BBA Undergraduate Students' Perceptions of Online Learning Platforms in Blended Learning Environments

Suhaidi Elias@Alias, Noriah Ismail, Wan Nor Hafidzah Wan Mohd, Shahira Abdul Jabar, Aidarohani Samsudin

Universiti Teknologi MARA Johor, Malaysia
Email: suhaidi27@uitm.edu.my, noriah135@uitm.edu.my, wanno995@uitm.edu.my, shahi997@uitm.edu.my, aidar551@uitm.edu.my

Abstract

This study examines BBA undergraduate students' perceptions of the use of online learning platforms in a blended learning environment. A quantitative survey research design was employed to explore students' preferences, perceived benefits, and challenges associated with commonly used online platforms. The participants consisted of 51 BBA undergraduate students from a Malaysian public university, selected through convenience sampling. Data were collected using a structured questionnaire comprising multiple-choice and Likert-scale items that measured platform preference, usability, accessibility, interactivity, and technical issues. The collected data were analyzed using descriptive statistics, including frequencies and percentages. The findings indicate that Google Classroom was the most preferred platform due to its ease of access and assignment submission, followed by WhatsApp, which was favored for its mobile accessibility and low data usage. In contrast, the institutional platform received strong dissatisfaction, mainly due to slow access and complex technical features. Google Meet was valued for real-time interaction but was limited by high data consumption. Overall, the results suggest that students prefer user-friendly, accessible, and low-bandwidth platforms, highlighting the need for institutions to improve usability and technical efficiency of official learning systems.

Keywords: Online Learning Platforms, Blended Learning, Student Perceptions, Learning Management Systems (LMS), Malaysian Higher Education

Introduction

The integration of online learning platforms into higher education has accelerated significantly in recent years, particularly following the COVID-19 pandemic, which compelled universities worldwide to adopt emergency remote teaching. In Malaysia, higher education institutions have since continued to implement blended and online learning models as part of long-term digital transformation initiatives aligned with the Malaysia Education Blueprint

(Higher Education) 2015–2025. As a result, online platforms such as learning management systems (LMS) and communication-based applications have become integral to undergraduate learning experiences.

For Bachelor of Business Administration (BBA) undergraduate students, effective use of online learning platforms is especially critical. Business education places strong emphasis on communication, collaboration, problem-solving, and continuous assessment, all of which rely heavily on timely interaction and accessible digital tools. Malaysian universities typically provide institutional platforms, such as UFUTURE, to centralize teaching and learning activities. However, students frequently complement or substitute these systems with widely available platforms such as Google Classroom, WhatsApp, and Google Meet due to their perceived ease of use and accessibility.

Previous studies in the Malaysian context indicate that usability, accessibility, and technological reliability strongly influence students' acceptance of online learning platforms (Adzharuddin & Ling, 2013; Ismail et al., 2021). Recent research also highlights persistent challenges related to internet connectivity, data costs, and platform complexity, particularly among students who rely on mobile devices for learning (Almahasees et al., 2021; Rapanta et al., 2020). These issues remain relevant even in the post-pandemic phase, suggesting that platform effectiveness is not solely dependent on availability but also on user experience and contextual suitability. This study therefore investigates BBA undergraduate students' perceptions of the use of online learning platforms in a Malaysian public university. By examining students' preferences, perceived benefits, and challenges associated with Google Classroom, WhatsApp, UFUTURE, and Google Meet, the study seeks to identify the key factors shaping platform adoption and continued use in a blended learning environment. The significance of this study lies in its contribution to evidence-based decision-making in Malaysian higher education. By capturing students' perspectives, the findings provide valuable insights for lecturers, instructional designers, and university administrators seeking to improve digital learning delivery. The study also highlights infrastructural and technical constraints that may affect student engagement and learning effectiveness.

In terms of contribution to the field, this research adds to the growing literature on online and blended learning by offering discipline-specific insights from business education within a developing-country context. It extends existing research by comparing institutional and non-institutional platforms simultaneously, thereby offering a comprehensive understanding of platform strengths and limitations. The findings may inform future platform development, digital pedagogy, and institutional policy aimed at enhancing the quality and sustainability of online learning in Malaysian universities. The objective of this study is to investigate BBA undergraduate students' perceptions of online learning platforms within a blended learning environment, focusing on their preferences, perceived benefits, and challenges in using commonly available digital tools. Specifically, the study aims to identify which platforms are most favored, evaluate usability, accessibility, interactivity, and technical issues, and determine factors that influence students' satisfaction with these platforms.

The scope of the study is limited to 51 BBA undergraduate students from a Malaysian public university, selected through convenience sampling, and encompasses quantitative data collection via structured questionnaires with multiple-choice and Likert-scale items. By

analyzing students' platform choices and their associated experiences, the study seeks to provide insights into the effectiveness and efficiency of online learning tools, highlighting areas where official institutional platforms may require improvements in usability, accessibility, and technical performance, while also examining the advantages of alternative platforms such as Google Classroom, WhatsApp, and Google Meet. This research is therefore positioned to inform blended learning strategies and digital platform enhancements in the Malaysian higher education context.

