



**Journal of Social Sciences and
Educational Practices (JSSEP)**
Website: <https://journal.vu.edu.pk/JSSEP>
Email: jssep@vu.edu.pk
Faculty of Education
Virtual University of Pakistan



Vol. 1, No. 1, 72–81, 2025
ISSN: 3106-647X (p)
3106-6488 (e)

Enhancing Student Engagement through Blended Learning: A Multivariate Analysis of its Influence on Academic, Intellectual, and Socio-Emotional Engagement

Van olem e. Benitez ¹

College of Business Administration

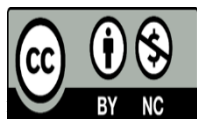
Abstract

The marketing education requires innovative teaching and learning pedagogy due to its vulnerability and complexity. This study analyzed how marketing management curriculum's blended learning approach impacts student engagement. It examined the implementation of blended learning in terms of achieving learning outcomes, instruction delivery, and assessment or evaluation used; characterized the level of academic, intellectual, and socio-emotional engagement; and analyzed the how blended learning predicts the student engagement. A sample of 75 students from a marketing management program were surveyed because the study employed quantitative research method. General Linear Model (GLM) was used to analyzed the data. Findings reveal that the blended learning approach was well implement specifically achieving learning outcomes, diverse instructional delivery methods, and project-based assessments were observed. However, areas for improvement were identified such as the provision of clearer learning outcomes, incorporation of technological learning tools, and utilization appropriate/competency-based assessment methods. High student engagement was found across all three domains implying a favourable learning environment that illustrates achievement, curiosity and social interactions. The findings suggest that to improve student engagement and learning outcomes, educators may adopt and maximize the benefit of the use of blended-learning approach.

Keywords: Blended Learning Approach, Student Engagement, Marketing Management, Assessment, Evaluation

Citation

Benitez, V. O. E. (2025). Enhancing student engagement through blended learning: A multivariate analysis of its influence on academic, intellectual, and socio-emotional engagement. *Journal of Social Sciences and Educational Practices*, 1(1), 72–81.



© Van olem e. Benitez. Authored this article in the *Journal of Social Sciences and Educational Practices*, published by the Virtual University of Pakistan and distributed under the Creative Commons Attribution (CC BY 4.0) license.

¹Corresponding Author. Instructor I

Email address.vanolembenitez@jrmsu.edu.ph

Introduction

Blended learning is described as a flexible and personalized learning experience that caters to diverse learning styles and preferences (Anthony et al., 2020). According to Kotler and Keller (2021), blended learning evolves as a relevant pedagogical approach or strategy specifically in the ever-changing and technologically driven landscape of marketing, thus, integrating in-person, online learning, and hybrid settings to boost student engagement and learning results (Kotler & Keller, 2012). More research is needed to examine the usefulness of blended learning, for raising student involvement and improving learning results in marketing management courses even though blended learning is becoming popular. The marketing world is fast changing and driven by technology so new teaching methods are needed in teaching marketing management. Chiu (2021) says that blended learning, which mixes face-to-face and online learning environments is a way to raise student involvement, improve learning results and ready students for today's business world (Kotler & Keller 2012). In marketing management courses, blended learning has been shown to be beneficial in achieving various learning outcomes. Blended learning has been proven in studies to improve student understanding of essential marketing concepts and theories (Zeng, 2023; Cannon et al., 2023), to improve critical thinking and problem-solving skills (Picciano et al., 2013), and to foster collaboration and teamwork (Anthony et al., 2020).

Blended learning courses use ways to deliver the instruction to fit the learning styles and preferences. Online components often use simulations, multimedia presentations and discussion forums (Angwaomaodoko, 2025). In-person meetings let the class have talks, case studies and hands-on activities that reinforce the theory and apply the theory to real-world situations. Assessment, in learning courses includes ways to evaluate the student comprehension and the development. Traditional assessments, like quizzes, exams and essays often get help from resources such as online quizzes, discussion forums and peer evaluations (Kotler & Keller 2012; Fredricks et al., 2004; Torto, 2020). Blended learning settings let the assessment become more personal and stay continuous, and it gives both students and teachers clear feedback.

