proactive and complete their tasks independently, without constant instructor supervision. However, the success of these aspects depends on whether students accept the software. Students who consider the software complicated and irrelevant to their learning needs would find it challenging to engage with it. Therefore, it is essential to understand the determinants of acceptance.

The Technology Acceptance Model (TAM) provides a well-tested theoretical basis for analyzing the adoption of digital technology by individuals. In particular, according to TAM, usefulness and ease of use are the major predictors of individuals' attitudes towards adopting the technology (Jakkaew & Hemrungrote, 2017). Usefulness refers to whether a person believes that using the system will increase their efficiency, while ease of use suggests that using the system does not require effort. In relation to the LMS, the two variables are students' adoption of the platform and their attitudes toward using it. Thus, when the students find Google Classroom both useful and easy to use, they develop a favorable attitude toward it and start using it actively.

Even though acceptability is a key determinant of LMS uptake, it is also critical to consider satisfaction when assessing LMS effectiveness. The term' satisfaction' refers to the extent to which the learners appreciate their experience with the use of the system. For instance, Heggart and Yoo (2018) suggested that LMS platforms should be supplemented with effective pedagogical methods to ensure learners are satisfied with the system. Therefore, there is a clear link between technology and pedagogy in the context of using the LMS.

Furthermore, satisfaction is closely associated with student engagement and persistence in online learning environments. Students who are satisfied with an LMS are more likely to participate actively in learning activities, complete assignments, and interact with instructors and peers. Conversely, dissatisfaction may lead to disengagement, reduced motivation, and lower academic performance. This underscores the importance of examining satisfaction as a multidimensional construct that encompasses both technological and instructional factors.

Despite numerous research articles on LMS acceptance, there is still a need to examine acceptance and satisfaction in tandem, especially in higher education institutions amid the current Coronavirus pandemic. Past research articles tended to investigate these two concepts independently, focusing either on technology acceptance or on user satisfaction. Nonetheless, these two concepts tend to be closely associated, whereby student acceptance of the system may lead to user satisfaction, and user satisfaction may lead to technology acceptance.

Another important aspect to consider is how students' perceptions vary across certain demographics and other academic features. Features such as age, year level, and course of study may affect students' familiarity with technologies and their learning. For example, students who take courses related to technologies may find online courses easier to follow than students who have to deal with practical tasks.
Apart from personal attributes, external factors such as internet connectivity, device availability, and technical support also affect how students experience Google Classroom. Even though Google Classroom is meant to be user-friendly, external factors also influence its effectiveness. Students who lack access to the internet and other technological means may find it hard to engage in e-learning activities on this platform. Such problems may hinder not only acceptance but also satisfaction, as users may view it as ineffective in some respects.

The relationship between the features of technology and context shows the necessity to analyze the effectiveness of the LMS platform from the perspective of the larger education system. For an efficient implementation of this tool, not only is a proper platform required, but a favorable environment is also needed to allow students to use the system effectively. In addition, the shift to e-learning has shown that both learners and educators need digital literacy skills. Learners have had to learn how to interact in the digital environment, use digital resources and tools, and communicate through it.

Given these, this study intends to measure the levels of acceptability and satisfaction among students enrolled in institutions of higher learning using Google Classroom as the learning management system. This study will also investigate differences in acceptability and satisfaction across selected profile variables, as well as the relationship between acceptability and satisfaction.

In particular, the research contributes to the existing knowledge base by providing a holistic assessment of the concepts of acceptability and satisfaction within a single study. It also provides insights into how the concepts differ across user categories and their determinants, including both technology- and context-related factors. The results of the study will help inform policies for implementing the LMS.

Through this investigation, the study aims to support the development of more inclusive and effective digital learning environments that respond to students' diverse needs. By understanding the factors that influence acceptability and satisfaction, higher education institutions can implement targeted strategies to enhance the quality of online learning and ensure that technological innovations meaningfully contribute to student success.

METHODOLOGY

This study employed a descriptive-correlational research design to examine students' levels of acceptability and satisfaction with Google Classroom and to determine differences and relationships among the variables. The descriptive component assessed students' perceptions, while the correlational component examined the relationship between acceptability and satisfaction.

Participants in this study were made up of 356 respondents enrolled at Guimaras State College using stratified random sampling. Stratified random sampling is used to ensure equal representation of students across fields and year levels. The use of various strata helped provide an in-depth examination of the differences in perceptions.