Literature Review

Research on online learning platforms frequently draws on technology acceptance and educational learning theories to explain how and why students adopt and use digital tools. The Technology Acceptance Model (TAM), originally proposed by Davis (1989), remains one of the most widely applied frameworks in studies examining users' perceptions of and intentions to use e-learning systems. TAM posits those two key beliefs, perceived usefulness, and perceived ease of use, influence an individual's behavioral intention to use a technology and its actual usage (Mad et al., 2024).

Beyond TAM, the Unified Theory of Acceptance and Use of Technology (UTAUT) and its extensions, such as UTAUT2, introduce additional constructs including social influence, habit, and facilitating conditions, which further explain technology adoption and sustained use (Venkatesh et al., as discussed in Al-Zeeno et al., 2022). These models acknowledge the role of contextual and social factors in shaping users' acceptance of digital learning platforms. Empirical reviews have consistently shown that TAM, UTAUT, and related models continue to dominate research on learning management system (LMS) adoption and provide valuable theoretical lenses for interpreting students' perceptions and usage of online learning tools (Alshammari et al., 2021). In the Malaysian context, these models have been employed to investigate students' and educators' perceptions of e-learning and LMS adoption, demonstrating that ease of use and perceived usefulness significantly influence acceptance (Mad et al., 2024; Salina et al., 2024).

Theoretical Foundation

The theoretical foundation of this study is grounded in the Technology Acceptance Model (TAM) and the Community of Inquiry (CoI) framework, which collectively provide a conceptual lens to examine students' perceptions of online learning platforms in a blended learning environment. The TAM, proposed by Davis (1989), posits that users' acceptance of technology is determined primarily by two key factors: perceived usefulness—the extent to which a system enhances learning performance—and perceived ease of use—the degree to which interacting with the system is free of effort. In the context of blended learning, TAM provides a robust framework to understand why students prefer certain platforms over others, as their choices are often guided by considerations of usability, accessibility, and efficiency. Studies applying TAM in higher education settings have consistently shown that platforms perceived as easy to use and beneficial for academic tasks tend to receive higher adoption and satisfaction rates (Muslem, 2024; Rustam, 2025). Complementing TAM, the Community of Inquiry (CoI) framework emphasizes the social, cognitive, and teaching presence necessary for meaningful learning experiences in online and blended contexts (Garrison et al., 2000). Social presence fosters interaction and collaboration among students, cognitive presence supports critical thinking and knowledge construction, and teaching presence guides the

instructional design and facilitation of learning. By integrating CoI with TAM, this study considers not only the functional usability of online platforms but also how they support engagement, interactivity, and collaboration in blended learning.

Together, these frameworks establish a conceptual lens for the research by linking platform design and technological characteristics with student perceptions, preferences, and satisfaction, allowing the study to systematically assess how different online platforms meet the needs of BBA undergraduates. This theoretical integration also enables a nuanced understanding of why certain platforms, such as Google Classroom and WhatsApp, are favored over institutional systems, highlighting the interplay between technical efficiency, and learning experience quality in shaping platform acceptance.

Online Learning and LMS in Higher Education
Online learning platforms, including institutional LMS and external tools like Google Classroom, WhatsApp, and Google Meet, have become institutional staples, especially after the COVID-19 pandemic (Mat et al., 2023). In Malaysia, although students recognize the benefits of flexibility and accessibility provided by online learning, they also report significant challenges such as unreliable internet connectivity and inadequate technical support (Mat et al., 2023; Veeramuthu et al., 2022).

Studies focusing on student perceptions of online learning environments reveal mixed attitudes toward platform effectiveness. A study of undergraduates across Malaysian universities found that while students value synchronous interactions (e.g., via Google Meet), they prefer a blended approach rather than fully online instruction (Mat et al., 2023). Another discipline-spanning study at a Malaysian public university revealed that Business Management students reported relatively higher satisfaction with online learning environments compared to other disciplines, highlighting the importance of contextual and disciplinary differences in perceptions (Ismail, Hussin, & Darus, (2012); Ismail, Soo Kum Yoke, & Ismail, (2018), Hussin, Abdullah, & Ismail, (2019); Soo Kum Yoke & Ismail, (2021); Ismail et al., (2025); & Saifuddin et al., (2025).

Platform Preferences and Student Experience
Empirical evidence indicates that students generally prefer platforms that are intuitive, accessible, and mobile-friendly. For example, research among Malaysian higher education students reported that ease of use and compatibility influence preference for platforms such as Google Classroom over more complex institutional LMS like Moodle or proprietary systems (Rusli et al., 2023). This aligns with international findings showing that Google Classroom's mobile accessibility and simplified interface contribute positively to initial perceptions and behavioral intention to use the platform (Heggart & Yoo, 2018). WhatsApp, while not designed as a formal LMS, has gained traction among students for its low data usage and real-time communication features, particularly in contexts where internet infrastructure varies widely. However, studies caution that such communication tools lack robust academic functionalities, such as structured assignment submission and integrated assessment, which can limit their effectiveness as primary learning platforms (Alshammari et al., 2021).

Challenges and Adoption Barriers

Despite widespread adoption, several barriers persist in online platform usage. Across Malaysian studies, common technical issues include slow internet access, platform complexity, and lack of interactivity, which negatively affect students' satisfaction and continuous use (Veeramuthu et al., 2022). Additionally, motivational, and environmental factors, such as home study conditions and psychological readiness, have been shown to moderate students' adaptation to online learning (Razak et al., 2024). The literature highlights that technology acceptance theories, especially TAM and UTAUT, provide effective frameworks for understanding student perceptions of online learning platforms. Malaysian research underscores students' preference for user-friendly, easily accessible tools but also points to ongoing challenges related to infrastructure and platform design. These findings lay the foundation for the current study, which seeks to explore BBA students' perceptions within this evolving educational landscape.

