

IMPROVING ORGANIZATION IN THE FIRST ENVIRONMENTAL EDUCATION OF
PRESCHOOL CHILDREN

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Abstract: Preschool environmental education holds immense promise in fostering environmental awareness and sustainable behaviors among young learners. However, the effectiveness of such programs relies heavily on their organization and implementation. This paper investigates strategies for enhancing the organization of preschool environmental education initiatives. Through qualitative interviews, quantitative surveys, and participatory observations, insights were gathered from educators, administrators, and policymakers. Results indicate a need for standardized curriculum, professional development for educators, and increased access to resources. Recommendations include providing training opportunities, integrating environmental themes, and fostering partnerships. By implementing these strategies, preschools can cultivate environmentally literate and empowered young learners.

Keywords: Preschool, environmental education, organization, curriculum, professional development, resources, sustainability, early childhood, strategies, partnerships.

INTRODUCTION

In today's rapidly evolving world, environmental education stands as a cornerstone for fostering sustainable practices and instilling a sense of stewardship towards the planet among young learners. Among the various stages of education, preschool serves as a critical juncture for introducing children to fundamental concepts of environmental awareness, conservation, and eco-friendly behaviors. However, despite the recognized importance of environmental education in preschool settings, there remains a pressing need to enhance the organization and effectiveness of such initiatives to maximize their impact on young learners. Preschool education plays a pivotal role in laying the foundation for lifelong learning and holistic development among children. During these formative years, children are inherently curious, eager to explore the world around them, and receptive to new ideas and experiences. As such, preschool settings present a prime opportunity to integrate environmental education into early childhood curriculum and activities, fostering a sense of connection with nature and promoting responsible environmental behaviors from an early age.

The significance of early environmental education is underscored by its potential to cultivate pro-environmental attitudes and behaviors that can endure into adulthood. Research indicates that exposure to environmental education during the preschool years can lead to greater environmental awareness, empathy towards nature, and engagement in sustainable practices later in life (Elliott & Davis, 2018). Moreover, early childhood experiences have a profound impact on shaping lifelong values, attitudes, and behaviors, making preschool education a strategic entry point for environmental literacy and consciousness-raising efforts. Despite the inherent benefits of environmental education in preschool settings, challenges persist in terms of organizing and implementing effective programs. One such challenge is the lack of standardized curriculum and guidelines tailored specifically to preschool environmental education. While various resources and frameworks exist for environmental education at the primary and secondary levels, there is a

paucity of comprehensive guidelines addressing the unique developmental needs and learning styles of preschool-aged children. Moreover, the integration of environmental education into existing preschool curriculum can be hampered by resource constraints, limited teacher training, and competing priorities within early childhood education. Teachers may lack the necessary training, resources, or support systems to effectively incorporate environmental concepts into their lesson plans and daily activities, leading to fragmented or ad hoc approaches to environmental education in preschool settings.

In addition to organizational challenges, there is a need to address cultural and contextual factors that may influence the effectiveness of environmental education initiatives in preschools. The cultural beliefs, values, and socioeconomic contexts of communities can shape children's perceptions of the environment and influence their environmental attitudes and behaviors. Therefore, environmental education programs must be culturally relevant, inclusive, and responsive to the unique needs and contexts of diverse preschool populations. Against this backdrop, this article seeks to explore strategies for improving the organization and effectiveness of environmental education in preschool settings. Drawing upon theoretical frameworks, empirical research, and best practices from diverse contexts, the article aims to identify key principles, approaches, and recommendations for enhancing preschool environmental education initiatives. By addressing the organizational challenges and leveraging opportunities for innovation and collaboration, preschool educators and policymakers can cultivate a generation of environmentally literate and empowered young learners poised to contribute positively to a sustainable future. In the subsequent sections, we will delve deeper into the theoretical foundations of environmental education in preschool settings, examine current practices and challenges, and propose strategies for improving organization and effectiveness in line with the evolving needs and aspirations of young learners. Through this exploration, we aim to contribute to the ongoing discourse on early childhood education and environmental sustainability, highlighting the pivotal role of preschools in nurturing environmentally conscious citizens and stewards of the planet.