Data were collected using a questionnaire developed from an already validated instrument. The two components of the questionnaire are acceptability and satisfaction. Acceptability is measured by usability, easy-to-use, and accessibility. Satisfaction is measured by the quality of interactions, learning, engagement, and academic support.

Participants' responses were rated using a five-point Likert scale, with values ranging from 1 (Very low) to 5 (Very high). The mean scores were rated using standard values to ensure uniformity in data interpretation. Test-retest reliability generated Cronbach's alphas of 0.89 for acceptability and 0.87 for satisfaction.

Data analysis was conducted using SPSS. The mean and standard deviation were used as descriptive statistics to assess the extent of acceptability and satisfaction levels. Tests of significance, such as the Mann-Whitney U test and the Kruskal-Wallis H test, were conducted as nonparametric tests to assess differences among groups. Pearson correlation was performed to establish the relationship between acceptability and satisfaction.

All ethical concerns were strictly adhered to throughout this research process. The participants were first told about the purpose of conducting this study, and their involvement was

RESULTS AND DISCUSSION

Level of Acceptability of Google Classroom

Table 1. Level of Acceptability of Google Classroom (TAM-Based)

Indicator	**M**	**SD**	**Interpretation**
Ease of Use	4.19	0.68	High
Usefulness for Learning	4.15	0.66	High
Helps in Online Research	3.97	0.76	High
Helps Find Appropriate Links	4.03	0.70	High
Supports Academic Tasks	3.94	0.73	High
Accessibility	3.66	0.86	High
Overall Mean	**3.99**	**0.73**	**High Acceptability**

The study found that students demonstrated a high level of acceptance of Google Classroom (M = 3.99, SD = 0.73). This indicates that students generally perceive the platform as a reliable, functional, and effective learning management system during the COVID-19 pandemic. Acceptability, as operationalized in this study, includes perceived ease of use, usefulness, and accessibility—three key dimensions aligned with the Technology Acceptance Model (TAM).

Among the measured variables, ease of use (M = 4.19, SD = 0.68) was rated highest. This implies that Google Classroom is user-friendly and easy to use, an important determinant for adopting any new technology. Ease of use plays an important role in shaping people's perceptions of technology; as Jakkaew and Hemrungrote (2017) found, the perception that the system requires little effort from the user results in positive attitudes towards technology. The high rating in this dimension indicates that students quickly adapted to the platform despite the abrupt transition to online learning.

Closely related to ease of use is perceived usefulness (M = 4.15, SD = 0.66), which also received a high rating. This indicates that students recognize Google Classroom as beneficial for accomplishing academic tasks such as accessing learning materials, submitting assignments, and participating in online discussions. The research results validate the claim made by Albashtawi & Bataineh (2020) that Google Classroom improves students' participation and supports their education through a systematic, efficient means of conducting educational processes. Likewise, Setiawan et al. (2021) have noted that Google Classroom's effectiveness stems from its integration with Google products.

Additional indicators such as helping students find appropriate links (M = 4.03) and facilitating online research (M = 3.97) further reinforce the platform's role as a centralized learning environment. These features enable students to access a wide range of resources, thereby supporting independent learning and information literacy. The ability to organize and retrieve learning materials efficiently is particularly important in online learning contexts, where students rely heavily on digital resources. However, the highest score in accessibility (M = 3.66, SD = 0.86) became the lowest among the acceptability indicators despite being within the category of "high."
It can be inferred from this result that, even when accessibility is perceived as good, students face hidden obstacles in using the application. External factors can cause this issue because students cannot be using the application when the Internet connection is poor or they lack the appropriate devices and technology.

This result highlights a major concern regarding online learning – the gap between acceptance and accessibility of systems. Although Google Classroom is accessible, its effectiveness depends on the environment. Without consistent internet connectivity and access to proper technology, learners will face difficulties accessing the system. Theoretically, the results provide strong validation of the Technology Acceptance Model. The fact that high marks have been given for ease of use and usefulness indicates the importance of these elements in determining students' acceptance of Google Classroom (Jakkaew & Hemrungrote, 2017). Nevertheless, the low accessibility score indicates that, in some developing countries such as Thailand, where infrastructure is vital for the adoption of new technologies, TAM should be supplemented by other factors.