Recent Empirical Past Studies

This literature review synthesizes recent empirical studies (2023–2025) that relate to students' perceptions of online learning platforms, blended learning environments, usability, and engagement—providing a foundation for comparing and positioning your current study on BBA undergraduate students in Malaysia.

Research on blended learning and online platforms emphasizes the importance of usability, interaction, self-regulation, and student satisfaction in shaping perceptions of technology-enhanced learning. For instance, ElSayad (2024) used a large student sample and structural equation modelling to examine how components of the *extended Community of Inquiry (COI)* framework—namely teaching presence, social presence, learning presence, and cognitive presence—impact undergraduates' learning perceptions in blended courses. The findings showed that *learning presence*, which reflects students' self-regulation and engagement, significantly influenced their overall learning perceptions, while social presence helped mediate cognitive gains. This study highlights that well-designed blended environments fostering interaction and self-directed learning can improve students' perceptions of blended learning effectiveness. Complementing this, Muslem (2024) investigated the *use of Google Classroom features* among 373 Indonesian students studying English as a foreign language. Using a questionnaire based on the Technology Acceptance Model (TAM), the study examined how specific platform features (e.g., Classwork, Stream) relate to perceived usefulness and ease of use. Results indicated that variations in feature utilization were associated with differences in students' perceptions of platform usefulness and ease of use, reinforcing the idea that *user-centered platform features influence perception and acceptance*.

Another recent study by Han (2023) evaluated blended learning effectiveness from undergraduate students' perspectives using structural equation modelling. Although focused broadly on blended learning rather than specific platforms, it provides strong empirical evidence that *students' perceptions of blended learning are linked to measurable outcomes*, reinforcing the need to understand how platform usability, engagement, and interaction contribute to perceived learning success.

In a related domain, although not specific to the higher-education business context, Rustam (2025) explored student perceptions of LMS-based blended learning in physical education courses. Using a descriptive quantitative design, the study found that *accessibility, usefulness, and satisfaction with LMS significantly influence perceptions of blended learning*, underscoring the role of *ease of access and platform usefulness*—findings that align with your results on platform preference and satisfaction.

Finally, while many recent studies concentrate on the psychological or engagement aspects of blended learning, insights from related research suggest that mobile and communication tools like WhatsApp can support learning engagement. For example, studies on student perceptions of WhatsApp and Google Classroom (e.g., Isda et al., 2021) demonstrate that learners value *mobile accessibility and platform familiarity* for facilitating communication and interaction—even though these studies predate the 2020s pandemic context, they help validate the ongoing relevance of mobile-friendly platforms in blended settings. Together, these empirical studies show that students' platform perceptions are shaped by usability, accessibility, interactivity, and self-regulated engagement, providing theoretical and methodological support for your findings that students prefer *user-friendly, low-data, and technically reliable platforms*. Your research adds context by highlighting specific preferences among Malaysian BBA students, especially dissatisfaction with institutional systems and favor for mobile-accessible tools.

Research Methodology
This chapter outlines the research methodology adopted in this study, including the research design, participants, instrument, data collection procedures, and data analysis methods. The use of a quantitative survey approach provided a systematic means of capturing BBA undergraduate students' perceptions of online learning platforms, thereby supporting the reliability and validity of the study's findings.

Research Design
This study employed a quantitative research design using the survey method to investigate third semester BBA undergraduate students' perceptions of online learning platforms in a blended learning environment. A quantitative approach was deemed appropriate as it allows for the systematic collection and analysis of numerical data to identify patterns, preferences, and trends among a defined population. The survey design enabled the researcher to gather data efficiently from a relatively large group of respondents within a limited timeframe and to quantify students' perceptions of different online learning platforms.

Research Setting
The study was conducted at a Malaysian public university, where blended learning has been widely implemented following the COVID-19 pandemic. Students in this context regularly use a combination of institutional and non-institutional online learning platforms, including UFUTURE, Google Classroom, WhatsApp, and Google Meet, to support teaching and learning activities.

Participants and Sampling Technique
The participants of this study consisted of 51 Bachelor of Business Administration (BBA) undergraduate students. A convenience sampling technique was used, as the participants

were readily accessible and had prior experience using online learning platforms. This sampling method is commonly adopted in educational research where access to the entire population is limited. All participants had used at least one online learning platform for academic purposes, ensuring the relevance of their responses.

Research Instruments
Data were collected using a structured questionnaire developed specifically for this study. The questionnaire comprised four main sections.
Section A gathered demographic information such as gender and year of study.
Section B focused on students' preferences for online learning platforms, allowing respondents to select up to two platforms they used most frequently.
Section C examined students' perceived benefits and challenges associated with Google Classroom, WhatsApp, UFUTURE, and Google Meet through multiple-choice items.
Section D measured students' level of agreement with statements regarding platform usability and satisfaction using **a** five-point Likert scale**,** ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

To ensure content validity**,** the questionnaire items were reviewed by two experts in educational technology and business education. Minor revisions were made based on their feedback to improve clarity and relevance. A pilot test was conducted with a small group of students who were not included in the final sample to ensure comprehensibility. The instrument demonstrated acceptable internal consistency, with a Cronbach's alpha value exceeding   0.70**,** indicating good reliability.

