

EFFECTIVENESS OF C.L.E.A.N. TO ENHANCE ENVIRONMENTAL CONSERVATION IN LEARNING SCIENCE 5

ABSTRACT

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There is a shortage of effective instructional materials specifically designed to enhance students' understanding and academic performance in environmental conservation. While many instructional materials are available, few focus on this critical area. David Kolb developed the theory of experiential learning, which positions students as active participants in their education by immersing them in real-world learning situations. Kolb asserts that learning is most effective when individuals engage in four stages of the learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation. This study introduces CLEAN (Children Learning Educational Activities in Nature), a manipulative instructional material. The goal of this research is to explore the potential of CLEAN as an innovative teaching tool aimed at improving environmental education and fostering a deeper understanding and appreciation of environmental conservation among fifth-grade science students at Commonwealth Elementary School. The study employed a quasi-experimental design and used quantitative methods to observe significant differences between the variables. The primary objective was to analyze these variables mathematically using statistical techniques, including frequency and percentage ranking, weighted means, Likert scales, and z-tests. The sample consisted of forty (40) fifth-grade pupils from Commonwealth Elementary School. The pre-test results indicated that the average performance of forty (40) respondents were notably at the High Proficient level, demonstrating their strong understanding of the subject matter even prior to the intervention. Additionally, the respondents "Strongly Agree" that the use of C.L.E.A.N. materials—particularly in enhancing practical skills, promoting hands-on learning, fostering environmental awareness, and increasing class participation—significantly contributed to a deeper understanding of environmental conservation and its relevance to their daily lives. The results of the pre-test conducted before using CLEAN show that respondents had an average level of understanding of Environmental Science 5. After implementing CLEAN, the majority of respondents scored between 13 and 19 on the post-test, representing 70% of the scores. These findings indicate that the educational materials were effective, as demonstrated by the improved post-test scores. The researcher recognizes that CLEAN enhances practical skills and positively impacts students' critical thinking abilities.

RECOMMENDED CITATION

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