Integrated Approach of Teaching Proper Waste Practices in Elementary Public-School Pupils.

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Abstract

This study examined the effectiveness of an integrated teaching approach in improving the awareness and practices of Grade 4 and Grade 5 public elementary pupils on proper solid waste management. Grounded in Bandura's Social Learning Theory, the intervention combined lecture discussions, video modeling, demonstrations, and hands-on activities that emphasized waste classification, the effects of improper disposal, and proper waste-handling behaviors aligned with the 3Rs and the CLAYGO policy. A total of 148 pupils from a public elementary school in Iloilo City participated in the study using a pre-experimental one-group pretest-posttest design. A researcher-made 60 item questionnaire, validated by experts and tested for reliability, was used to measure pupils' awareness of waste types, awareness of the effects of improper waste disposal, and actual waste management practices. Results revealed a significant improvement in pupils' awareness of the types of solid waste after the intervention, indicating that the integrated teaching approach enhanced their ability to classify biodegradable and non-biodegradable materials. Although gains in awareness of the effects of improper waste disposal were modest, a significant increase was still observed among Grade 4 pupils. Moreover, pupils demonstrated high levels of solid waste management practices both before and after the intervention, with posttest scores showing increased consistency and frequency of proper waste-handling behavior. The Wilcoxon Signed Rank Test confirmed significant differences in most measured domains, affirming the intervention's positive impact. The findings highlight the value of structured, engaging, and model-based environmental instruction in shaping young learners' knowledge and behavior toward sustainable waste practices. The study recommends integrating similar approaches across elementary levels to strengthen environmental responsibility and support school and community waste management initiatives.

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Part A

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Part C

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