Data Collection Procedure
Data collection was carried out over a two-week period. The questionnaire was distributed online using Google Forms to facilitate easy access and completion. Participation was voluntary, and respondents were informed of the purpose of the study prior to answering the questionnaire. All responses were collected anonymously to encourage honest and unbiased feedback.

Data Analysis
The collected data were analyzed using descriptive statistical techniques**.** Frequencies and percentages were used to summarize students' preferences, perceived benefits, and challenges associated with each online learning platform. The results were presented using bar charts, and pie charts to enhance clarity and interpretability. Descriptive analysis was appropriate for addressing the research objectives, which focused on understanding students' perceptions rather than establishing causal relationships.

Ethical Considerations
Ethical considerations were carefully observed throughout the study. Participants were informed that their participation was voluntary and that they could withdraw at any time without penalty. No personal identifying information was collected, and all data were used solely for academic purposes. The confidentiality and anonymity of the respondents were strictly maintained.

The Main Findings and Analysis

Section B: Students' preferences for online learning platforms.

For online learning tools I prefer to use (choose 2 only)
51 responses

- Whatsapp — 45 (88.2%)
- Google classroom — 49 (96.1%)
- UFUTURE — 1 (2%)
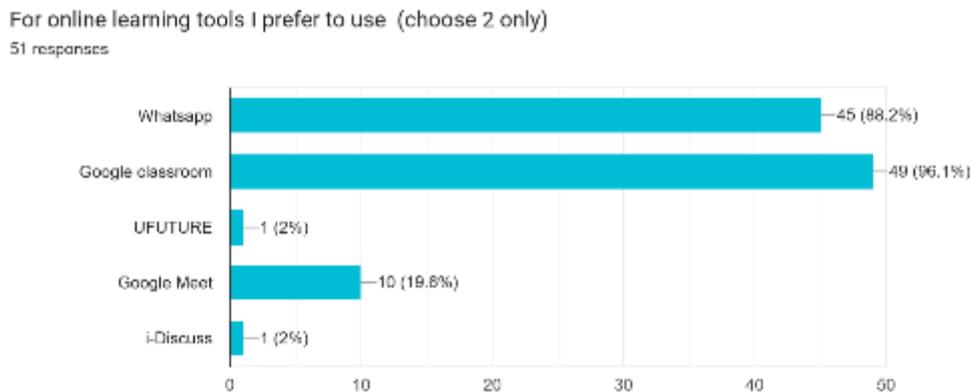- Google Meet — 10 (19.6%)
- i-Discuss — 1 (2%)

Chart 1

Chart 1 shows student preferences for online learning tools among 51 respondents, where each was allowed to choose two options. Google Classroom emerged as the most preferred platform, selected by 96.1% of respondents (49 individuals), followed closely by WhatsApp at 88.2% (45 respondents). Google Meet was a distant third with 19.6% (10 respondents), while UFUTURE and i-Discuss were the least favored, each chosen by only 2% (1 respondent). This indicates a strong inclination towards platforms that offer ease of communication and user-friendly interfaces, suggesting that familiarity and accessibility play major roles in tool preference.

I prefer to learn using google classroom because it is (Choose 2 only)
51 responses

- Easy to Access — 44 (86.3%)
- Easy to upload my work — 45 (88.2%)
- Has a nice interface — 5 (9.8%)
- Has many options — 2 (3.9%)
- I can see my grade — 3 (5.9%)
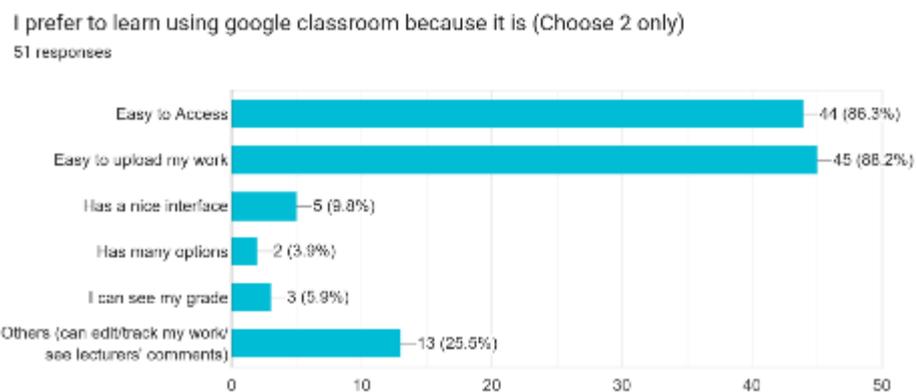- Others (can edit/track my work/ see lecturers' comments) — 13 (25.5%)

Chart 2

Chart 2 shows that the primary reasons students prefer to use Google Classroom are its ease of uploading work (88.2%) and ease of access (86.3%), highlighting functionality and convenience as key factors in platform choice. A smaller portion of respondents cited additional reasons: 25.5% appreciated features like the ability to edit/track work and view lecturers' comments (categorized under "Others"), while only 9.8% valued its interface, 5.9% appreciated the ability to view grades, and just 3.9% considered the variety of options available important.