Moreover, the study's results concur with Heggart and Yoo (2018), who stressed the importance of an enabling environment for the proper functioning of LMS applications, as well as efficiency. The lack of supportive structures could make an otherwise acceptable system underperform.

Overall, the results indicate that Google Classroom is a highly acceptable LMS, particularly in terms of usability and functionality. However, accessibility remains a critical concern, highlighting the need for institutional interventions to address infrastructural challenges. This underscores the importance of viewing acceptability not only as a function of system design but also as a product of the broader educational context.

Level of Satisfaction of Students

Table 2. Level of Satisfaction (Experience-Based)

Indicator	M	SD	Interpretation
Liked Using Google Classroom	4.15	0.66	High
Interaction (Teacher/ Classmates)	3.81	0.85	High
Writing vs Paper Notes	3.53	1.00	High
Awareness of Content	3.99	0.69	High
Academic Productivity	3.43	0.90	High
Engagement (Notes/ Drafts Work)	3.94	0.73	High
Overall Mean	**3.81**	**0.80**	**High Satisfaction**

The study revealed that students demonstrated a high level of satisfaction (M = 3.81, SD = 0.80) in using Google Classroom. This suggests that students generally had positive experiences with the platform, particularly in terms of engagement, interaction, and learning support.
The indicator receiving the highest rating among students was liking Google Classroom (M = 4.15, SD = 0.66). It implies that the learners have positive attitudes toward this learning tool. This attitude can be explained by Google Classroom's intuitive interface and its opportunities for students to communicate with peers and collaborate. Therefore, students not only accept the platform but also like working with it during their studies.

The high perceptions of indicators related to engagement (M = 3.94) and content awareness (M = 3.99) demonstrate that Google Classroom is effective in promoting engagement and increasing awareness. These outcomes align with the study by Fahriany et al. (2022), which demonstrates the effectiveness of Google Classroom in engaging students in learning activities.

Similarly, interaction with teachers and classmates (M = 3.81) was rated highly, indicating that the platform facilitates communication and collaboration. This is particularly important in online learning environments, where maintaining interaction is essential for sustaining student engagement. According to Heggart and Yoo (2018), effective interaction is a key component of student satisfaction on LMS platforms, as it fosters a sense of community and supports collaborative learning.
But the academic productivity indicator (M = 3.43, SD = 0.90) received the lowest satisfaction score of all indicators measuring students' satisfaction. It is, however, still in the "high" category, indicating that the slightly lower mean score suggests that the use of Google Classroom is not significantly linked to better academic achievement.

Google Classroom enables engagement, but it does not guarantee better academic achievement. achievements are corroborated by the conclusion of Hidayat et al. (2022), who argued that the effectiveness of an e-learning tool depends on its incorporation into instructional activities. One more thing to mention is that having a specific e-learning tool is not enough; the teaching skills required by the process matter.

This finding underscores the importance of integrating pedagogy into online learning. Although Google Classroom is the right platform for learning because it is equipped with everything that is needed for the same, the efficiency of this tool largely hinges on how the tool is being employed by instructors, for example, through poorly structured tasks or failure to provide any form of feedback.

Another important implication of this finding is that student satisfaction is influenced by multiple factors, including: System usability, Interaction quality, Instructional design and Learning environment.
Hence, efforts to enhance satisfaction should focus on applying a holistic approach that considers both technical and pedagogical issues.

In summary, it is evident from the findings that Google Classroom offers a satisfactory and enjoyable learning experience; however, its contribution towards students' academic achievement can be constrained by the mode of instruction employed.

Differences in Acceptability by Profile Variables

Table 3. Differences in Acceptability Differences in Acceptability and Satisfaction of Google Classroom According to Profile Variables

Variable	Acceptability (p-value)	Interpretation	Satisfaction (p-value)	Interpretation
Age	> 0.05	Not Significant	> 0.05	Not Significant
Year Level	0.256	Not Significant	0.256	Not Significant
Course	0.000*	Significant	0.000*	Significant

