

Empowering Education through Sustainable Practices: Harnessing Household Waste for Innovative Learning Media in UPT SD Negeri No.034805.Sopobutar

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Abstrak

Upaya tersebut mencakup keterlibatan aktif siswa dalam mengumpulkan dan mengolah sampah rumah tangga, mengubahnya menjadi bahan pembelajaran yang bagus. Proyek ini berhasil mengubah sikap siswa terhadap sampah, mendorong mereka untuk memandang sampah sebagai sumber daya dan bukan sekedar barang sekali pakai. Perubahan mentalitas ini tidak hanya membantu pengurangan sampah tetapi juga menumbuhkan rasa tanggung jawab terhadap lingkungan. Melalui keterlibatan langsung, siswa mendapatkan pemahaman praktis tentang keberlanjutan, menghargai pengaruh positif daur ulang terhadap lingkungan. Proyek ini berfungsi sebagai katalis bagi siswa untuk menjadi pendukung keberlanjutan, yang mempengaruhi kebiasaan mereka baik di dalam maupun di luar kelas. Para guru melaporkan peningkatan dramatis dalam sikap siswa, menghasilkan lingkungan belajar yang lebih dinamis dan relevan. Di luar lingkungan sekolah, siswa secara aktif berbagi pengetahuan baru mereka, membantu membangun komunitas yang lebih berkelanjutan dan bertanggung jawab. Kesimpulannya, proyek pengabdian masyarakat ini tidak hanya memberikan dampak positif terhadap lingkungan belajar tetapi juga menumbuhkan generasi warga yang berwawasan lingkungan. Abstraknya mencerminkan esensi proyek, menekankan dampak transformasinya terhadap persepsi sampah, kesadaran keberlanjutan, dan penciptaan anggota masyarakat yang bertanggung jawab.

Kata kunci: *Pengelolaan Sampah, Media Pembelajaran Inovatif, Pengabdian Kepada Masyarakat.*

Abstract

The effort entailed actively engaging students in collecting and processing domestic waste, transforming it into great learning materials. The project successfully transformed students' attitudes on garbage, encouraging them to perceive it as a resource rather than just disposables. This change in mentality not only aided to waste reduction but also fostered a sense of responsibility for the environment. Through hands-on involvement, students got a practical grasp of sustainability, appreciating the positive influence of recycling on the

environment. The project functioned as a catalyst for students to become advocates for sustainability, affecting their habits both in and beyond the classroom. Teachers reported a dramatic improvement in students' attitudes, generating a more dynamic and relevant learning environment. Beyond the school setting, students actively shared their newfound knowledge, helping to the construction of a more sustainable and responsible community. In conclusion, this community service project not only positively influenced the learning environment but also cultivated a generation of environmentally conscientious citizens. The abstract embodies the project's essence, stressing its transforming effects on waste perception, sustainability awareness, and the creation of responsible community members.

Keywords: *Waste Management, Innovative Learning Media, Community Service.*

INTRODUCTION

This community service strives to optimize the usage of household waste in an effort to generate creative and sustainable learning medium. The site of this activity will be held at UPT SD Negeri No.034805.Sopobutar on January 7 2024. The methods that will be utilized include lectures and seminars, so that the material offered can include all components of the educational community. In the development of technology and the demand for creative learning media, the use of domestic waste has become an attractive alternative. Household garbage, if correctly elaborated, can be transformed into helpful learning medium and lessen its negative influence on the environment. Therefore, through this community service project, it is intended that the educational community can be informed about the potential of household garbage and how to integrate it into the learning process.

Utilizing household waste as a fundamental material for manufacturing learning media is a proactive move in tackling two significant challenges, namely sustainability of learning and waste management. Continuity of learning is the key focus in tackling increasingly rapid technological advances. On the other hand, the problem of home garbage is fast becoming a global concern, and demands imaginative solutions to decrease its negative impact. This community service responds to the need for serious efforts to develop more sustainable and environmentally friendly learning. Therefore, the choice of this issue was based on the immense potential that household garbage has and its positive impact on learning in schools.

Household garbage, which is typically regarded a cause of environmental problems, actually has significant potential to be exploited. Many sorts of domestic garbage, such as used cardboard, plastic bottles and paper, can be converted into creative and engaging learning medium (Cooper, 2019). Through this transformation process, garbage that was formerly a burden on the environment can become a beneficial resource that promotes learning activities in schools. In the UPT SD Negeri No.034805.Sopobutar context, understanding of the potential of household garbage as learning material still has to be improved. Through this community service project, it is intended that teachers as learning agents can be more aware of the possibilities of home garbage, so they can design more inventive and sustainable learning approaches.