Section C: Students' perceived benefits and challenges associated with Google Classroom, WhatsApp, UFUTURE, and Google Meet.

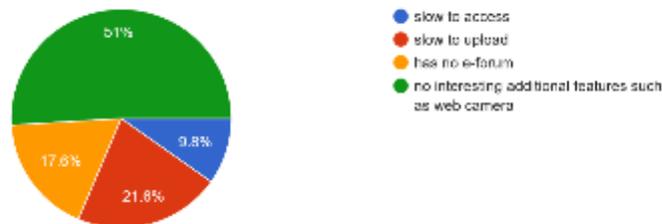The problem with using Google classroom is (Choose 2 only)
51 responses

- slow to access
- slow to upload
- has no e-forum
- no interesting additional features such as web camera

Chart 3
This pie chart outlines the perceived problems with using Google Classroom, as reported by 51 respondents. The most cited issue (51%) is the lack of interesting additional features such as a web camera, indicating that students may feel the platform is too basic or lacks interactivity. Other concerns include the absence of an e-forum (21.6%), slow upload speeds (17.6%), and slow access (9.8%). Despite its popularity and ease of use, this feedback suggests that students still seek more dynamic, integrated, and feature-rich learning environments.

I prefer using the university's online platform (UFUTURE) (Choose 2 only)
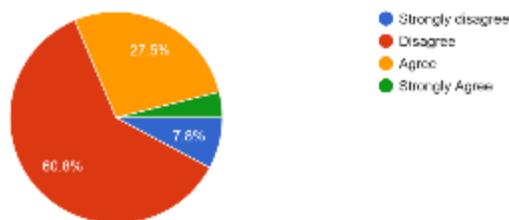51 responses

- Strongly disagree
- Disagree
- Agree
- Strongly Agree

Chart 4
Chart 4 shows the strong student dissatisfaction with UFUTURE, the university's official online learning platform. Among 51 respondents, 60.8% disagreed and 7.8% strongly disagreed with preferring UFUTURE, totaling 68.6% in opposition. In contrast, only 27.5% agreed and 3.9% strongly agreed. This shows a clear lack of support for the platform, mirroring earlier data that highlighted the popularity of more accessible and user-friendly tools like Google Classroom and WhatsApp.

I often encounter these problems with UFUTURE (Choose 2 only)
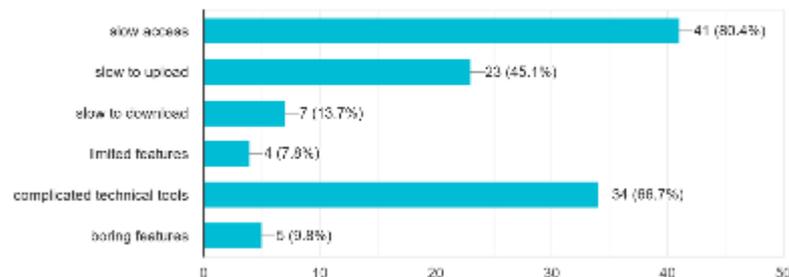51 responses

Chart 5

Chart 5 further reveals the major technical and usability issues students face with UiTM's UFUTURE platform. The top two problems are slow access (reported by 80.4% of respondents) and complicated technical tools (66.7%), followed by slow upload speeds (45.1%). Other issues include slow downloads (13.7%), boring features (9.8%), and limited functions (7.8%). These findings strongly validate the earlier dissatisfaction expressed, showing that UFUTURE's lack of efficiency and user-friendliness is a key barrier to student engagement and preference.

Section D: Students' level of agreement with statements regarding platform usability and satisfaction

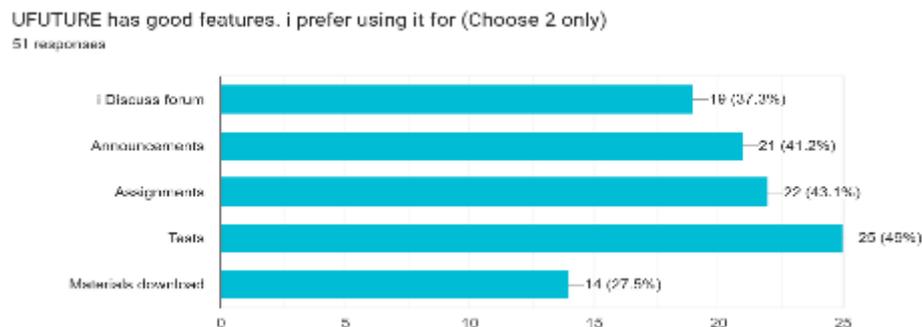UFUTURE has good features. i prefer using it for (Choose 2 only)
51 responses

Chart 6
Chart 6 highlights the specific features of UFUTURE that students still find useful despite its broader criticisms. Among 51 respondents, the most appreciated feature is Tests (49%), followed by Assignments (43.1%) and Announcements (41.2%). The i-Discuss forum is also moderately valued (37.3%), while Materials download is the least favored feature (27.5%). These results suggest that while UFUTURE struggles with user experience and technical performance, its structured academic functionalities such as assessments and assignment management remain beneficial to students.

