Contribution ID: **89** Type: **Oral**

EFFECTIVENESS OF BLENDED LEARNING IN PHYSICAL EDUCATION

Thursday, October 2, 2025 4:30 PM (15 minutes)

Abstract. This study aimed to find the relationship between student's perception and academic performance in learning Physical Education using blended learning. The study used a descriptive correlational quantitative method research design. The respondents were the PATHFIT students of Northwestern Mindanao State College of Science and Technology in the first semester of the academic year 2023-2024. The level of students' perception of blended learning in physical education is average. The academic performance of students in Physical Education was very good. There was no relationship between student's perception and academic performance in learning Physical Education using blended learning. The transition of learning modality from face-to-face classes to distance learning caused by the COVID-19 pandemic challenged PE students and teachers. In order to increase blended learning's overall efficacy in physical education, educators should consider discussion on the issues related to perception and support in addition to technical challenges in the future.

Keywords: academic performance, blended learning, PATHFIT

Background

Since the dawn of industrialization, numerous changes have occurred in all facets of human life. People nowadays live very differently than they did in the past. Many aspects of communication, transportation, and the economy have improved. Along with these, the learning model of education has become more accessible as new technologies develop.

However, a global crisis due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), COVID-19 has changed the world. According to the World Health Organization (WHO), COVID-19 is responsible for global excess mortality. As stated by Tria (2020), the educational sector was mostly affected. Face-to-face classes were suspended to stop the infection from spreading and to ensure the safety of the learners, teachers, and personnel.

However, to guarantee the continuous delivery of education under the "New Normal", the Higher Education Commission (CHED) released a memorandum order no. 4 series of 2020 whose subject is the Guidelines on the implementation of flexible learning. This memorandum states that in compliance with the relevant Republic legislation Act No. 7722 (RA), also referred to as the "Higher Education Act of 1994", Republic Act No. 11469, otherwise known as the"Bayanihan to Heal As One Act", and by the virtue of Commission en Banc (CEB) Resolution No. 412-2020, the Higher Education Commission (CHED) hereby adopts and promulgates the Guidelines on Flexible Learning (FL) to be implemented by public and private Higher Education Institutions (HEI). This document contains the general guidelines that all levels of public and private higher education institutions in the nation must follow when implementing flexible learning and teaching options, approaches, strategies, systems, pedagogies, and modalities in undergraduate and graduate programs, including those that require permits. It will apply to all current HEI students, including incoming first-year students. Programs, courses, and learning interventions are designed and delivered to meet the individual needs of learners concerning location, pace, learning method, and learning outcomes. It covers face-to-face or in-person learning, learning outside of the classroom, and a combination of learning modes of delivery. It also involves the use of digital and non-digital technology. When the use of conventional teaching methods is impractical, like in the case of national emergencies, it guarantees the continuation of inclusive and accessible education. In this context, educators and students collaborate to create knowledge and have the authority to tailor learning experiences to improve student learning based on the realities of our classrooms. Therefore, flexible learning is an adaptable modality to teaching and learning that considers students' different learning styles and needs for different access points to course materials.

Correspondingly, there were several considerations upon the selection of the alternative learning delivery modality, such as the availability of materials at home, location, convenience, and printing cost. Results from the survey showed that only a few students had gadgets at home and the majority could not access the internet, thus online distance learning was not possible. To respond to the gap, a state college in the city of Tangub, one of the provinces in Misamis Occidental was able to come up with a solution of making a module for each subject course. The institution then tapped every nearby municipality to have a drop box area where students could submit their modules.

Two learning delivery modalities were crafted; the online modality through the use of Google Classroom and the modular type of learning where it was printed and distributed by the institution. Both are uniquely beneficial to the students. However, only those students who have an internet connection can access the Google Classroom. Thus, some students regardless of their location selected modular as their learning modality.

