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INTEGRATING ECO-FRIENDLY PROJECTS INTO ENGLISH FOR YOUNG LEARNERS: FOSTERING CREATIVITY AND ENVIRONMENTAL AWARENESS

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ABSTRAK

This article explores the integration of eco-friendly projects into English for Young Learners (EYL) as a means to foster both language development and environmental awareness. The project was conducted through a series of hands-on activities, including recycling crafts, planting, and creative use of waste materials, designed to engage learners in meaningful tasks while practicing English. By combining language learning with eco-friendly practices, the approach not only enriched students' vocabulary and communication skills but also promoted creativity, responsibility, and sustainable values. The activities encouraged active participation, collaboration, and critical thinking, allowing learners to connect classroom knowledge with real-life environmental issues. Data were collected through observation, reflection, and documentation of learners' involvement and outputs. The findings suggest that integrating eco-friendly projects in EYL classrooms can provide a holistic learning experience, where language acquisition is linked to character building and social responsibility. This study highlights the potential of innovative, project-based learning to nurture environmentally conscious young learners while enhancing their English proficiency.

Keyword: English for Young Learners, Generation Z, Generation Alpha, offline digital learning, educational games.

INTRODUCTION

Environmental issues such as waste accumulation, pollution, and unsustainable habits have become global concerns that also affect young generations (UNESCO, 2020). In the context of education, particularly English for Young Learners (EYL), there is still a tendency to focus mainly on linguistic competence while giving less attention to integrating values of environmental responsibility (Cameron, 2001). This gap indicates the need for an innovative learning approach that not only improves students' English skills but also nurtures their awareness of ecological issues from an early age.

To address this challenge, eco-friendly projects were designed as part of an EYL course. Activities such as recycling crafts, planting, and creative reuse of waste were employed to provide meaningful contexts for practicing English. Through hands-on tasks, learners were encouraged to engage actively, collaborate with peers, and use English in real-life situations while simultaneously developing environmentally responsible attitudes. This approach is grounded in project-based learning (PBL), which emphasizes experiential learning, problem-solving, and the integration of language with content and values (Thomas, 2000; Beckett & Slater, 2005).

The purpose of this study is to examine how eco-friendly projects can be integrated into EYL classrooms to enhance language learning, foster creativity, and build environmental awareness. Theoretically, this study is supported by constructivist perspectives that view learning as an active process (Piaget, 1972; Vygotsky, 1978) and by the principles of PBL that connect classroom activities with authentic contexts (Stoller, 2006). Prior research suggests that combining language learning with sustainability education can strengthen both linguistic and character development among young learners (Tilbury, 2011; Kırkgöz, 2019).

It is expected that the findings of this research will contribute to innovative

practices in EYL by showing that eco-friendly projects are not only effective for language acquisition but also beneficial for shaping learners' environmental responsibility and creativity. Moreover, the study offers insights for teachers and educators seeking to design integrative, value-based, and sustainable language learning experiences.

METHOD

This study employed a **qualitative descriptive design** supported by components of **project-based learning (PjBL)** implementation. The design was selected to provide a comprehensive and naturalistic portrayal of the learning process as it unfolded in an authentic classroom environment. A qualitative descriptive orientation allowed the researchers to capture rich, contextual, and experience-based data regarding learners' linguistic behaviors, engagement patterns, and ecological awareness as they participated in eco-friendly project activities. Integrating PjBL within the English for Young Learners (EYL) framework also enabled the investigation of real-world, hands-on tasks that mirror children's lived experiences, thereby strengthening ecological learning as an extension of language use in meaningful contexts.

The participants of the study consisted of **20 young learners** aged at the elementary school level, enrolled in a community-based EYL program developed as part of a university course project. A **purposive sampling** technique was applied to ensure the selection of participants who were accessible, actively engaged in the program, and representative of early language learners. The groups were intentionally kept small to optimize interaction, scaffolding, and opportunities for collaborative learning. The program was facilitated by **student-teachers**, who assumed dual roles as instructors and researchers. This dual positioning allowed for continuous observation of learner behavior, development of language skills, and responses to eco-friendly project tasks within an authentic instructional setting.