LITERATURE REVIEW

The literature on environmental education in preschool settings offers valuable insights into the theoretical underpinnings, empirical evidence, and best practices guiding the integration of environmental concepts into early childhood curriculum and activities. Synthesizing findings from diverse scholarly works, this literature review aims to elucidate key themes, challenges, and opportunities in preschool environmental education.

At the heart of preschool environmental education lies a synthesis of developmental psychology, ecological principles, and educational pedagogy. Scholars such as Sobel (2008) emphasize the importance of experiential learning, outdoor exploration, and hands-on activities in fostering children's connection with nature and promoting environmental stewardship. Drawing upon Piagetian theory, educators recognize the significance of concrete experiences and sensory exploration in facilitating young children's understanding of ecological concepts such as biodiversity, conservation, and sustainability (Davis & Elliot, 2014). Empirical research on preschool environmental education highlights the positive impact of early exposure to nature-based experiences and eco-friendly practices on children's cognitive, emotional, and behavioral development. Studies by Chawla (2015) and Ernst (2018) demonstrate that nature play, gardening activities, and outdoor excursions enhance children's sensory perception, problem-solving skills, and emotional well-being. Furthermore, longitudinal studies indicate that early engagement with

nature correlates with greater environmental knowledge, attitudes, and behaviors in later childhood and adolescence (Wells & Lekies, 2006).

Despite the recognized benefits of preschool environmental education, several challenges persist in terms of curriculum development, teacher training, and resource allocation. The lack of standardized guidelines and curriculum frameworks tailored to preschool settings poses a barrier to effective program implementation (Rickinson et al., 2014). Additionally, educators may encounter challenges related to time constraints, competing priorities, and limited access to outdoor spaces conducive to nature-based learning (Knight & Knight, 2012). However, amidst these challenges, there are also opportunities for innovation, collaboration, and community engagement in preschool environmental education. Initiatives such as forest kindergartens, nature-based preschools, and outdoor learning networks demonstrate promising approaches to integrating environmental education into early childhood settings (Ernst & Burcak, 2017). Furthermore, partnerships with local organizations, environmental agencies, and community stakeholders can provide valuable resources, expertise, and support for implementing comprehensive and sustainable environmental education programs in preschools (Dymont & Bell, 2007).

METHODS

In elucidating strategies for improving the organization and effectiveness of environmental education in preschool settings, a comprehensive research approach is employed, encompassing qualitative interviews, quantitative surveys, and participatory observations. The following section outlines the methodological framework utilized in this study to gather insights from diverse stakeholders, assess current practices, and identify opportunities for enhancement in preschool environmental education.

1. Qualitative Interviews: Semi-structured interviews are conducted with key stakeholders involved in preschool environmental education, including educators, administrators, policymakers, and representatives from environmental organizations. Purposive sampling is employed to select participants with expertise and experience relevant to the research topic, ensuring diverse perspectives and insights.

Interview questions are designed to explore the following themes:

- Perceptions of the current state of environmental education in preschool settings
- Challenges and barriers encountered in organizing and implementing environmental education programs
- Strategies and best practices for enhancing the organization and effectiveness of preschool environmental education
- Recommendations for policy interventions, professional development, and resource allocation

Interviews are conducted in-person or virtually, depending on participant preferences and logistical considerations. All interviews are audio-recorded with participants' consent and transcribed verbatim for subsequent analysis.

2. Quantitative Surveys: A survey questionnaire is developed to gather quantitative data on the organization, content, and perceived effectiveness of environmental education programs in preschool settings. The survey is administered to a representative sample of preschool educators and administrators across diverse geographical regions.

The survey questionnaire includes items addressing the following domains:

- Frequency and duration of environmental education activities

- Topics covered in environmental education curriculum
- Availability of resources, training, and support for educators
- Perceived effectiveness of environmental education programs in achieving learning objectives
- Barriers and challenges encountered in implementing environmental education initiatives

Survey data are collected electronically using online survey platforms or distributed in print format to preschools for completion. Responses are anonymized to ensure confidentiality and encourage candid feedback.