As a newly implemented mode of learning in the "New Normal Education", the researchers aimed to assess the effectiveness of online and modular modalities of learning. It further sought to find out whether the blended type of learning has effects on students'perception, and academic performance as well as the relationship of both student's perception of blended learning and the academic performance of the respondents.

Statement of the Problem

This study aimed to find out the effectiveness of blended learning in Physical Education among the students of a state college in Tangub City and its relationship on students'academic performance in the new normal delivery of instruction.

1. What is the level of students'perception of Physical Education using blended learning?
2. What is the academic performance of students in Physical Education?
3. Is there a significant relationship between a student's perception and academic performance in Physical Education using blended learning?

Methods

This study used a descriptive-correlational design. It sought to find out whether there was a significant correlation between students' perception and their academic achievement when learning physical education through blended learning. The participants of this research were the 92 PATHFIT students of a state college in Tangub City, Northern Mindanao school year 2023-2024.

A modified questionnaire was pilot-tested to ensure its reliability and validity. The number of participants from each block was determined using stratified random sampling. Moreover, the data were statistically treated using weighted mean, and Pearson product-moment correlation coefficient.

Results

Based on the data that were gathered, the study's key conclusions are as follows:

1. Students'level of perceptions in Physical Education using blended learning, was all average.
2. The level of academic performance of the students in Physical Education was very good.
3. There was no significant relationship between students'perception on blended leaning and academic performance in physical education.

Conclusion

PATHFIT students and teachers faced challenges due to the COVID-19-related shift in the learning modality from in-person instruction to blended learning. Although, students value features like self-paced learning and flexible scheduling, questions remain about how effective blended learning is. Despite these reservations, a student's excellent academic achievement shows that they may succeed in a mixed-learning setting. Nonetheless, the lack of a strong link between students' perceptions and their academic achievement highlights the call for a more complex understanding of the variables affecting blended learning success. Going forward, teachers must think about addressing not just the technical difficulties but also the factors connected to perception and assistance in the hope of boosting blended learning's overall efficacy in physical education.

REFERENCES

Alhazbi, N. A., Alharbi, N., & Aldosari, M. (2021). The Impact of Self-Regulated Learning Strategies on Academic Performance for Online Learning during COVID-19. Frontiers in Education, 6, 658727.

Bao, W., & Li, C. (2021). The impact of COVID-19 on student motivation and academic performance: A meta-analysis. Education and Information Technologies, 26(2), 1-16.

Bendania, F. (2011). Students' attitudes towards a blended learning environment using the OCC model. Journal of Educational Technology & Society, 14(4), 101-113.

BenQ (2021). 5 challenges of blended learning. BenQ Education Asia Pacific.

Chen, C., & Yang, Y. (2021). The impact of COVID-19 on student motivation and engagement in online learning: A comparative study of two universities in China. Education and Information Technologies, 26(7), 1-16.

Chetty, R., Friedman, J. N., Handcock, M. S., & Jackson, C. (2020). The effects of the COVID-19 pandemic on educational inequality. National Bureau of Economic Research Working Paper 27813.

Commission en Banc (CEB). (2020). CEB Resolution No. 412-2020, series of 2020: Guidelines on the Implementation of Flexible Learning. Retrieved from https://ca.usm.edu.ph/usm-ca-faculty-as-resource-persons-during-barmm-mbhte-he-faculty-training-on-flexible-learning/