Most research focuses more on the claimed benefits of blended learning despite the lack of data to back those claims (Picciano et al. 2013; Angwaomaodoko, 2025). Further research specifically on the features that drive student engagement in learning is needed because this can shape how educators design and run blended learning courses (Fredricks et al., 2004; Torto, 2020). In marketing management education, student participation matters for learning results. In this sense, students who are engaged in the learning process are more likely to apply the information that students learn to life (Boden, 2019; Bergdahl et al., 2024). Academic engagement is the involvement of students in the thinking parts of learning. Academic engagement includes attending classes, joining discussions, finishing projects, and asking instructors for help when needed (Holmes, 2017). The academic involvement leads to the accomplishment in marketing management courses (Fredricks et al., 2004; Torto, 2020; Bergdahl et al. 2024). In other words, academic involvement helps the accomplishment in the marketing management expected outcomes and competencies.

Intellectual engagement goes beyond involvement. Intellectual domain of student engagement includes students' thinking, problem solving and analysis skills. Students who are intellectually engaged tend to question assumptions, challenge views and create solutions (Fredricks et al., 2004; Torto, 2020). Intellectual engagement is very important, in marketing management education because it prepares students for the complex business world, meaning students who are engaged handle business challenges better. Students' socio-emotional engagement is the way students relate to the learning environment and to their classmates. A feeling of sense of belonging, identifying with the course content, and feeling supported by the instructors and the classmates are all examples of this domain of engagement (Patwardhan et

al., 2020; Fredricks et al., 2004; Picciano et al. 2013). Socio-emotional engagement helps build drive, tenacity, and resilience (Chiu, 2021). The drive, the tenacity, and the resilience support success in marketing management education.

Given these situations, the focus of the paper is clear, that is: to assess the blended-learning approach and the student engagement of Marketing Management students of Jose Rizal Memorial State University-Dipolog Campus. The paper examines how the blended-learning approach influences the student engagement of Marketing Management students. The researchers also look at how the student engagement of Marketing Management major students changes with the blended-learning approach. The results of this study can help the academic body plan, use learning and teaching methods that equip Marketing Management students with marketing competence. This paper also addresses two interconnected United Nations Sustainable Development Goal: 4 – Quality Education and Goal 8 – Decent Work and Economic Growth.

Significance of the Study

One of the significances of the study lies in its ability to bridge the research void or gap in comprehending the effectiveness and efficiency of blended learning in increasing student involvement, participation, or engagement and improving learning outcomes or competencies in marketing management education. There is limited data to back the claimed benefits of blended learning in the field of business and marketing, and the need to describe the dimensions that drive student engagement in learning settings. These reasons demonstrate the gap that the study wants to address. Blended learning can help design and run the blended learning courses, in marketing management education. Educators can make choices about picking and mixing face-to-face activities when they know how blended learning changes student engagement and learning results. The study's findings can help to shape the development of marketing professionals with the skills and knowledge needed to succeed in today's business environment.

Research Objectives

The objective of my study is to:

1. The study aimed to assess the blended-learning approach implemented in the marketing management curriculum and the degree to which it predicts or influence student engagement in terms of academic engagement, intellectual engagement, and socio-emotional engagement.

Research Questions

Following research questions will address in the present study:

1. To what extent the blended-learning approach is implemented in the marketing management curriculum in terms of achieving learning outcomes, instruction delivery, and assessment or evaluation used?
2. What is the level of student engagement in the marketing management curriculum in terms of academic engagement, intellectual engagement, and socio-emotional engagement?
3. Is there a significant causal relationship between the extent of the implementation of blended-learning approach and the level of student engagement in the marketing management curriculum?

