# INTEGRATING ENVIRONMENTAL EDUCATION AND CREATIVE ARTS IN EARLY CHILDHOOD: A COMMUNITY DEVELOPMENT INITIATIVE AT BAIT ADZKIA ISLAMIC KINDERGARTEN SCHOOL

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#### **Abstrak**

Makalah ini menyajikan inisiatif pengabdian kepada masyarakat yang dilakukan bekerja sama dengan TK Islam Bait Adzkia. Tim yang terdiri dari lima mahasiswa universitas melaksanakan proyek ini sebagai bagian dari tugas mata kuliah Pembangunan Berkelanjutan mereka. Tujuan dari inisiatif ini adalah untuk melibatkan siswa TK dalam kegiatan kreatif yang berfokus pada mendaur ulang sampah plastik menjadi kolase, sehingga meningkatkan keterampilan dalam pemecahan masalah, kerja sama tim, dan kesadaran lingkungan. Metode yang digunakan melibatkan persiapan bahan secara menyeluruh, termasuk mengumpulkan dan menyiapkan sampah plastik, mengorganisir anak-anak ke dalam kelompok, dan membimbing mereka dalam proses pembuatan kolase. Hasilnya menunjukkan keterlibatan dan kepuasan yang signifikan di antara siswa TK setelah menyelesaikan karya seni mereka, yang menyoroti antusiasme dan pemahaman mereka tentang pengelolaan lingkungan. Implikasi dari studi ini menegaskan efektivitas mengintegrasikan pendidikan lingkungan dengan seni kreatif dalam pengaturan pendidikan anak usia dini, mempromosikan praktik berkelanjutan dan mempersiapkan pelajar muda untuk menjadi warga global yang bertanggung jawab. Inisiatif ini berkontribusi pada diskusi yang lebih luas tentang peran pendidikan anak usia dini dalam menanamkan nilai-nilai keberlanjutan lingkungan, dengan menekankan aplikasi praktis dari pengetahuan teoretis dalam konteks masyarakat.

**Kata Kunci:** Pengembangan masyarakat, pendidikan anak usia dini, kesadaran lingkungan, tujuan pembangunan berkelanjutan, daur ulang, sampah plastik.

#### Abstract

This paper presents a community development initiative conducted in collaboration with Bait Adzkia Islamic Kindergarten School. A team of five university students undertook the project as part of their Sustainable Development coursework. The initiative's purpose was to engage kindergarten students in creative activities centered on recycling plastic waste into colleges, fostering skills in problem-solving, teamwork, and environmental awareness. The method involved thorough preparation of materials, including collecting and preparing plastic waste, organizing children into groups, and guiding them through the process of creating collages. The results demonstrated significant engagement and satisfaction among the kindergarten students upon completing their artwork, highlighting their enthusiasm and understanding of environmental stewardship. The study's implications underscored the effectiveness of integrating environmental education with creative arts in early childhood settings, promoting sustainable practices and preparing young learners to become responsible global citizens. This initiative contributes to broader discussions on the role of early childhood education in instilling values of environmental sustainability, emphasizing practical applications of theoretical knowledge within community contexts.

**Keywords:** Community development, early childhood education, environmental awareness, sustainable development goals, recycling, plastic waste

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#### Introduction

The community service project at Bait Adzkia Islamic School involves teaching kindergarten students creative ways to use waste materials and reflects several educational and developmental strategies highlighted in the activity. This initiative aims to boost children's creativity and imagination by instructing them to create collages from plastic waste, thereby nurturing their problem-solving abilities and environmental consciousness. This approach mirrors the success of the "Learning Through Play" program in rural Pakistan, which improved mothers' understanding of early child development through interactive activities, underscoring the effectiveness of hands-on learning experiences for children (Rahman et al., 2009). Moreover, the program's emphasis on environmental education aligns with research findings to explore how parental attitudes impact children's behaviors related to air pollution avoidance (Woo et al., 2022). By teaching children to reuse plastic waste, the initiative not only promotes environmental responsibility but also echoes the goals of the ToyBox intervention, which aimed to reduce sedentary behaviors in preschoolers through active parental involvement and teacher-led activities (Latomme et al., 2017).