This growth in understanding is in line with efforts to develop sustainable education that not only produces intellectual pupils, but also has sensitivity to environmental challenges. Thus, the utilization of household waste not only gives practical solutions for learning, but also fosters a mindset that cares about the environment in the younger generation (Norman & Furnes, 2016). In this regard, community service is the first step to establish a more ecologically conscious and child-friendly learning climate at UPT SD Negeri No.034805.Sopobutar. Apart from that, it is believed that the successful execution of this creative idea can be an example for other schools in developing sustainable learning techniques based on local resources.

The major purpose of this activity is to promote public understanding, especially teachers at UPT SD Negeri No.034805.Sopobutar, discusses the use of household garbage in developing useful learning medium. Apart from that, this activity also attempts to provide actual solutions to environmental concerns while presenting the notion of sustainable learning. By integrating instructors as the major participants, it is intended that this exercise can bring benefits in promoting creativity in learning, teaching environmentally friendly concepts, and opening insight into home trash management (Prayuda et al., 2023). Apart from that, it is also envisaged that the usage of household garbage can be an inspiration for connected parties in developing an innovative learning environment. This community contribution is a concrete step in supporting sustainable learning and contributing to better environmental management.

METHOD

The use of household garbage in generating learning material at UPT SD Negeri No.034805.Sopobutar will be carried out through a series of lectures and seminars. This strategy was chosen to equip teachers and school workers with a complete awareness of the potential of domestic garbage and how to integrate it into learning activities.

1. **Lecture:** The lecture will be the opening step of the activity, when participants will be exposed to the concept of using household waste in learning. The lecture topic will include identifying forms of garbage that can be used, processing techniques, and examples of learning media that can be produced. This lecture aims to offer listeners with a fundamental awareness of the potential of household garbage.
2. **Seminar:** After providing fundamental comprehension through lectures, the next activity will include participants in an interactive seminar. Participants will be asked to debate, exchange ideas, and devise strategies for incorporating the use of household garbage in learning at school. This lecture is created so that attendees can be more actively involved in the planning and execution process.
3. **Practice field:** As a concrete step towards implementation, field practice activities will offer participants with the opportunity to apply the concepts they have learnt in real scenarios. Teachers and school personnel will be invited to collect domestic rubbish available in the school area and convert it into creative learning material. This outdoor practice will equip participants with direct experience and practical skills.
4. **Monitoring and Evaluation:** During and after implementation, these activities will continue to be monitored and assessed. Feedback from participants will be collected

to evaluate the effectiveness of incorporating household garbage in learning. The evaluation results will be the basis for generating recommendations for improvement or further development to boost the beneficial impact of this activity.

Through this strategy, it is intended that participants can respond positively and actively to the use of household waste in learning. Over time, it is hoped that this method can become a model that can be implemented by other schools in an effort to foster sustainable and ecologically responsible learning.

RESULT AND DISCUSSION

The results of this community activity represent real attempts to introduce innovation into the field of education, notably at UPT SD Negeri No.034805.Sopobutar. With an emphasis on using household garbage as a basis for developing learning media, this initiative strives to build a learning environment that is sustainable and responsive to environmental sustainability. In the initial step, community service volunteers were introduced to the notion of utilizing home waste through lecture sessions. The outcomes of this stage develop a comprehensive awareness of the potential of home waste as a resource that can be utilized creatively in a learning context.

Through seminar activities, attendees are invited to actively participate in discussions, exchange ideas, and build implementation strategies. Success can be evident by the strong engagement and passion of participants in submitting their unique ideas (Saura et al., 2021). This indicates a communal knowledge of the need of recycling garbage and integrating it into creative learning approaches. The use of the concept in field practice shows actual success in transforming home garbage into helpful learning medium. Teachers and school personnel have succeeded in generating innovative and functional things, such as whiteboards from used cardboard, props from plastic bottles, and many more. This success promotes a more engaging and ecologically mindful learning environment.