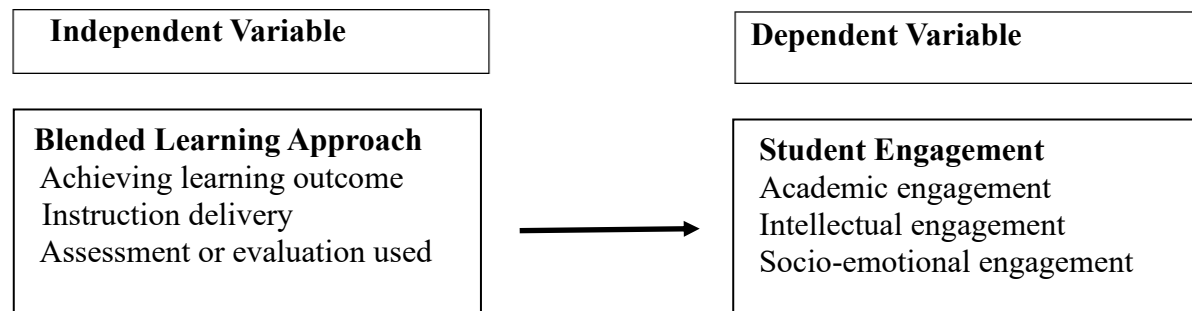
Theoretical Framework

The study was anchored in two commonly known theoretical framework: self-determination theory (SDT) and community of inquiry (COI). Self-determination theory (SDT) offers a thorough framework for comprehending the aspects that drive student motivation and engagement, both of which are critical for success in blended learning situations (Chiu, 2021). SDT can assist academics in identifying techniques for building blended learning courses that encourage student engagement and generate positive learning

outcomes by concentrating on the needs for intellectual engagement (autonomy), academic engagement (competence), and socio-emotional engagement (relatedness). Thus, this theory served as the basis for defining each domain of the student engagement ensuring that each domain (intellectual, academic, and socio-emotional) captured key motivational needs that predict learning outcomes in blended learning context.

The community of inquiry (COI) framework gives a way to build learning environments that bring a shared purpose, critical thinking, collaborative learning and shared responsibility for learning results (Patwardhan et al. 2020). The community of inquiry (COI) framework can help academic personnel design blended learning courses increases student engagement and raise learning outcomes. This framework includes teaching presence, cognitive presence and social presence. I have used the community of inquiry (COI) framework, in my classes. Seen the benefits. The community of inquiry (COI) framework works well. In the context of this study, instructional delivery reflects teaching and social presence, as it involves the design, organization, and facilitation of instruction. Assessment or evaluation connects to teaching presence and cognitive presence. Assessment or evaluation captures how assessment strategies support meaning-making and learning progression. it emphasizes students' ability to construct meaning through sustained reflection and discourse an essential indicator of effective blended learning. Thus, the COI identifies the elements needed in implementing the blended learning approach in marketing management program.

Conceptual Framework



The framework shows the causal relationship between blended-learning (independent variable) and student engagement (dependent variable). Blended learning, as defined previously, is a pedagogical approach that combines online and offline classes to achieve high level of engagement and positive learning outcomes. This means that the approach can clearly help student involved or engage and makes learning results even better. In the framework, student engagement has three domains namely, academic engagement, intellectual engagement, and socio-emotional engagement. The blended learning approach provides the students the ability to control over the way they learn. In other words, the students can take charge of their learning experience. It also can foster deeper intellectual engagement though the aid of critical thinking, problem-solving, and collaboration by online discussions and group works. Aside from these, blended learning also pushes and encourages the students to think beyond what they know. Blended learning encourages the students to use thinking to solve problems and to work together. Finally, the framework says blended learning can strengthen students' socio-emotional connection. Blended learning does this by giving chances, for interaction by building relationships with peers and instructors, and by promoting a sense of community.

Materials and Methods

In this study, a quantitative research approach was employed to investigate the effect of blended learning approach on student engagement. The study's population was the 2nd year to 4th year marketing management students who had experienced the blended learning approach in their curriculum. A stratified sampling technique was used to pick 75 respondents, from the

total population of 92 students. The sample size of 75 was seen as enough to represent the population for many reasons:

- A sample size of 75 is considered a moderate size, which is suitable for descriptive research (Krejcie & Morgan, 1970).
- The stratified random sampling technique ensured that the sample was representative of the entire population, as it ensured that each stratum (i.e., each year level) was proportionally represented in the sample.
- According to Cohen et al. (2007), having the 75 respondents for the study provided enough to enable statistical analysis and ensure that the results were generalizable to the population.
- Malhotra and Dash (2013) have shown that a sample size of 75 is sufficient and can give valid and reliable results and interpretation of the data.

This study analyzed the how the blended learning approach impacted the student engagement in the context of marketing management curriculum. The blended learning was then operationalized through the three constructed parameters namely 'achieving learning outcome' (ALO), 'instruction delivery' (ID), and 'assessment or evaluation use' (AUE). Meanwhile, the student engagement was operationalized and measured through the 3 domains namely 'academic engagement' (AE), 'intellectual engagement' (IE), and 'socio-emotional engagement' (SE). The questionnaire was validated by three professionals in the field of marketing management and business education through the face and content validity. The instrument was also pilot-tested with 30 non-actual respondents (meaning with similar characteristics with the actual respondents) to determine its dependability. The results yielded a Chronbach's alpha value of 0.9 which can be interpreted that the instrument was dependable, appropriate, and ready for usage.

