



Project-Based Learning (PBL): Student Creativities in the Upcycling Projects

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Abstract

Fashion waste has become a global issue because it is the second-largest contributor to waste after oil and gas. Thus, every sector in the fashion industry, especially the education sector, has begun to think about a zero-waste learning curriculum that can form the competence of fashion designers who can be creative wisely without producing any waste. However, Fashion waste in fabric trashes and used clothes today requires serious handling. Designers' expertise is needed to turn this waste into a unique, exclusive, useful product. Fabric waste upcycling needs a wide variety of competencies, such as sorting fabric trash and choosing the proper technique according to the type of fiber. The most important thing is finding the right market for the product. A community service program (PKM) has seen an opportunity to develop various upcycled products according to market needs, namely a guest house that needs multiple upcycled products ranging from bed linings to home décor.

Students are also involved in the Project-Based Learning (PBL) through this community service program (PKM). This project-based learning (PBL) study aims to increase student's creativity in project upcycling for fabric waste. This research used qualitative methods with descriptive analysis, the data collection methods used observation techniques, and the interviews of students in textile manipulation courses—data analysis used the theory of Project-based Learning (PBL). The study's results showed that PBL had produced variations in student creativity in the products made, originality in describing problems, and creativity in finding solutions. The upcycling project carried out by students in PBL has become a solution for two institutions related to the waste problem. The first institution is the classroom, which will always produce fabric waste from course projects every semester. The second institution is a partner in the study. Student creativity in the form of upcycling products such as bed linings and home décor contributes creative ideas for Ketapanrame tourism villages so that they can improve the creative economy in the town.

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Keywords

Project-based learning (PBL) · Eco-art education ·
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1 Introduction and Literature Review

A textile manipulation course is a course that aims to provide an understanding of fabric manipulation techniques for new forms or types of textiles. It covers several techniques of processing fabric surfaces, such as natural dyeing and making new types of materials such as felting, warm water-soluble (WWS), and tapestry. Along with individual projects of processing fabric waste and making various wearable art forms during the effectiveness of

Fig. 11.9



results made optimally by students during this PBL. The success of PBL was also in line with Eco-art Education's principle that creating a work must consider the conditions of the community and the surrounding nature and its problems. One of the programs being developed by Bumdesa Ketapanrame as a tourism village manager was to create a waste processing program due to the waste problem as an effect of tourism. Students' product from the upcycling project contributed to creative ideas for the village using fabric waste. Therefore, it is hoped that through these innovative products, they will be able to bring out new works from the use of waste from the Ketapanrame village community, whose continuation can make the creative economy in the tourist village be improved.

4 Conclusion

The upcycling product made by students in PBL was a unique but modern product without being seen coming from waste. Students also had high confidence that the outcomes of this upcycling product were in demand by the public because of the uniqueness produced, and it can be a solution to the problem of fashion waste which has now become a global issue. The partner was very impressed with the students' accuracy in mixing various motifs and colors from batik fabric waste and suggested developing other general products that the community needs. The upcycling project carried out by students in PBL has become a solution for

two institutions related to the waste problem. The first institution is the classroom, which will always produce fabric waste from other course projects every semester. The second institution is the partner in the study. Student creativity in the form of upcycling products such as bed linings and home décor contributed creative ideas for Ketapanrame tourism villages, which can further develop the results of village products made by the Ketapanrame tourism village community so that they can improve the creative economy in the village. The results of PBL in this qualitative research are the first step to finding a roadmap related to eco-art Education that can be developed in every course in the fashion department as a solution in the field of Education to the issue of global fashion as the second largest contributor to waste in the world.

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