I prefer to use WhatsApp for Blended learning because (Choose 2 only)
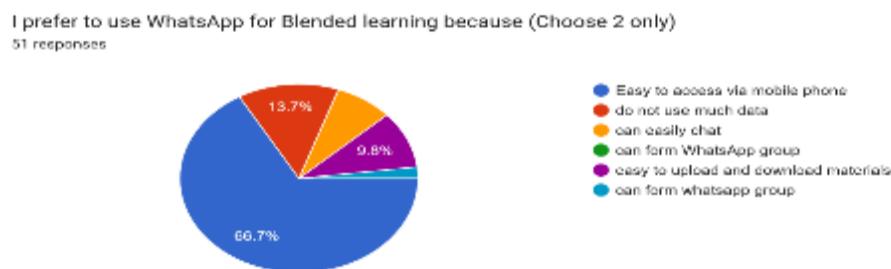51 responses

Chart 7
Chart 7 highlights students' reasons for preferring WhatsApp in blended learning contexts. A significant majority (66.7%) favor WhatsApp because it is easy to access via mobile phone, followed by 13.7% who cite low data usage and 9.8% who appreciate the ability to chat easily. These preferences underscore a strong leaning toward convenience, mobility, and low technological barriers, factors especially relevant in contexts where digital infrastructure or device access may be limited.

The problems with using Whatsapp for online learning (Choose 2 only)
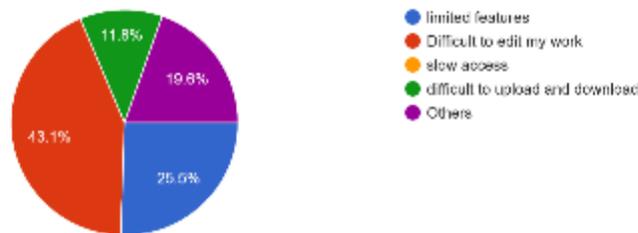51 responses

Chart 8

Chart 8 reveals the perceived limitations of WhatsApp in an online learning context. The most common issue, cited by 43.1% of respondents, is that it is difficult to edit work on the platform. This is followed by limited features (25.5%) and slow access (19.6%). A smaller group (11.8%) found it difficult to upload and download materials, while a few noted other unspecified issues. Despite WhatsApp's strengths in accessibility and communication, these findings suggest that it lacks the functionality needed for more comprehensive academic tasks.

I prefer using Google Meet for online learning because (Choose 2 only)
51 responses

Chart 9

Chart 9 outlines why students prefer using Google Meet for online learning. The most cited reason (49%) is that it allows students to engage directly with lecturers and classmates, reflecting the value placed on real-time interaction. Equal proportions (19.6%) appreciate that they can better understand their lecturers and interact without showing their face, suggesting flexibility in communication preferences. A smaller segment (11.8%) values ease of access. This indicates that Google Meet is seen as a useful tool primarily for fostering interaction, though it may not be the top platform overall.

The problems with using Google Meet for online learning is (Choose 2 only)
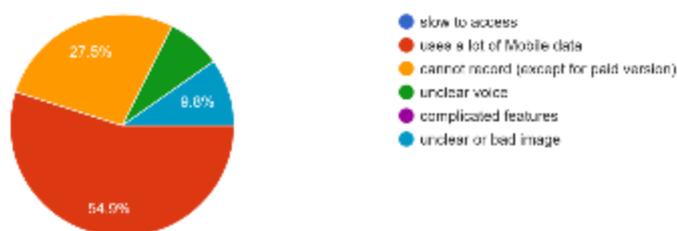51 responses

Chart 10

Chart 10 presents the main challenges users face when using Google Meet **for** online learning. The most significant concern, cited by 54.9%, is that it uses a lot of mobile data, making it less

accessible for students with limited connectivity. Another 27.5% note the inability to record **sessions** unless using the paid version**,** which restricts review opportunities. Smaller portions report issues with unclear voice (9.8%)**,** slow access**,** and unclear/bad image**,** highlighting technical barriers that can impact learning quality.

Comprehensive Analysis of Online Learning Tool Preferences and Challenges
The survey results from 51 respondents provide a detailed snapshot of student preferences, experiences, and perceptions regarding various online learning tools, namely Google Classroom, WhatsApp, UFUTURE, and Google Meet, within a blended learning environment.

Benefits and Issues by Platform
Google Classroom
Students primarily favor Google Classroom due to its accessibility (86.3%) and ease of uploading work (88.2%). However, the platform is not without limitations. Half of the respondents indicated dissatisfaction with its lack of interactive features (e.g., no built-in video communication), while 21.6% noted the absence of an e-forum, which may hinder collaborative learning. These concerns align with findings by Almahasees et al. (2021), who highlight that while LMS platforms streamline content delivery, they often lack interactivity.

WhatsApp
WhatsApp's popularity stems from being easy to access via mobile (66.7%), using little data, and enabling quick communication. These traits make it especially practical in regions with limited connectivity or where students rely heavily on smartphones (Al-Hunaiyyan et al., 2020). However, its drawbacks are significant in an academic context: 43.1% report difficulty editing work, and 25.5% highlight limited features, reflecting the platform's unsuitability for complex educational tasks.

UFUTURE
The university endorsed UFUTURE platform received strong criticism. 80.4% of students experience slow access, while 66.7% report complicated technical tools, leading to a generally frustrating user experience. Despite some useful features—such as handling tests (49%) and assignments (43.1%)—the platform's inefficiency overshadows its utility. According to Adzharuddin and Ling (2013), institutional platforms often suffer from poor UX design, leading to low engagement and adoption.