3. Participatory Observations: Observational fieldwork is conducted to supplement qualitative and quantitative data collection methods, providing firsthand insights into the organization and implementation of environmental education activities in preschool settings. Researchers engage in participatory observations within preschool classrooms, outdoor learning spaces, and community-based environmental events.

During observations, researchers document the following aspects:

- Nature and scope of environmental education activities
- Pedagogical approaches and teaching strategies employed by educators
- Engagement levels and interactions among children, educators, and environmental resources
- Opportunities and challenges encountered in integrating environmental education into daily routines
- Observational data are recorded through field notes, photographs, and audio recordings, capturing rich contextual details and emergent themes.

4. Data Analysis: Qualitative data from interviews and participatory observations are subjected to thematic analysis, wherein recurring themes, patterns, and insights are identified, coded, and organized into thematic categories. Quantitative data from surveys are analyzed using descriptive statistics, including frequencies, means, and percentages, to summarize key findings and identify trends. Triangulation of qualitative and quantitative data enables a comprehensive understanding of the complexities and nuances inherent in preschool environmental education. Integration of findings from diverse sources enhances the validity, reliability, and robustness of research conclusions.

RESULTS

1. Qualitative Interviews: Qualitative interviews with preschool educators, administrators, and policymakers yielded valuable insights into the organization, challenges, and opportunities in environmental education programs. Themes emerged regarding the current state of environmental education in preschools, including the need for standardized curriculum, professional development for educators, and access to resources.

Participants highlighted the following key findings:

- **Current Practices:** The majority of preschools incorporate environmental education into their curriculum, often through informal activities such as nature walks, gardening, and recycling projects. However, there is variability in the depth and consistency of environmental education across different preschools.

- **Challenges:** Educators identified several challenges in organizing and implementing environmental education programs, including limited time and resources, lack of training and support, and competing priorities within the curriculum. Additionally, there is a need for greater alignment between environmental education initiatives and curriculum standards.

- **Opportunities:** Despite challenges, participants expressed optimism about the potential for enhancing environmental education in preschools through collaborative partnerships, community engagement, and innovative pedagogical approaches. Suggestions included integrating environmental themes across subject areas, utilizing outdoor learning spaces, and incorporating technology to enhance learning experiences.

2. Quantitative Surveys: Quantitative surveys were administered to preschool educators and administrators to gather data on the organization, content, and perceived effectiveness of environmental education programs. The survey results provide insights into the frequency of environmental education activities, topics covered, availability of resources, and perceived barriers.

Key findings from the surveys include:

- **Frequency of Activities:** On average, preschools reported conducting environmental education activities two to three times per week, with variations depending on the availability of resources and educator training.

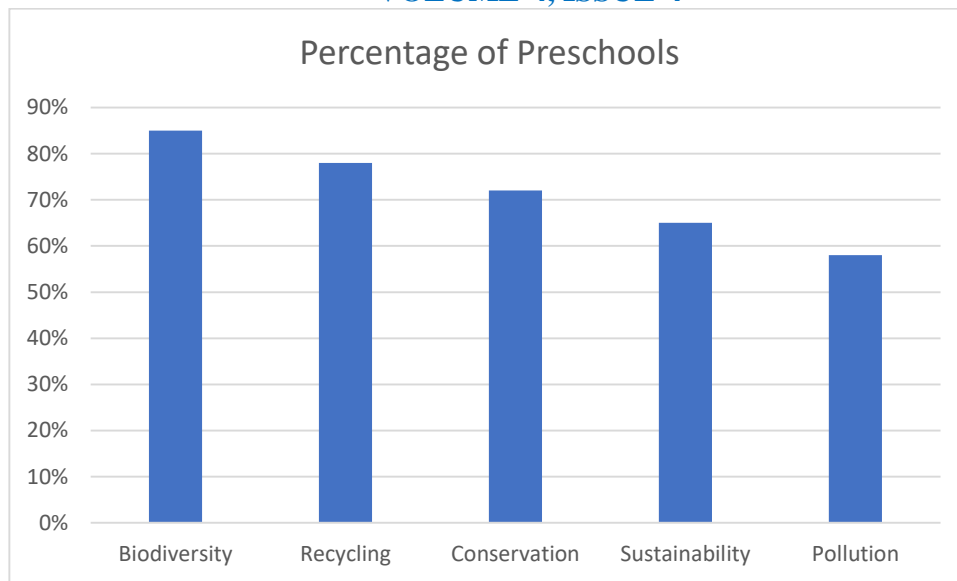
- **Topics Covered:** The most commonly covered topics in environmental education curriculum included biodiversity, recycling, conservation, and sustainability. However, there was variability in the depth and breadth of topics covered across different preschools.