Different statistical techniques were utilized for this study specifically on the causal relationship between the blended learning approach and student engagement. The average weighted mean was used to characterize or describe the extent to which the blended learning approach is implemented in the marketing management program. The same statistical tool was used to describe the level of student engagement. Moreover, the General Liner Model (also known as GLM) specifically the multivariate test was also used to analyzed keenly significant effect of the blended learning approach on ALO, ID, and AUE, and in relation to AE, IE, and SE. Data were examined at a significant level of 0.05. A statistical software was utilized to answer the specific research questions.

Despite the rigorous methodology adopted for this study, however, it is also essential to acknowledge that there were limitations of this study when interpreting the results. The study was conducted within a single university which may limit its generalizability to other institutions. The nature of the assessment was on self-reported by the respondents which may be subject to potential bias and limitations. Furthermore, other factors exist that influence the student engagement that were not accounted for in this study. Given these constraints, the study could still contribute a baseline yet deeper understanding of the impact of blended learning on the student engagement in the marketing management curriculum. The findings may have recommendations for educators, administrators, and other academic bodies who seek to improve learning systems, student engagement, and learning outcomes in higher education.

Findings of the study

Assessment of Implementation of Blended Learning Approach in the Marketing Management Curriculum

Table 1

Assessment of the students to the implementation of blended-learning approach to Marketing Management program

| Implementation of Blended Learning Approach | Mean | Interpretation |
|--|-------------|-----------------------|
| 1. Achieving learning outcomes (ALO) | 4.23 | Highly Observed |
| 2. Instruction delivery (ID) | 4.37 | Highly Observed |
| 3. Assessment or evaluation used (AUE) | 4.18 | Much Observed |

Table 1 showed a weighted average of 4.23 for the implementation of blended learning in achieving the learning outcomes of the marketing management courses. This implies that students generally highly observed the used of blended learning approach in the program. In this context, students appreciated and witnessed the activities they do together to finish an intellectual project, get comprehensive information of the course's objectives and expectations, and present themselves academically and socially both offline and online in order to achieve the learning outcomes set in the program. Despite these appreciations to the use of blended learning for achieving learning outcomes, the use of technology-enabled learning tools and the provision of the instructor's learning at the end of each session found to be areas that needed improvements.

On the second dimension, students rated the instruction delivery (ID) of blended learning as highly observed which means that teaching and learning delivery in this approach are highly implemented. This implies that professors utilize a range of instructional techniques such as project-based learning, group presentations, interactive sessions, and online, modular, and/or in-person trainings which were appreciated by the students. However, learning assignment flexibility and clear notification of deadlines were identified as areas needing further improvements.

Though the first two dimensions showed positive response from students regarding the implementation of the blended learning, the assessment and evaluation (AUE) yielded only a 'much observed' rating by the marketing management students. This means that most of the assessments or evaluations used in this approach are needed enhancement. Project-based tests were most favored and yielded a positive value by the students because these performance-based outputs are aligned with the learning goals of the course. Other areas that need improvement were formal and informal evaluation, qualitative and quantitative ratings, method to monitor student progress, and validated rubrics for student outputs.

These findings are consistent with earlier research of Picciano et al. (2013), Holmes (2017), and Benitez (2023) that they suggest blended learning strategies can improve learning outcomes and active participation in university academic activities. The findings infer that the blended learning approach is truly a valuable teaching and learning approach for upcoming course modification.

