

EFFECTIVENESS OF SML IN IMPROVING KNOWLEDGE IN BASKETBALL SKILLS AMONG 1ST YEAR FEMALE BPED STUDENTS IN BESTLINK COLLEGE OF THE PHILIPPINES

ABSTRACT

AUTHORS

Billy Joe Dian
Renzo Albert Morales
Kathleen Pilpa
Ely Emmanuel Taglay
Ericka Vicente

RESEARCH ADVISER

Abraham P. Muyrong II,
PhD

AFFILIATION

Bestlink College of the
Philippines

DISCIPLINE

Education

KEYWORDS

*basketball skills; bped
students; scan me and learn;
physical education; interactive
learning; visual learning*

ARTICLE ID

AASGBCPJMR-B64498

Scan Me and Learn (SML) is an innovative instructional material that utilizes QR codes and interactive technologies to enhance the learning experience. This study explores the effectiveness of the SML approach in improving basketball knowledge and skills among first-year female BPED students at Bestlink College of the Philippines. By comparing the performance of an experimental group using SML with a control group exposed to traditional teaching methods, the study aims to determine the impact of technology-enhanced learning in physical education, particularly in developing foundational basketball competencies. A quasi-experimental research design is employed, involving thirty first-year female BPED students. Participants are divided into control and experimental groups. The study uses pretest and post-test measures to evaluate knowledge and performance in basketball, focusing on skills such as dribbling, passing, and understanding of game rules. Data are gathered using structured tools and analyzed through statistical measures, including mean scores, standard deviation, and Z-test values, to assess significant differences in learning outcomes. The majority of respondents are aged 18 to 19, with 70% reporting no prior experience in basketball. Among the SML components, Arcademics posting received the highest effectiveness rating ($\bar{x} = 2.57$), while facilities scored the lowest ($\bar{x} = 1.63$). The most improved area was understanding game rules ($\bar{x} = 3.30$), with dribbling showing the least improvement ($\bar{x} = 2.63$). Pretest analysis yielded a p-value of 0.046, indicating significant deviation, while the post-test p-value of 0.075 approached a normal distribution. Mean scores increased notably from pretest ($M = 12.50$, $SD = 3.90$) to post-test ($M = 17.63$, $SD = 5.32$), with a significant performance difference ($Z = -4.80$, $p = 0.00$). However, 36% of students reported misunderstandings while using SML, highlighting areas for refinement in the implementation process. The study concludes that the SML strategy is an effective tool in enhancing basketball knowledge and skills among first-year female BPED students. Significant post-test improvements in dribbling, passing, and rule comprehension affirm the instructional value of SML. Despite challenges such as technological barriers and occasional learner confusion, the findings underscore the importance of integrating creative, technology-based methods into physical education. The success of SML suggests promising potential for broader application across various sports and instructional settings, contributing to more engaging and effective learning experiences.

RECOMMENDED CITATION

Dian, B. J., Morales, R. A., Pilpa, K., Taglay, E. E., & Vicente, E. (2025). Effectiveness of SML in Improving Knowledge in Basketball Skills Among 1st Year Female BPED Students in Bestlink College of the Philippines. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts*, 7(4), 60.