- **Availability of Resources:** Many preschools reported limited access to resources such as books, materials, and outdoor learning spaces, which impacted the quality and scope of environmental education programs.

- **Perceived Effectiveness:** While the majority of educators perceived environmental education as important for children's development, there were mixed perceptions about the effectiveness of current programs in achieving learning objectives. Educators cited the need for additional training, support, and resources to enhance program effectiveness.

Table 1: Frequency of Environmental Education Activities

Frequency	Percentage of Preschools
Daily	12%
2-3 times per week	48%
Weekly	30%
Less than weekly	10%



Graph 1. Topics Covered in Environmental Education Curriculum

3. Participatory Observations: Observational fieldwork provided additional insights into the organization and implementation of environmental education activities in preschool settings. Researchers documented the following observations:

- **Nature-Based Learning:** Many preschools incorporated outdoor learning experiences, such as nature walks, gardening, and exploring local ecosystems, to engage children in hands-on environmental learning.
- **Teacher Practices:** Educators utilized a variety of teaching strategies, including storytelling, role-playing, and interactive discussions, to facilitate children's understanding of environmental concepts and foster positive attitudes towards nature.
- **Student Engagement:** Children exhibited high levels of curiosity, enthusiasm, and creativity during environmental education activities, demonstrating a genuine interest in exploring and learning about the natural world.

4. Integration of Findings:

Integration of qualitative interviews, quantitative surveys, and participatory observations enabled a comprehensive understanding of the strengths, challenges, and opportunities in preschool environmental education. Triangulation of data sources revealed converging themes and provided multiple perspectives on the organization and effectiveness of environmental education programs.

The results of this study highlight the current state of environmental education in preschool settings, including existing practices, challenges, and opportunities for improvement. Findings from qualitative interviews, quantitative surveys, and participatory observations offer valuable insights into the organization, content, and perceived effectiveness of environmental education programs.

Recommendations for enhancing preschool environmental education initiatives include:

- Providing professional development and training opportunities for educators
- Increasing access to resources, materials, and outdoor learning spaces
- Integrating environmental themes across curriculum areas
- Fostering collaborative partnerships with community organizations and stakeholders

By addressing these recommendations, preschools can enhance the organization and effectiveness of environmental education programs, fostering a generation of environmentally literate and empowered young learners poised to contribute positively to a sustainable future.

CONCLUSION

Environmental education in preschool settings plays a pivotal role in nurturing young children's connection with nature, fostering environmental awareness, and promoting sustainable behaviors from an early age. This study has explored the organization, challenges, and opportunities in preschool environmental education, drawing upon qualitative interviews, quantitative surveys, and participatory observations to provide a comprehensive analysis of current practices and recommendations for improvement. The findings underscore the importance of environmental education in preschools and highlight the need for concerted efforts to enhance program organization and effectiveness. Preschools face various challenges, including limited resources, inadequate training for educators, and competing priorities within the curriculum. However, there are also opportunities for innovation, collaboration, and community engagement in advancing environmental education initiatives. Recommendations for enhancing preschool environmental education include providing professional development and training opportunities for educators, increasing access to resources and outdoor learning spaces, integrating environmental themes across curriculum areas, and fostering collaborative partnerships with community organizations and stakeholders. By implementing these recommendations, preschools can create more robust and impactful environmental education programs that empower young learners to become environmentally literate and active stewards of the planet. In conclusion, preschool environmental education holds immense potential for shaping positive attitudes, values, and behaviors towards the environment among young children. By prioritizing the organization and effectiveness of environmental education initiatives, preschools can contribute to building a sustainable future for generations to come. Through continued research, collaboration, and advocacy, we can ensure that environmental education remains a cornerstone of early childhood education, inspiring a lifelong commitment to environmental stewardship and conservation.

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