Additionally, the collaborative nature of collage-making enhances teamwork and communication among children and will raise children's awareness of safety issues through joint government and community efforts (Gribble, 2012). The initiative also addresses the need for sustainable and inclusive childcare services to develop community-driven mechanisms for water, sanitation, and hygiene services (Chumo et al., 2023). Furthermore, the project's potential to reduce waste and promote recycling is critical, as environmental conditions impact child health and nutrition (Habtamu et al., 2022). Integrating environmental education into early childhood programs can also contribute to public health goals, as evidenced by research on child feces disposal in rural Bangladesh, which emphasized safe sanitation practices to prevent health issues (Islam et al., 2018).

Moreover, initiatives like this emphasize the importance of physical and creative activities in early childhood education to support overall development and reduce health risks (Roth et al., 2010). Finally, engaging children in creative activities can influence their attitudes toward sustainability and healthy eating behaviors (Shanks et al., 2021). The community service project at Bait Adzkia Islamic School is a comprehensive approach that enhances children's creativity, problem-solving skills, environmental awareness, teamwork, and communication, contributing significantly to their holistic development and well-being.

### **Community Development Method**

The community service initiative was conducted in collaboration with TK Bait Adzkia Islamic School, situated at Jl. Suka Damai VI, Serua Indah, Ciputat. This partnership was selected due to its proximity to Universitas Pembangunan Jaya, facilitating seamless engagement in educational activities to achieve the Sustainable Development Goals (SDGs), mainly focusing on Quality Education. The location's accessibility and readiness to align with the SDG targets were pivotal factors in choosing this institution. Through creative activities, children at TK Bait Adzkia were engaged in focus group discussions and problem-solving exercises, contributing significantly to their early skills development.

The workshop commenced with thorough preparation, involving collecting, cleaning, and cutting plastic waste into small pieces. Collage paper, glue, and necessary tools were also prepared in advance. Children were organized into three groups to facilitate effective participation and teamwork. Each group received collage paper, plastic waste materials, and glue during the

workshop. Facilitators guided the children in creatively arranging and adhering the plastic waste onto the collage paper, followed by coloring according to their artistic vision.

In the concluding phase of the workshop, each group presented their completed collages. The service team took this opportunity to discuss the significance of environmental cleanliness and the reuse of plastic waste. This discussion aimed to reinforce the children's understanding of their role in maintaining a clean environment and utilizing resources responsibly.

The workshop succeeded in engaging kindergarten children through hands-on, creative activities centered around recycled materials. Beyond fostering artistic expression, the initiative nurtured essential teamwork, problem-solving, and environmental awareness skills. The workshop effectively conveyed the importance of waste management and sustainability practices from an early age by integrating practical environmental lessons with artistic creativity.

# **Results Community Development and Discussion**

#### Result

Figure 1 depicts the community service team of five university students engaged in practical implementation tasks as part of their Sustainable Development coursework. They are accompanied by teachers and students from Bait Adzkia Islamic Kindergarten School, who are the beneficiaries of this service initiative. This illustration highlights the collaborative effort between higher education institutions and local schools to foster real-world applications of sustainability principles within educational settings. The involvement of students and educators underscores the importance of hands-on learning experiences in promoting sustainable practices from an early age, aligning with global efforts to integrate sustainable development goals into educational curricula.



Figure 1. Community Service Team with Students of Bait Adzkia Islamic Kindergarten School

Figure 2 illustrates the community service team guiding kindergarten students in cutting plastic waste to size for collages and teaching them how to adhere the pieces according to color onto the collage paper. This image captures a pivotal moment in the community engagement initiative where university students, as part of their practical learning experience in Sustainable Development coursework, actively mentor young learners at Bait Adzkia Islamic Kindergarten School. By involving children in creative activities that repurpose plastic waste, the team enhances

environmental awareness and cultivates practical skills in waste management and artistic expression. This hands-on approach fosters a sense of responsibility towards sustainable practices from an early age, aligning with global efforts to instill environmental stewardship in future generations. The collaboration between university students and kindergarten educators underscores the significance of interdisciplinary partnerships in promoting holistic learning experiences that integrate sustainability into early childhood education.