Student Engagement in the Marketing Management Curriculum

Table 2

Level of engagement of the Marketing Management students with blended learning in terms of Academic engagement

| Student Engagement | Mean | Interpretation |
|------------------------------------|-------------|-----------------------|
| 1. Academic Engagement (AE) | 4.12 | High Level |
| 2. Intellectual Engagement (IE) | 4.18 | High Level |
| 3. Socio-emotional engagement (SE) | 4.43 | Extreme Level |

The table 2 explicitly revealed the analysis of the student level of engagement in the blended learning approach in the context of marketing management curriculum. A high level of academic engagement (AE) was exhibited by the students which indicates that they are actively participative in their education and made use of the opportunities blended learning has offered for them. As seen in their high levels of involvement in both offline and online assignments and completion of task on time, students were very driven to connect with the learning materials

and take ownership of their education. These findings supported the claims of Cao (2023) which the research noted that the control and flexibility of blended learning have enhanced the learning outcomes and engagement of the students. Although students showed a high degree of interest, students found areas for improvement to further increase their academic engagement. These improvements include the utilization of the university's learning management system for assignments, actively listening to instructors or professors during class discussion, and participating in online and offline class discussions and activities.

In the intellectual engagement (IE), marketing management students exhibited a high level of engagement in the blended learning approach as shown in table 2. This implies that students were reportedly active in applying their knowledge, evaluating difficult assignments, and applying higher order thinking skills. This is consistent with the study of Zeng's (2023) that found blended learning increase student's intellectual engagement in a higher education. This is because this approach increased opportunities for individualized instructions, involvement, and collaboration.

Marketing management students also revealed an extreme level of socio-emotional engagement in the blended learning approach which means that they are extremely active in working with classmates, in seeking assistance from instructors or professors, and in developing strong relationships. In addition, they also demonstrated high levels of eagerness to learn with peers, ask questions, and express their point of view or thoughts in group discussion. A high level of communication and teamwork was also evident. According to Tabassum et al. (2024), these levels exist because blended learning fosters strong bonds between students and academic personnel as well as a feeling of community among the students. The authors even further emphasized and clarifies that blended learning provides greater opportunities for customization and individualization. This conclusion is strongly supported by Angwaomaodoko's (2025) findings that show how blended learning has improved the capacity of the students specifically for collaborative learning and teamwork while being aware of oneself.

Multivariate Tests of Blended Learning Approach in Marketing Management Curriculum

Table 3

Tests of Between-Subjects Effects_Blended Learning Approach to Student Engagement

| Tests of Between-Subjects Effects | | | | | | |
|-----------------------------------|--------------------|-------------------------|----|-------------|-----------|------|
| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | AE | 16.641 ^a | 58 | .287 | 4.686 | .001 |
| | IE | 16.245 ^b | 58 | .280 | 4.066 | .002 |
| | SE | 15.034 ^c | 58 | .259 | 4.234 | .001 |
| Intercept | AE | 833.681 | 1 | 833.681 | 13616.790 | .000 |
| | IE | 814.301 | | 814.301 | 11822.438 | .000 |
| | SE | 866.799 | | 866.799 | 14157.719 | .000 |
| ALO | AE | 1.773 | 1 | .161 | 2.632 | .039 |
| | IE | .394 | 1 | .036 | .520 | .863 |
| | SE | 1.375 | 1 | .125 | 2.042 | .094 |
| ID | AE | .967 | 1 | .088 | 1.436 | .248 |

| | | | | | | |
|------------|----|----------|---|------|-------|------|
| | IE | 2.190 | 1 | .199 | 2.890 | .027 |
| | SE | 1.565 | 1 | .142 | 2.323 | .061 |
| | AE | 1.196 | | .133 | 2.170 | .085 |
| AUE | IE | .428 | | .048 | .690 | .708 |
| | SE | .938 | | .104 | 1.703 | .169 |
| | AE | .000 | | . | . | . |
| ALO * ID | IE | .000 | | . | . | . |
| | SE | .000 | | . | . | . |
| | AE | .000 | | . | . | . |
| ALO * AUE | IE | .000 | | . | . | . |
| | SE | .000 | | . | . | . |
| | AE | .000 | | . | . | . |
| ID * AUE | IE | .000 | | . | . | . |
| | SE | .000 | | . | . | . |
| | AE | .000 | | . | . | . |
| ALO * ID * | IE | .000 | | . | . | . |
| AUE | SE | .000 | | . | . | . |
| | AE | .980 | 6 | .061 | | |
| Error | IE | 1.102 | 6 | .069 | | |
| | SE | .980 | 6 | .061 | | |
| | AE | 1291.878 | 5 | | | |
| Total | IE | 1286.898 | 5 | | | |
| | SE | 1345.020 | 5 | | | |
| | AE | 17.620 | 4 | | | |
| Corrected | IE | 17.347 | 4 | | | |
| Total | SE | 16.014 | 4 | | | |

a. R Squared = .944 (Adjusted R Squared = .743)

b. R Squared = .936 (Adjusted R Squared = .706)

c. R Squared = .939 (Adjusted R Squared = .717)