Table 3 presents the results of an analysis that show no statistically significant difference in acceptance and satisfaction by age or year level ($p > 0.05$). This means that students, irrespective of their demographic backgrounds, have similar perceptions regarding Google Classroom as a learning management system. The lack of significant variation in perceptions indicates that the learning platform offers a consistent experience for users across age groups and year levels.
This uniformity in perception may be explained by the growing use of technology in learners' everyday lives, which, in turn, has led to the emergence of basic digital competencies among students of different ages. In modern education systems, learners are often engaged in various digital activities that can help them fill knowledge gaps across different technologies. Therefore, both young and older students will likely have the skills to work with LMSs, thereby eliminating any gaps in their perceptions of these systems.
This platform characteristic, along with the integration of familiar technologies, may make it more inclusive and enable diverse groups of learners to use the system effectively. Hence, the results confirm the idea that the Google Classroom platform can be considered an inclusive LMS due to its user-friendliness.
Contrary to age and year level, where no significant differences were identified, a significant difference in acceptability and satisfaction with Google Classroom was found by course ($p = 0.000$). Therefore, it is possible to conclude that a student's field of study is critical for evaluating Google Classroom.
Moreover, this result suggests that Google Classroom's design aligns with the principles of user-centered design, which emphasize developing systems that accommodate a wide range of users with varying levels of expertise. Given that the platform is simple and incorporates commonly used technologies in its development, this is most likely the primary reason the platform will remain accessible to all learners regardless of their background. Therefore, this further strengthens the notion that Google Classroom is a universally accessible LMS.

Though the analysis showed that there were no significant differences in the variables of age and year level, significant differences were seen in the variables of acceptance and satisfaction, wherein $p = 0.000$, in relation to the variable of course. It is thus evident that respondents' academic majors are a key determinant of their perceptions of Google Classroom. Unlike demographic variables, which showed uniformity, academic context introduces variability in how the platform is experienced and evaluated.

The noted differences can be attributed to variations in the demands of the particular courses, the nature of the subject matter, and technological requirements. Courses vary greatly in their design and in the learning strategies used to teach and assess learners' progress. For example, those who focus on conceptual understanding and take a theoretical approach, such as in the social sciences or humanities, would benefit greatly from Google Classroom, which facilitates discussion and writing tasks. However, those requiring practical demonstrations, labs, and other hands-on activities might not be well suited to online platforms, which can lead to lower satisfaction.
In addition, the extent to which technology is embedded in the curriculum could differ among various subjects. Some courses use technology in their teaching methods; therefore, students enrolled in these courses would find it easier to adapt to Google Classroom. The use of Google Classroom by students enrolled in these subjects would be an expansion of what they have been accustomed to, making it more acceptable and satisfactory for them. In contrast, there may be subjects in which students lack experience with technology in learning; hence, they may find it difficult to adapt to Google Classroom.

This finding is consistent with the study of Jakkaew and Hemrungrote (2017), which emphasized that students' acceptance of learning technologies is influenced by their academic background and prior technological exposure. It is shown that knowledge of digital tools influences how students think about them. This implies that variations in discipline-related approaches can affect the degree of technology adoption. In the same way, Setiawan et al. (2021) claim that the success of Google Classroom is heavily influenced by the way it is used in practice. The researchers emphasize that the success of the online classroom depends not only on what the tool offers but also on how it is used.

Moreover, large differences across courses could be attributed to teachers' use of different educational techniques. Teachers use diverse approaches depending on their subjects, which can affect students' interactions with the LMS systems they use. The use of interactive lessons and media in classes can positively impact students' satisfaction levels. However, courses based on one-sided learning can fail to leverage Google Classroom's features, resulting in poor student experiences.

Thus, the results underscore the necessity of discipline-sensitive implementation of LMS (learning management systems) wherein instructional methods are adapted to the specific needs of individual academic programs. A standardized LMS model may not meet the needs of different disciplines. Ultimately, educators would do better to determine which parts of the platform can be tailored to align with their course's specific strengths. This might include adding interactive tools, creating fun and immersive activities, or offering timely, personal feedback to the learner.
Other implications of this research include the importance of having an institution to facilitate effective LMS use. Educators must be trained to develop courses that make the best use of Google Classroom. By equipping instructors with the necessary skills and knowledge, institutions can ensure that the platform is used effectively across different disciplines, thereby reducing disparities in student perceptions.

Furthermore, the findings suggest that improving acceptability and satisfaction requires a holistic approach that considers both technological and pedagogical factors. While Google Classroom provides a robust platform for online learning, its effectiveness ultimately depends on how it is utilized within the educational context. Addressing discipline-specific challenges and enhancing instructional practices can contribute to more positive student experiences.