Figure 2. The community service team provides guidance in arranging waste for collages



Figure 3. The enthusiasm of kindergarten students in arranging collages

Figure 3 captures the vibrant enthusiasm of kindergarten students as they arrange collages. Beyond learning to adjust and adhere pieces of plastic and colors onto their collages, the children also learn the value of teamwork and collaboration with their peers. This image exemplifies the hands-on learning experience facilitated by the Bait Adzkia Islamic Kindergarten School community service initiative, where university students guide and mentor young learners in sustainable practices through creative activities.

The activity not only promotes artistic expression but also aims to raise awareness among children about the environmental impact of plastic waste and the potential for creative reuse. By actively participating in creating collages from recycled materials, students are encouraged to think critically about waste management and environmental conservation from a young age. This aligns with the educational objectives of integrating sustainability into curriculum frameworks, preparing students to become responsible global citizens who value and practice environmental stewardship.

Moreover, the collaborative nature of the activity fosters social skills and mutual respect among the students, enhancing their ability to work together towards a common goal. The engagement of kindergarten students in such initiatives underscores the importance of early childhood education in shaping attitudes and behaviors towards sustainability, setting a foundation

for lifelong environmental consciousness. So, Figure 3 exemplifies how interactive and creative learning activities can instill environmental awareness and foster teamwork among young children, contributing to broader efforts to promote sustainable development goals within educational contexts.



Figure 4. Kindergarten students strive to complete their artwork thoroughly

Figure 4 depicts kindergarten students diligently working to complete their artwork with attention to detail. The image captures their focus on adjusting the colors and sizes of plastic waste pieces to fit their collages. This scene illustrates a vital aspect of the community service initiative at Bait Adzkia Islamic Kindergarten School, where children actively engage in hands-on activities that promote creativity and environmental consciousness.

The students' effort reflects their commitment to the task and their eagerness to produce quality artwork using recycled materials. By participating in such activities, the students enhance their artistic skills and learn important lessons about resourcefulness and waste reduction. This aligns with educational objectives to integrate sustainability principles into early childhood education, preparing young learners to become environmentally responsible.

Furthermore, completing their artwork underscores the value of perseverance and attention to detail, traits that contribute to holistic development in young children. These practical experiences encourage kindergarten students to explore innovative ways of repurposing materials and contributing positively to environmental conservation efforts. Figure 4 highlights the positive outcomes of integrating creative and environmentally focused activities into early childhood education. It demonstrates how such initiatives can inspire young learners to actively participate in sustainable practices while fostering skills crucial for their future development and engagement as responsible global citizens.



Figure 5. The satisfied faces of kindergarten students after completing their creative work

Figure 5 captures the contented expressions of kindergarten students upon completing their creative work. The image portrays their satisfaction in successfully arranging pieces of plastic waste into collages, transforming them into beautiful artworks. This moment exemplifies the culmination of the community service initiative at Bait Adzkia Islamic Kindergarten School, where students actively repurpose plastic waste through artistic expression.

The smiles on their faces reflect pride in their artistic achievements and a deeper understanding of environmental stewardship. By reusing plastic waste materials to create artwork, the students contribute positively to reducing environmental pollution and demonstrate a practical application of sustainability principles learned through hands-on activities.

Moreover, this experience reinforces the importance of creative thinking and resourcefulness in addressing environmental challenges from a young age. It instills a sense of responsibility among students towards their surroundings and encourages them to explore innovative ways to promote environmental conservation.

In conclusion, Figure 5 highlights the impact of integrating environmental education with creative arts in early childhood settings. It underscores how such initiatives empower children to participate actively in sustainable practices while fostering a sense of accomplishment and environmental awareness. By celebrating their creative achievements, kindergarten students enrich their learning experiences and contribute positively to building a more sustainable future.