Google Meet
Google Meet is valued for its real-time engagement (49%) and helps students better understand lectures. However, its reliance on high bandwidth makes it inaccessible for many—54.9% noted high data usage, and others cited recording limitations and unclear audio as key issues. These reflect the need for platforms to balance functionality with accessibility (Rapanta et al., 2020).

Platform Strengths and Weaknesses
Google Classroom
Students appreciate Google Classroom for its simplicity—particularly in uploading assignments (88.2%) and accessibility (86.3%). However, 51% criticize its lack of additional

features, such as video conferencing or forums. This indicates a gap in interactive functionalities, which are crucial for engagement in remote learning (Rapanta et al., 2020).

WhatsApp
The mobile-centric nature of WhatsApp makes it highly accessible (66.7%), but its limitations as a learning management tool are evident. Students report difficulties editing work (43.1%) and cite limited features (25.5%). While useful for informal communication, it lacks the structure needed for academic rigor (Almahasees et al., 2021).

UFUTURE
UFUTURE, the university's platform, was the least preferred. About 68.6% of students disagreed or strongly disagreed with using it. The most reported issues include slow access (80.4%), complicated tools (66.7%), and slow uploads (45.1%). Yet, some appreciated its features for tests (49%) and assignments (43.1%), showing its potential if usability were improved. This supports Adzharuddin and Ling (2013), who argue that platform complexity deters adoption regardless of feature richness.

Google Meet
Google Meet is valued for enabling real-time engagement (49%) and better understanding through live interaction. However, it has a high data cost (54.9%), and its recording limitation (27.5%) hinders reviewability—both crucial for asynchronous learning access (Bernard et al., 2014).

Overall Preferences
Google Classroom emerged as the most preferred online learning tool, selected by 96.1% of students, followed by WhatsApp at 88.2%. The preference for these tools is largely due to their ease of access and simplicity in uploading work—Google Classroom being valued for its structured academic functions (e.g., assignments and announcements), while WhatsApp is appreciated for its mobile accessibility and low data consumption. Google Meet, though not as popular (only 19.6%), is seen as a valuable tool for direct engagement with lecturers and classmates. UFUTURE, the university's own learning platform, was the least preferred, with a combined 68.6% of students disagreeing or strongly disagreeing with using it. This low acceptance is attributed to several usability and technical issues.

Systemic and Cross-Platform Challenges
The broader problems students face in online learning, highlighted in the final chart, offer critical insights:
- Internet access remains the most significant issue (74.5%), underscoring infrastructural inequality.
- A lack of clarity in explanations (47.1%) and perceptions of ineffectiveness compared to face-to-face classes (47.1%) reflect pedagogical challenges.
- Stress levels are higher for 37.3% of students, which may relate to unfamiliarity with platforms, technical disruptions, or lack of personal interaction (Rapanta et al., 2020).

Recommendations
1. Improve Platform Usability: Simplify institutional platforms like UFUTURE to reduce technical barriers. Improve UFUTURE's user interface and technical performance.

2. Enhance Interactivity in LMS: Integrate video features and forums into Google Classroom to boost engagement.
3. Promote Inclusive Tools: Optimize low-data tools like WhatsApp for structured academic use or pair them with richer platforms.
4. Address Infrastructure Gaps: Provide data subsidies or offline materials to counter poor internet access.
5. Support Pedagogical Training: Equip educators with skills to effectively use blended tools and ensure clarity in content delivery.
6. Provide data subsidies and offline access to address connectivity issues.
7. Offer professional development for lecturers on digital pedagogy.

Limitation of The Study

i. The study involved only 51 BBA undergraduate students selected through convenience sampling from a single public university. This relatively small and non-random sample limits the generalizability of the findings to a broader population of undergraduate students, other academic programmes, or different higher education institutions. Students' perceptions of online learning platforms may vary across disciplines, universities, and socio-economic backgrounds, which are not fully represented in this study.

ii. The study relied solely on a quantitative survey using structured questionnaire items and descriptive statistical analysis (frequencies and percentages). While this approach provides an overview of students' preferences and perceptions, it does not capture deeper explanations for their views or examine relationships between variables. The absence of inferential statistics limits the ability to draw stronger conclusions about factors influencing platform preference or to understand the underlying reasons behind students' dissatisfaction with certain platforms.

Conclusion

The findings of this study reveal that undergraduate students show a strong preference for online learning platforms that are accessible, simple to navigate, and mobile-friendly, while simultaneously valuing interactive and functional features that support deeper engagement. Platforms such as Google Classroom and WhatsApp are overwhelmingly favored, largely because they provide intuitive interfaces, require minimal data usage, and allow students to complete tasks and communicate efficiently. The survey results indicate that students not only prioritize convenience and ease of access but also appreciate platforms that support structured academic activities, such as assignment submission, announcements, and feedback tracking.