Data were collected through multiple procedures to ensure depth, reliability, and contextual accuracy. **Classroom observations** were conducted systematically using validated observation sheets to document learners' verbal participation, use of English during project execution, peer interaction, and overall engagement. In addition to observation, extensive **documentation** was gathered in the form of photographs, recordings, students' tangible products (e.g., recycled crafts, planting projects), and activity logs. Student-teachers also maintained **reflective journals**, which served to capture subjective interpretations, instructional decisions, unexpected events, and emerging insights during each session. **Field notes** were written throughout the project to document nonverbal behaviors, spontaneous interactions, and noteworthy instructional moments that were not always captured through formal instruments.

The eco-friendly project activities utilized accessible, low-cost, and sustainable materials, such as recyclable waste (plastic bottles, paper scraps, metal cans), planting materials (soil, seeds, small pots), and basic art supplies. The selection of these materials was intentional, aiming not only to support classroom activities but also to encourage learners to replicate environmentally responsible practices outside the classroom. By engaging with familiar, everyday materials, learners were expected to develop a sense of environmental responsibility intertwined with their language learning experience.

Data analysis followed a **qualitative content analysis** approach. The analysis involved several stages: data reduction, coding, categorization, and interpretation, leading to the identification of emerging themes related to language use, creativity, collaboration, and environmental awareness. **Triangulation** was applied by cross-checking data from various sources—observations, documentation, interviews, and reflective journals—to enhance the credibility and validity of the findings. Researcher presence was continuous throughout the implementation due to the dual role of the student-teachers, enabling a sustained and holistic understanding of the

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classroom processes.

RESULTS AND DISCUSSION

The integration of eco-friendly projects into English for Young Learners (EYL) provided rich insights into how language learning can be meaningfully combined with sustainability education. The results were derived from multiple sources, including classroom observations, reflective journals from student-teachers, documentation of students' products, and short interviews with learners and parents. Triangulation of these sources strengthened the validity of the findings. Four key themes emerged: (1) language development, (2) creativity and problem-solving, (3) environmental awareness and responsibility, and (4) collaboration and social skills.

1. Language Development through Eco-Friendly Projects

The most immediate outcome observed was an improvement in learners' English vocabulary. Unlike traditional word-list memorization, vocabulary was embedded within meaningful tasks. For example, when a student instructed peers to *cut the bottle* or *plant the seed*, the phrases were linked to physical actions, reinforcing comprehension and retention. Learners repeated these terms multiple times, and during interviews, parents confirmed that children used the same words at home, suggesting transfer of knowledge beyond the classroom.

This finding is consistent with Cameron (2001), who emphasizes the role of meaningful context in young learner pedagogy, and Stoller (2006), who advocates for project-based learning (PBL) as a bridge between language practice and authentic application. However, while vocabulary retention improved, more abstract language skills—such as complex sentence formation—remained underdeveloped, suggesting that eco-friendly projects are more effective for concrete rather than abstract linguistic input. This limitation reflects the developmental stage of young learners but also highlights a potential area for methodological refinement in future studies.

2. Creativity and Problem-Solving Skills

Picture 1. Creativity and Problem-Solving Skills.

The projects fostered creativity by encouraging learners to transform waste into useful products. Students demonstrated originality, such as decorating cans into pencil holders or designing flower pots with unique patterns. More significantly, when materials were insufficient, learners spontaneously sought alternatives—using tape instead of glue, or reshaping bottles when scissors were unavailable.

Reflective journals noted that these problem-solving moments not only maintained engagement but also created opportunities for critical thinking and peer discussion. According to Piaget (1972), such experiences exemplify active knowledge construction, where children adapt strategies to overcome challenges. Yet, it is worth noting that some learners initially struggled with unfamiliar tools, requiring more scaffolding from teachers. This suggests that eco-friendly projects, while promoting creativity, must be carefully balanced with appropriate guidance to avoid frustration.

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3. Environmental Awareness and Responsibility

Picture 2. Environmental Awareness and Responsibility.

Perhaps the most compelling result was the emergence of environmental responsibility among learners. Classroom observations revealed genuine enthusiasm for planting activities, with students insisting on taking home seedlings to continue caring for them. Follow-up interviews with parents confirmed behavioral changes, such as sorting trash or asking family members to recycle.