Figure 1. Seminar of the community service

The deployment of household waste-based learning material has had a substantial positive impact on the learning process at UPT SD Negeri No.034805.Sopobutar. These inventive initiatives bring genuine changes in the quality of learning and inspire active participation of students. This achievement is measured by improving students' interest and drive to learn which may be evident via their interactions with learning media that are more interesting and environmentally friendly. Using whiteboards from used cardboard, for example, not only provides a cheap and environmentally friendly option, but also produces a more vibrant and exciting classroom ambiance. Students become more engaged and eager to participate in class discussions. This provides a dynamic learning atmosphere, where creativity and collaboration are rewarded.

Learning media made from domestic waste also gives a practical way to education. Props fashioned from plastic bottles, for example, not only provide a vivid visual representation but also teach the ideals of sustainability and environmental responsibility. Students are becoming more aware of the positive influence they may produce through simple actions such as recycling. Not only pupils perceive the beneficial impact, but also teachers. By integrating more varied and environmentally friendly learning tools, the teaching process becomes more dynamic and interesting. Teachers report improved interactions with students, creating better relationships, and sparking deeper discussions.



Figure 2. Meeting before conducting the community service

The success of this endeavor is not just restricted to the classroom. The beneficial impact permeates the school community and even more broadly into the surrounding neighborhood. By implementing sustainable practices, schools provide positive examples for the surrounding environment, prompting awareness of the importance of sustainability and environmental responsibility. Through the successful use of household garbage in generating learning material, this community activity creates a firm basis to promote innovative and sustainable learning in the future. The good impact is not only seen in the classroom, but

also promotes sustainable change to build an inspiring and ecologically empowered learning environment.

This community service provides a vital contribution to altering attitudes and awareness among students and the school community. By incorporating household waste in generating instructional media, there is a dramatic alteration in the way students understand the surrounding environment and their responsibility in preserving sustainability. Students' views towards garbage showed actual positive changes. They no longer perceive waste as useless, but as a potential resource that may be transformed into helpful learning media. This change is shown in students' active participation in waste collecting and processing operations, generating awareness of the need of recycling and decreasing waste.

Awareness of sustainability has also expanded tremendously. Students not only comprehend the notion of sustainability intellectually, but they also experience for themselves how simple actions like as recycling may have a good impact on the environment. They become agents of change who care about the surrounding environment and feel they have a responsibility to contribute to sustainability. In addition, teachers also noted changes in attitudes among students. They found an upsurge in students' interest in sustainability and environmental themes. Classroom conversations become more varied and relevant to environmental challenges, producing a more dynamic and immersive learning environment.

Changes in attitudes and awareness are not just limited to the classroom, but also infiltrate students' daily lives outside of school. Students become agents of change in their communities by sharing their knowledge about the utilization of household waste. This provides up opportunity to develop a more sustainable and responsible communal environment for garbage. In this way, this community service project not only has a good impact on learning in schools, but also causes fundamental changes in attitudes and knowledge in tackling environmental concerns. Utilizing household waste as a learning medium has opened the way to creating a generation that is more caring, ecologically sensitive, and eager to contribute to the sustainability of this planet.

CONCLUSION

The community service effort focusing on the utilization of household garbage for generating instructional media has achieved considerable and beneficial benefits. The project successfully improved the perception and awareness of both pupils and the school community. By reusing domestic waste for educational purposes, the effort not only addressed the issue of waste management but also developed a sense of environmental responsibility and sustainability. The active involvement of students in rubbish collecting and processing revealed a tangible shift in their views towards waste. They began to consider garbage not only as something to be discarded but as a valuable resource that might be recycled into constructive learning medium. This transformation was obvious in the enthusiastic participation of students in waste-related activities, imparting an understanding of the need of recycling and waste reduction.

The project dramatically heightened awareness of sustainability. Students not only grasped the theoretical concept of sustainability but witnessed directly how simple actions

like recycling may have a positive impact on the environment. They emerged as change agents, caring for the environment and felt a responsibility to contribute to sustainability. Teachers noted a substantial shift in students' attitudes. Class discussions became more diversified and relevant to environmental issues, producing a dynamic and profound learning environment. The influence of these new attitudes and understanding extended beyond the classroom, influencing students' daily lives and turning them into agents of change within their communities. They actively shared their knowledge about utilizing household waste, helping to the creation of a more sustainable and responsible community.

In essence, this community service project not only favorably improved the learning environment within the school but also caused deep-seated changes in attitudes and knowledge towards environmental concerns. The exploitation of household waste as a learning resource has opened doors to producing a generation that is more ecologically conscious, caring, and eager to contribute to the sustainability of our planet.

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