The three interrelated aspects of student engagement: academic engagement (AE), intellectual engagement (IE), and socio-emotional engagement (SE) are the dependent variables of this study. A multivariate test of between-subjects effects was used to achieve this. The independent variables of the blended learning include achieving learning outcome (ALO), instruction delivery (ID), and assessment or evaluation used (AUE) are subjected for their independent effects. In addition, this study searches for potential links between these domains and their potential effects on each engagement dimension.

Based from the presented data in table 3, each dimension of the blended learning approach significantly affects at least of the dimensions of student engagement. One of the most interesting results is on how ALO has a significant influence on the AE (with a p-value

of 0.039). This result emphasizes that on achieving the ALO in the blended learning approach has a favourable effect on student's academic engagement. The present results agree with Prinsen and De Bruijn-Smolters (2024). But, it appears that ALO has no effect afternoon on either socio-emotional engagement (SE) or intellectual engagement (IE).

Instructional delivery (ID), on the other hand, has a substantial effect on IE (with a p-value of 0.027) which suggests that the blended learning's specific instructional delivery method is truly crucial in developing and increasing an intellectual engagement. ID also shows a slightly significant effect on SE (with a p-value of 0.061) which means instructional delivery may considerably has smaller effect on socio-emotional involvement. Another interesting finding is that AUE trends toward significance for AE (with a p-value of 0.085) but it does not attain statistical significance for any of the student engagement dimension. This means that the type of assessment or evaluation used in blended learning may not have a direct effect on the student engagement.

Another finding is the absence of interactions effects between any combination of blended learning approach and student engagement dimensions. This clearly implies that each domain of the implementation of blended learning effects on student engagement function separately and are not affected by one another. These results indicate that in increasing the engagement of student in the marketing management curriculum, educators may give top priority specifically on creating blended learning strategies that emphasize the attainment of learning outcomes, excellent instructional delivery, and efficient assessment techniques.

Conclusion and Implications

Based on the findings of the study, the following are concluded:

- The implementation of blended learning strategy was highly, positively received by the marketing management program's students as they rated 'highly observed' for achieving the learning outcomes, the use of wide range of instructional delivery, and the used of evaluation or assessment tools. However, there are areas for improvement such as offering flexibility in learning assignments, employing a wider range of assessment techniques with more transparent communication and mechanisms for feedback, providing clearer learning outcomes in the end of the end of sessions, and adding more technology-enabled learning tools.
- Students in marketing management program exhibited extreme level of engagement across three domains: academic, intellectual, and socio-emotional in the blended learning setting. Meaning, they exhibit critical thinking, teamwork, and active participation. The study concluded and claims that blended learning approach improves academic performance, intellectual growth, and learning environment for marketing management students. In this study, blended learning develops a strong learning space for students studying the marketing management program, encourage academic success, constructive and social interactions, and intellectual curiosity. But despite that, there are rooms for improvement specifically for the use of online platforms and participation in class discussions.
- All three blended learning approach domains (Achieving Learning Outcomes (ALO), Instruction Delivery (ID), and Assessment or Evaluation Used (AUE)) have independent effects on student engagement. Aligning learning activities with course goals (ALO) fosters academic engagement, while the chosen instructional delivery method (ID) significantly impacts intellectual engagement and potentially socio-emotional engagement as well. Assessment methods (AUE) show a trend towards influencing academic engagement, but further research is needed to confirm this effect.

Recommendations

Based on the findings of the study, the following are recommended:

- Program chairpersons and marketing management instructors may review the Marketing Management curriculum to ensure that blended learning approach aligns with industry standards and expectations.
- Marketing management program may send their instructors to trainings in how to effectively use blended learning methods in their teaching.
- Marketing management program may develop a variety of blended learning approaches depending on specific learning outcomes of the course and the needs of the students.
- Instructors may use a variety of assessment methods to evaluate student performance comprehensively. They may implement clear and timely communication of feedback mechanisms for all assessments.
- Future researchers may develop framework for evaluating the effectiveness of blended learning programs and may replicate this study on other course offerings/programs.
- Conduct a longitudinal study to track student engagement and learning outcomes over time within the Blended Learning environment. This would provide valuable information on the program's long-term effectiveness.