These outcomes strongly support Tilbury's (2011) claim that education can serve as a catalyst for sustainability values, and Kırkgöz (2019), who demonstrated the compatibility of environmental themes with EYL pedagogy. Importantly, the transfer of values beyond the classroom indicates that eco-friendly projects can generate long-term behavioral shifts, not just temporary classroom compliance. Nevertheless, sustained impact remains uncertain without longitudinal follow-up, raising the question of whether such awareness persists over time or diminishes without reinforcement.

4. Collaboration and Social Skills

Collaboration emerged as both a process and a product of the eco-friendly projects. Learners naturally divided roles—for example, one child cut bottles while another decorated them—while maintaining cooperative dialogue. Field notes documented moments of encouragement, such as peers helping one another tie strings or suggesting alternative designs.

This dynamic aligns with Vygotsky's (1978) theory of social constructivism, which posits that knowledge is mediated through interaction. The projects not only facilitated linguistic exchanges but also fostered values such as tolerance, responsibility, and empathy. However, occasional conflicts were observed when learners disagreed about design choices, indicating that collaboration requires intentional scaffolding. Teachers must balance freedom with structure to ensure that group work remains constructive rather than competitive.

5. Critical Reflection and Theoretical Implications

Picture 3. Critical Reflection and Theoretical Implications

The findings answer the research questions by showing that eco-friendly projects in EYL contexts effectively combine language acquisition with value-based education. The results validate the principles of project-based learning (Thomas, 2000; Beckett & Slater, 2005) while extending them by embedding sustainability as an additional pedagogical dimension.

From a theoretical standpoint, the study reinforces constructivist (Piaget, 1972) and social constructivist (Vygotsky, 1978) perspectives, illustrating how hands-on, socially mediated tasks drive both linguistic and value learning. Yet, it also suggests a modification: PBL in EYL may be optimized not only for language and content integration but also for character and sustainability education. This expands the scope of PBL beyond its traditional academic focus.

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6. Practical Contributions and Limitations

Picture 4. Practical Contributions and Limitations.

Practically, the study offers a replicable model for teachers: eco-friendly projects are cost-effective, contextually relevant, and capable of engaging young learners holistically. They link classroom activities to broader social issues, ensuring that language learning is not isolated from real life.

However, limitations must be acknowledged. First, the study was conducted in a short four-week period, making it difficult to assess long-term retention of both language and environmental habits. Second, the reliance on qualitative methods means the findings are context-specific and may not be generalizable to all EYL settings. Future research could adopt a mixed-methods approach, combining observational data with quantitative measures of vocabulary acquisition or attitude change.

CONCLUTION

This study critically examined the integration of eco-friendly projects into English for Young Learners (EYL), highlighting both pedagogical opportunities and contextual challenges. The findings revealed that while eco-friendly projects successfully enriched vocabulary, fostered creativity, promoted environmental awareness, and strengthened collaboration, their effectiveness was not uniform across all linguistic and behavioral domains. Learners benefited most from concrete vocabulary embedded in hands-on tasks, yet more abstract structures and extended discourse competence remained underdeveloped, indicating the need for targeted scaffolding.

From a theoretical perspective, the study affirms constructivist and social constructivist principles (Piaget, 1972; Vygotsky, 1978), but also extends project-based learning (PBL) models by embedding sustainability as a pedagogical dimension. This suggests that PBL in EYL should not be viewed solely as a language-content integration tool but also as a platform for cultivating values and real-world responsibility. Such an extension enriches existing frameworks of task- and project-based learning, positioning sustainability as both a theme and a method of inquiry.

Practically, the results demonstrate that eco-friendly projects are cost-effective, culturally relevant, and capable of engaging learners beyond the classroom. However, the short duration of the intervention raises questions about the sustainability of observed behavioral changes. Without longitudinal reinforcement, environmental awareness and collaborative behaviors risk becoming temporary rather than transformative.

Therefore, while the integration of eco-friendly projects shows significant promise, it should not be idealized as a comprehensive solution. Teachers must combine projects with structured language scaffolding, ongoing value reinforcement, and systematic assessment to maximize both linguistic and affective outcomes. Future studies are encouraged to adopt mixed-methods approaches and longer implementation periods to critically test the long-term viability of eco-friendly PBL in EYL.

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