These results indicate greater consistency in the features offered by Google Classroom across all demographic variables under study, while stark differences remain between disciplines. This underscores the need for institutions to consider contextual factors as they roll out their LMS. Higher satisfaction and acceptability could be achieved if they are responsive to the disciplines and focus on these specific requirements.

Relationship Between Acceptability and Satisfaction

Table 4. Pearson Correlation Between Acceptability and Satisfaction

Variables	r	p-value	Interpretation
Acceptability ↔ Satisfaction	0.412	< 0.001*	Significant (Moderate Positive)

According to the results of the correlation analysis shown in Table 4 above, there is a moderately strong, positive correlation between acceptability and satisfaction ($r = 0.412$, $p < 0.001$). In essence, the results imply that students who view Google Classroom as beneficial, user-friendly, and accessible tend to be more satisfied with their learning process. The significance of the p-value implies that the correlation between the two variables is not coincidental but rather empirical.

The strength of the correlation indicates that acceptability significantly influences students' satisfaction, though it does not act alone. Instead, it acts as one of many interconnected variables that affect how students perceive and evaluate Google Classroom as an LMS. This is a crucial point because it underscores the fact that while making the system user-friendly will increase students' satisfaction, such action alone cannot solve all problems related to their learning process.

Theoretical analysis shows that the results strongly support the Theory of Technology Acceptance, which posits that perceived usefulness and perceived ease of use of technology significantly influence users' attitude towards the system and the behavior associated with it (Jakkaew & Hemrungrote, 2017). In the current research, acceptability encompasses two major TAM concepts, whereas satisfaction results from users' interaction with technology. The positive association between these factors shows that perceiving Google Classroom as useful and easy contributes to positive attitudes towards it and, thus, to greater satisfaction.

However, given the rather weak correlation coefficient ($r = 0.412$), the acceptability variable cannot be treated as the sole factor responsible for the effect on satisfaction. The presence of additional factors affecting students' experience underscores that the use of LMS is a multifactorial concept. Although TAM is rather efficient as a conceptual framework for understanding the dynamics of technology use, other factors may still affect users' levels of satisfaction.

The findings are consistent with those of Heggart & Yoo (2018), who stressed that student satisfaction in an LMS context depends not only on technology factors but also on pedagogical factors such as interaction quality, feedback, and instructional design. According to the authors'

findings, even advanced systems can fail to achieve high satisfaction scores if no adequate teaching methods are used. The presented point of view aligns with current research, which has established acceptance as a factor in satisfaction.

One key implication of this observation is that being merely usable is not enough to guarantee good experiences for learners. Although Google Classroom might be very user-friendly and efficient, satisfaction levels can be affected by how the tool is implemented in the teaching process. For example, having good instructions, appropriate feedback, and interesting assignments will make the experience more enjoyable irrespective of the platform itself. On the contrary, bad teaching practices can limit its potential impact even if the tool itself is highly acceptable for the users.

Moreover, since the correlation is moderate, the quality of interaction is an important factor in determining satisfaction. The online environment does not provide immediate and rich interaction; therefore, it is important to develop interaction among students through different activities. Google Classroom has provided ways of communication and interaction. However, the way tools are used influences interaction effectiveness and determines satisfaction levels.

Another aspect that could contribute to student satisfaction is the context of the learning experience, which could be the learning environment within which the technology is deployed. Google Classroom is not just experienced through its interface; rather, students' use and experience of it depend on the context outside the system, including internet access and device availability, among others. In contexts where technological resources are limited, students may experience frustration and difficulty, which can reduce satisfaction even if the platform is perceived as useful.

Moreover, the motivation of the students is critical in measuring their satisfaction levels. The students who have an interest in gaining new knowledge will feel motivated to engage with the portal, experiment with its features, and participate in learning activities. Such behavior will lead to higher satisfaction levels. In contrast, the students who are not adequately motivated may end up not using the portal to its full potential, resulting in lower satisfaction levels.

The findings also highlight the importance of instructional alignment, where the design of learning activities is aligned with the capabilities of the LMS. Google Classroom provides several features that can accommodate diverse instructional techniques, but they have to be applied efficiently for better learning results. For instance, including multimedia materials, interactive tasks, and assessment measures may increase the degree of engagement on the part of students. Proper alignment between instructional techniques and capabilities of the application may contribute to the higher utility and satisfaction level of users.