Conversely, institutional platforms like UFUTURE face significant adoption challenges. Students reported issues with slow access, complex navigation, and limited user-friendly functionalities, which negatively affect engagement and satisfaction. Although certain features, such as tests and assignment management, are still valued, the overall experience is hindered by technical limitations and usability barriers. Google Meet, while providing real-time interaction benefits, is similarly constrained by high data requirements and limited accessibility for some students, highlighting the importance of balancing functionality with infrastructure capacity. The study underscores that blended learning can be effective if platform selection, usability, and technical support align with student needs. To enhance

online learning experiences, institutions should prioritize optimizing the user interface, simplifying complex tools, and integrating features that promote interactivity and collaboration. Providing training for both lecturers and students on digital pedagogy, as well as improving network infrastructure and offering low-data options, could significantly increase platform adoption and learning effectiveness.

In conclusion, this research emphasizes that platform accessibility, simplicity, and mobile optimization are critical determinants of student preference and engagement in online learning. By addressing technical, pedagogical, and infrastructural challenges, Malaysian universities can foster more inclusive, efficient, and sustainable blended learning environments that maximize both student satisfaction and academic outcomes. Looking forward**,** institutions should consider continuous platform evaluation and student feedback loops to ensure the tools evolve alongside learners' needs. Implementing innovative features such as integrated discussion forums, collaborative document editing, and analytics for performance tracking can further enhance learning outcomes. Ultimately, a strategic, student-centered approach to digital learning will not only improve engagement but also prepare students to thrive in increasingly technology-driven educational and professional contexts.

References

Adzharuddin, N. A., & Ling, L. H. (2013). Learning management system (LMS) among university students: Does it work? *International Journal of e-Education, e-Business, e-Management and e-Learning, 3*(3), 248–252. https://doi.org/10.7763/IJEEEE.2013.V3.233

Al-Hunaiyyan, A., Alhajri, R., & Al-Sharhan, S. (2020). Blended e-learning design: Discussion of cultural issues. *International Journal of Advanced Computer Science and Applications, 11*(4), 135–140. https://doi.org/10.14569/IJACSA.2020.0110418

Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and students' perceptions of online learning during COVID-19. *Frontiers in Education, 6*, Article 638470. https://doi.org/10.3389/feduc.2021.638470

Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: From the general to the applied. *Journal of Computing in Higher Education, 26*(1), 87–122. https://doi.org/10.1007/s12528-013-9077-3

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

ElSayad, G. (2024). Higher education students' learning perception in the blended learning community of inquiry. *Journal of Computers in Education.* https://doi.org/10.1007/s40692-023-00290-y

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Han, X. (2023). Evaluating blended learning effectiveness: An empirical study from undergraduates' perspectives using structural equation modeling. *Frontiers in Psychology, 14*, 1059282. https://doi.org/10.3389/fpsyg.2023.1059282

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

Hussin, S., Abdullah, M. Y., & Ismail, N. (2019). The effects of CMC applications on ESL writing anxiety among postgraduate students. *English Language Teaching, 8*(9).

Isda, I., Devira, M., & Purwati, P. (2021). "Whatsapp & Google Classroom?": EFL students' perceptions on online-based learning amid the COVID-19. *Advances in Social Science, Education and Humanities Research, 576,* 336–339. https://doi.org/10.2991/assehr.k.210909.075

Ismail, N., Elias, S., Ratan Singh, D. S., Abu, R., Wan Mohd, W. N. H., Razlan, Z., & Mahmood, C. K. (2025). Investigating online reading habits and attitudes among ESL tertiary students. *International Journal of Academic Research in Progressive Education and Development, 14*(1).

Ismail, N., Hussin, S., & Darus, S. (2012). ESL students' attitude, learning problems, and needs for online writing. *GEMA Online™ Journal of Language Studies, 12*(4), 1089–1107.

Ismail, N., Soo Kum Yoke, C., & Ismail, N. (2018). Reexamining academic reading skills of unemployed graduates through the English Language E-Training (ELET) module. *Insight Journal (IJ), 1*(1), 11–22.

Muslem, A. (2024). The preferred use of Google Classroom features for online learning: Insights from EFL classes. *European Journal of Educational Research.*

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the COVID-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education, 2,* 923–945. https://doi.org/10.1007/s42438-020-00155-y

Razak, A. A., Md Nawi, N. H., Mohd Noor, A. L., Che Daud, B., & Ismail, M. (2021). Students' adaptability in online learning based on Malaysian students' perception. *MALIM: Jurnal Pengajian Umum Asia Tenggara, 22*(1), 1–15. https://doi.org/10.17576/malim.2021.2201.11

Rusli, R., Hashim, F., Mohd Akhir, N., & Nasrudin, N. (2023). Learning management system (LMS) preference among Malaysian educators: A comparison between Google Classroom and Microsoft Teams. *Asian People Journal (APJ), 6*(2), 212–228. https://doi.org/10.37231/apj.2023.6.2.527

Rustam, S. (2025). Analysis of student perceptions on blended learning using learning management system (LMS) for physical education. *International Journal on Informatics Visualization, 9*(X), xxx–xxx.

Soo Kum Yoke, C., & Ismail, N. (2021). Perceived e-learning conditions of Malaysian undergraduates. *International Journal of Academic Research in Progressive Education and Development, 10*(3), 286–294.

Veeramuthu, S. P., Ganapathy, M., Abdul Rahman, M. L., Harun, J., & Ramganesh, E. (2022). Malay literature students' perceptions of online learning experiences during the COVID-19 pandemic at a public university. *Journal of Nusantara Studies, 7*(2), 44–60. https://doi.org/10.24200/jonus.vol7iss2pp44-60

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478. https://doi.org/10.2307/30036540