Commission on Higher Education. (2020). CMO No. 4, s. 2020 Guidelines on the Implementation of Flexible Learning. Quezon City, Philippines: Commission on Higher Education.
Giarla, M. C. (2022). Blended Learning: A Powerful Tool for Personalized Education. In Blended Learning for Adult Education (pp. 1-12). IGI Global.
Graham, C. R., Woodfield, E., & Harrison, J. (2011). The foundations of blended learning: A theoretical framework for blended practice. In C. R. Graham (Ed.), Handbook of blended learning: Global perspectives, local designs (pp. 1-21). Routledge.
Halverson, R., Graham, C. R., & Osmundson, E. (2014). Blended learning in higher education: Framework, principles, and guidelines. EDUCAUSE Review, 49(2), 8-29.
Jaadi, Z. (2021, December 12). Everything you need to know about interpreting correlations. Medium. https://towardsdatascience.com/eve
you-need-to-know-about-interpreting-correlations-2c485841c0b8
Kumar, S., Agarwal, M., & Agarwal, N. (2021). Defining and Measuring Academic Performance of HEI Students-A Critical Review. Turkish Journal of Computer and Mathematics Education, 12 (6), 3091-3105.
Loveless, D. (2023). Blended learning: A practical guide for educators and trainers
Routledge.
Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. Rupkatha Journal on Interdisciplinary Studies in Humanities Special Issue, 3 (2), 12-19.
Republic of the Philippines. (1994). Republic Act No. 7722: Higher Education Act of 1994. Retrieved from https://lawphil.net/statutes/repacts/ra1994/ra_7722_1994.html
Republic of the Philippines. (2020). Republic Act No. 11469: Bayanihan to Heal as One Act. Retrieved from https://polisci.upd.edu.ph/resources/bayanihan-primer/
Rogens, J. (2012). The relationship between students' perceptions of their academic performance and their actual academic performance. Journal of Educational Psychology, 104(3), 779-791.
Sagarra, N., & Zapata, G. C. (2008). Blending classroom instruction with online homework: A study of student perceptions of computer-assisted L2 learning. ReCALL, 20(2), 208-224.
Salvador, A., Morales, D. R., & Hernández, J. R. (2008). The effects of computer-assisted instruction on the achievement of students with learning disabilities. Journal of Educational Technology & Society, 11(2), 297-306.
Shantakurami, S. (2015). Effectiveness of blended learning on student learning outcomes in a higher education institution in the United States. The International Journal of Engineering Education, 31(5), 1444-1459.
Smyth, R., Phillips, R., & Graham, A. (2012). Students' perceptions of a blended learning environment to promote critical thinking. Frontiers in Psychology, 3, 122.
Stracke, E. (2007). A route to comprehension: A qualitative investigation into the reasons why students leave a blended language learning (BLL) setting. ReCALL, 19(1), 57-78.
Taylor, R. T. (2012). Examining the Motivated Strategies for Learning Questionnaire (MSLQ) and Assessing Scale Reliability via Reliability Generalization Techniques (Doctoral dissertation, Auburn University, Auburn, AL).
Tong, D. H., Uyen, B. P., & Ngan, L. K. (2022, December 1). The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: A quasi-experiment study in teaching the conventions for coordinates in the plane. Heliyon. https://doi.org/10.1016/j.heliyon.2022.e12657
Tria, J. Z. (2020). The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal. International Journal of Pedagogical Development and Lifelong Learning, 1 (1), ep2001. https://doi.org/10.30935/ijpdll/8311
UNICEF Philippines. (2020). Education in the time of COVID-19: The Philippines. https://www.unicef.org/philippines/
Wigfield, A. & Eccles, J. (2000). Expectancy-Value Theory of Achievement Motivation. Contemporary Educational Psychology, 25, 68-81.
World Bank. (2021). The impact of COVID-19 on learning outcomes in the Philippines: Evidence from a national assessment. https://www.worldbank.org/en/topic/education/coronavirus
Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. Theory Into Practice, 41 (2), 64-70.
Zheng, W., Ma, Y.-Y., & Lin, H.-L. (2021). Research on Blended Learning in Physical Education During the COVID-19 Pandemic: A Case Study of Chinese Students. SAGE Open, 11(4). https://doi.org/10.1177/21582440211058196.

Authors: Ms BOSTON, Hazzel Joyce; Ms LAURENTE, Argen

Presenter: Ms LAURENTE, Argen

Session Classification: Physical Education: Innovation and Pedagogy

Track Classification: Physical Education: Innovation and Pedagogy