UTILIZATION OF AIR DROP CARD ACTIVITIES FOR TEACHING NATURAL OBJECTS IN THE SKY IN SCIENCE FOR GRADE 3 PUPILS

ABSTRACT

AUTHORS
Jerrieca Arellano
Jeffrey Bandol
Joan Espelimbergo
Ricalyn San Esteban
Gerome Toribio

RESEARCH ADVISER
Ryan Christopher M. Villalon, PhD

AFFILIATION
Bestlink College of the Philippines

DISCIPLINE
Education

KEYWORDS
air-drop card game; interactive activities; science education; play-based learning; student engagement; primary students

ARTICLE ID
AASGBCPJMRA-B55857

Teaching science in primary schools poses distinct challenges, especially in engaging young learners in scientific inquiry amid limited resources. Many educators find it difficult to motivate students who are more accustomed to traditional subjects like reading and mathematics. However, recent studies indicate that integrating play-based activities into science lessons can significantly boost student engagement, particularly among preschool and elementary students. This approach not only captures children's interest but also supports the development of foundational skills, including reading proficiency. In this study, 80 Grade 3 students from Cielito Zamora Memorial School served as respondents. The researcher developed a 30-item survey questionnaire, as well as pre-tests and post-tests, grounded in relevant literature and aligned with the essential learning competencies in Grade 3 science. To ensure the validity and clarity of the test items, the researcher consulted academic experts, including the Dean of the College of Teacher Education at Bestlink College of the Philippines. Their constructive feedback guided the revision and refinement of the instrument, resulting in a more reliable and effective assessment tool. The study revealed a significant difference in performance between the Home Group and the Experimental Group. Initially, the Home Group obtained a mean score of 14.83, while the Experimental Group achieved a higher mean score of 21.93. This difference yielded a z-value of -10.58302 ($p < 0.00001$), indicating a statistically significant gap. Post-test results further supported this finding, with the Home Group's mean score increasing to 19.53 and the Experimental Group's mean rising to 25.83, resulting in a z-value of -11.15104 ($p < 0.00001$). These Findings suggested that the integration of interactive, play-based activities—such as the Air-drop card game—substantially enhances student performance in science learning. The study highlights the critical role of engaging and interactive activities—such as the Air-drop card game—in maintaining student interest, enhancing focus, and improving learning outcomes. Lessons that incorporate movement and hands-on experiences promote active participation, making science instruction more effective and meaningful. This approach is supported by Bruner's Theory of Learning and Cognitive Development (2024), which emphasizes that children learn best through experiential and discovery-based methods. The findings underscore the value of such strategies in stimulating curiosity, developing observational skills, and transforming science education into a more engaging, enjoyable, and impactful experience for young learners.

RECOMMENDED CITATION

Arellano, J., Bandol, J., Espelimbergo, J., San Esteban, R., & Toribio, G. (2025). Utilization of Air Drop Card Activities for Teaching Natural Objects in the Sky in Science for Grade 3 Pupils. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts, 7*(5), 124.