#### **Discussion**

The success of the creative workshop in engaging kindergarten children to create collages using plastic waste resonates with several recent research findings on early childhood education and environmental awareness. The activity effectively nurtured basic problem-solving skills as children selected and adhered to plastic waste to create art, reflecting a relational approach to child participation in early childhood education that emphasizes the social, material, and cultural dynamics within learning environments (Ylikörkkö et al., 2023). This methodology also aligns with insights from a study where children and educators interacted with educational settings to transform and create new meanings, underscoring the role of materiality in learning (Magnusson & Elm, 2023).

The workshop's ability to foster creativity and environmental consciousness is particularly significant in light of the global challenge posed by plastic pollution, advocating for educational interventions alongside technological solutions (Liu et al., 2023). By focusing on recycling plastic waste into art, the workshop supports broader efforts to promote sustainable consumption behaviors and educate about pollution prevention, which is crucial for long-term solutions to plastic waste (Liu et al., 2023). Moreover, the workshop's approach can be linked to concepts such as plastic credit systems that incentivize recycling and enhance the quality of recyclable plastics through market-driven mechanisms (X. Zhang et al., 2023). Engaging children in recycling activities also reinforces the role of younger generations in waste management practices, highlighting the influence of environmental education and family upbringing on children's recycling habits (D. Zhang et al., 2023).

Furthermore, the workshop's success in promoting group participation and active learning reflects findings from studies on physical literacy interventions, emphasizing interactive and supportive learning environments for young children (Carson et al., 2022)]. The hands-on experience of using plastic waste in art projects enhances children's creativity and cultivates a sense of environmental responsibility critical for addressing plastic waste's global ecological and health impacts (Khoaele et al., 2023). Additionally, the workshop's potential to inspire future recycling initiatives among children aligns with the principles of a circular economy, advocating for continuous repurposing of waste materials into new products to minimize environmental impact and promote sustainability (Venkatesan et al., 2023). The workshop's outcomes underscore the effectiveness of integrating environmental education with creative activities in early childhood

education. This approach fosters cognitive and social development while addressing pressing environmental challenges.

#### Conclusion

In collaboration with Bait Adzkia Islamic Kindergarten School, the community development project has demonstrated significant achievements in integrating sustainability principles into early childhood education. The initiative engaged children through creative activities that included focus group discussions and problem-solving exercises, thereby enhancing their developmental skills from an early age.

The workshop commenced with meticulous preparation, involving collecting, cleaning, and cutting plastic waste into manageable pieces. Collage paper, glue, and necessary tools were provided to facilitate the children's participation in three organized groups, fostering effective teamwork and engagement. Throughout the workshop, the children were guided in creatively arranging and adhering plastic waste onto collage paper, followed by coloring to express their artistic vision.

During the concluding phase of the workshop, each group proudly presented their completed collages. At this moment, they allowed the service team to reinforce the importance of environmental cleanliness and the responsible reuse of plastic waste. Such discussions aimed to deepen the children's understanding of their environmental stewardship and sustainable resource management roles.

The success of this initiative is evident in the enthusiastic participation and satisfaction displayed by the kindergarten students upon completing their creative artwork. Their ability to transform plastic waste into aesthetically pleasing collages fostered artistic expression and instilled a sense of pride in contributing positively to environmental conservation. Moreover, the project emphasized critical skills such as teamwork, problem-solving, and ecological awareness, which are essential for holistic child development.

The collaboration between university students and Bait Adzkia Islamic Kindergarten School highlighted the synergistic benefits of integrating practical sustainability education into early childhood settings. Such initiatives cultivate a generation of environmentally responsible citizens and contribute to global efforts to achieve sustainable development goals.

In conclusion, the community development project at Bait Adzkia Islamic Kindergarten School exemplifies the transformative impact of integrating creative and environmental education. By nurturing children's creativity and ecological awareness through practical activities, the initiative enhances educational outcomes and cultivates a deep-seated commitment to sustainability among future generations. This holistic approach underscores the pivotal role of early childhood education in fostering lifelong values of environmental stewardship and responsible citizenship in a rapidly evolving world.

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