References

- Anthony, B., Kamaludin, A., Romli, A., Raffei, A. F. M., Phon, D. N. A. L. E., Abdullah, A., & Ming, G. L. (2020). Blended learning adoption and implementation in higher education: A theoretical and systematic review. *Technology, Knowledge and Learning*, 27(2), 531–578. <https://doi.org/10.1007/s10758-020-09477-z>
- Angwaomaodoko, E. A. (2025). Impact of blended learning on student engagement and academic performance. *International Journal of Recent Research in Social Sciences and Humanities (IJRRSSH)*, 12(3), 24–29. <https://doi.org/10.5281/zenodo.16264499>
- Benitez, V. (2023). Students' learning style and their preference to teaching method. Jose Rizal Memorial State University. https://www.researchgate.net/publication/367969086_Students'_Learning_Style_and_their_Preference_to_Teaching_Method
- Bergdahl, N., Bond, M., Sjöberg, J., Dougherty, M., & Oxley, E. (2024). Unpacking student engagement in higher education learning analytics: A systematic review. *International Journal of Educational Technology in Higher Education*, 21(1). <https://doi.org/10.1186/s41239-024-00493-y>
- Boden, K. E. (2019). Pedagogical innovation among university faculty. *Creative Education*, 10(5), 848–861. <https://doi.org/10.4236/ce.2019.105063>
- Cannon, J. P., Lohtia, R., & Paulich, B. J. (2021). Blended learning in principles of marketing: The effects of student differences on student performance. *Journal of Marketing Education*, 45(1), 70–90. <https://doi.org/10.1177/02734753211058357>
- Cao, W. (2023). A meta-analysis of effects of blended learning on performance, attitude, achievement, and engagement across different countries. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1212056>
- Chiu, T. K. F. (2021). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54(sup1), S14–S30. <https://doi.org/10.1080/15391523.2021.1891998>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge. <https://doi.org/10.4324/9780203029053>

- De Bruijn-Smolders, M., & Prinsen, F. R. (2024). Effective student engagement with blended learning: A systematic review. *Heliyon*, 10(23), e39439. <https://doi.org/10.1016/j.heliyon.2024.e39439>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <http://www.jstor.org/stable/3516061>
- Holmes, N. (2017). Engaging with assessment: Increasing student engagement through continuous assessment. *Active Learning in Higher Education*, 19(1), 23–34. <https://doi.org/10.1177/1469787417723230>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610. <https://doi.org/10.1177/0013164470030003>
- Kotler, P., & Keller, K. L. (2012). *Marketing management* (14th ed.). Pearson eBooks.
- Malhotra, N. K., & Dash, S. (2016). *Marketing research: An applied orientation*. Pearson.
- Patwardhan, V., Rao, S., Thirugnanasambantham, & Prabhu, N. (2020). Community of Inquiry (CoI) framework and course design as predictors of satisfaction in emergency remote teaching. *Journal of E-Learning and Knowledge Society*, 16(4), 94–103. <https://doi.org/10.20368/1971-8829/1135315>
- Picciano, A. G., Dziuban, C. D., & Graham, C. R. (2013). *Blended learning: Research perspectives* (Vol. 2). Routledge. <https://www.taylorfrancis.com/books/blended-learning-anthony-picciano-charles-dziuban-charles-graham/e/10.4324/9781315880310>
- Tabassum, B., Moin, M., Abbas, Q., Kumbhar, M. I., & Khan, M. H. N. (2024). The impact of blended learning on student performance. *Journal of Education and Social Studies*, 5(2), 360–371. <https://doi.org/10.52223/jess.2024.5217>
- Torto, G. A. (2020). Investigating the type of student engagement that exists in English classrooms of public basic schools in Ghana. *Open Journal of Social Sciences*, 8(9), 69–83. <https://doi.org/10.4236/jss.2020.89005>
- Zeng, C. (2023). Student engagement and academic performance during the COVID-19 pandemic: Does a blended learning approach matter? *International Journal for the Scholarship of Teaching and Learning*, 17(1), 1–9. <https://doi.org/10.20429/ijstol.2023.17107>