In addition to this, the medium connection between acceptability and satisfaction highlights the importance of adopting a holistic perspective towards the introduction of an LMS. Instead of limiting attention only to technical aspects and trying to improve the system per se, it is important to look at the whole educational environment where the tool will be utilized. This means making sure that instructors receive appropriate training, technological capabilities are available to students, and proper educational policies exist.

Yet another inference that can be drawn from the results is the requirement for ongoing assessment and enhancement of LMS adoption. With changes in technology and learning processes, it is essential to continually evaluate students' opinions to find ways for improving the system. Student feedback will help determine the advantages and disadvantages of the system and make decisions on its implementation.
These findings further show that acceptability is an important predictor of user satisfaction, though it does not stand alone. The modestly positive correlation shows that apart from being usability and useful, there are other aspects that are important as well such as instructional design, interaction design, the learning context, and learner motivation. These findings underscore the importance of a holistic approach toward the use of LMS.

Finally, the findings show that the success of Google Classroom as an LMS lies in the interdependence of many factors. Understanding the intricacies of such interactions allows teachers and organizations to adopt a broader approach towards the improvement of online classes. Improving the efficiency of teaching and overcoming certain barriers related to the context, as well as working with the tool itself, is important.

CONCLUSION

It can be concluded from this study that Google Classroom was considered a highly acceptable and satisfactory LMS among higher education students amid the coronavirus outbreak. The platform was regarded by the learners as useful, user-friendly, and effective in fulfilling their learning needs. The results obtained have confirmed the appropriateness of applying the Technology Acceptance Model when it comes to predicting the learners' acceptance of technology-assisted learning platforms.

Nevertheless, there were several obstacles to the effective use of Google Classroom identified within this research study, especially in terms of its accessibility. While the level of acceptance remains at a very high level, lack of Internet and inability to use some of the devices due to various technical reasons remain an obstacle in the process of effective LMS use.

Moreover, even in case of high learners' satisfaction, the improvement of academic achievements cannot always be expected. It means that appropriate instructional design becomes one of the key factors in improving learners' academic achievements. Differences observed across academic programs indicate that LMS implementation should be tailored to the specific needs of different disciplines. A one-size-fits-all approach may not be effective in addressing the diverse requirements of various fields of study.

Improving the effectiveness of Google Classroom requires a comprehensive approach that includes enhancing digital infrastructure, improving instructional practices, and adopting discipline-specific strategies. By addressing these factors, institutions can create a more inclusive and effective online learning environment that supports student success.

REFERENCES

Albashtawi, A. H., & Bataineh, K. B. A. (2020).
The effectiveness of Google Classroom among EFL students in Jordan: An innovative teaching and learning platform. International Journal of Emerging Technologies in Learning, 15(11), 78–89. https://doi.org/10.3991/ijet.v15i11.12865

Fahriany, F., Aini, Q., Husna, N., Hidayat, D. N., Waliyadin, W., & Sufyan, A. (2022).
Using Google Classroom as a media for learning English during the pandemic. Pioneer: Journal of Language and Literature, 14(1), 187–198.
https://doi.org/10.36841/pioneer.v14i1.1683

Heggart, K., & Yoo, J. (2018).
Getting the most benefits from Google Classroom: A pedagogical framework for tertiary educators. Australian Journal of Teacher Education, 43(3),
140–153. https://doi.org/10.14221/ajte.2018v43n3.9

Hidayat, M. Y., Jaya, F., & Astindari, T. (2022).
The effect of e-learning using Google Classroom on student learning outcomes. EDUSAINTEK: Jurnal Pendidikan, Sains dan Teknologi, 8(2), 285–292.
https://doi.org/10.47668/edusaintek.v8i2.228

Jakkaew, P., & Hemrungrote, S. (2017).
The use of UTAUT2 model for understanding student learning perceptions in Google Classroom. ICDAMT Proceedings, 205–209.
https://doi.org/10.1109/ICDAMT.2017.7904962

Setiawan, F., Prambudi, H., Supenah, P., & Supriyatin, S. (2021).
Implementation of Google Classroom for online learning. COMSERVA: Indonesian Journal of Community Services and Development, 1(5), 173–177.
https://doi.org/10.36418/comserva.v1i5.27