

SURFACE DESIGN TRAINING USING SUMINAGASHI TECHNIQUE TO INCREASE STUDENT CREATIVITY IN PKBM BINAR, SOUTH TANGERANG**Dhika Purnama PUTRA^{1*}, Dewi PUGERSARI², Elizabeth ELIZABETH³, and Arbi Cristional LOKANANTA⁴**¹⁻⁴*Universitas Budi Luhur***dhika.purnama@budiluhur.ac.id***ABSTRACT**

Apart from entering the workforce or pursuing higher education, high school and vocational school graduates are encouraged to become creative entrepreneurs. Creative businesses are rapidly developing and play a vital role in creating high-quality products with added value that contribute significantly to the economy. A training program on making surface designs using the suminagashi technique serves as a community service activity aimed at enhancing the motivation and creativity of PKBM Binar students in the Bintaro area of South Tangerang. Surface design involves creating patterns on a material's surface to enhance its functional value. Suminagashi is an ancient Japanese technique that uses water to create marbled patterns, resembling marble textures. While often applied to fabric, this technique can also be used on other materials like wood, synthetic leather, and ceramics. The community service implementation consists of material presentation, discussions, and hands-on training. The presentation and discussion methods will introduce the material effectively. The goal of this community service is to expand the creative insight of PKBM Binar students, enabling them to produce value-added products through the application of the suminagashi surface design technique. This initiative seeks to inspire creativity and innovation among participants.

Keywords: surface design, training, suminagashi, pkbm binar

INTRODUCTION

It is estimated that in 2030 to 2040 Indonesia will enter the era of the demographic bonus, namely a period in which the number of people of working age (15-64 years) is greater than the non-productive age population, more than 60% of Indonesia's total population. The demographic bonus can turn into a disaster if the available job opportunities are not sufficient for the workforce or the quality of the workforce resources does not meet the qualifications required by the industry.

Based on data from the Central Statistics Agency (BPS), it is recorded that there are still 7.2 million unemployed people in Indonesia until February 2024, this figure is around 5.45% of the total current domestic workforce. The high unemployment rate in Indonesia is caused by many factors, including the quality of human resources. One aspect related to the quality of human resources is the low level of education and skills possessed by the Indonesian people.

Various programs have been carried out in an effort to increase Indonesia's human resources to overcome the problem of unemployment. One of them is through improving the quality of human resources based on community participation by establishing Community Learning Activity Centers (PKBM) in various places in the country.

PKBM is a non-formal education institution formed from, by and for the community. Law of the Republic of Indonesia no. 20 of 2003 concerning the National Education System recognizes that PKBM is a non-formal education unit. This institution is oriented towards empowering the potential of local communities to improve community knowledge, skills and attitudes in the economic, social and cultural fields.

One of the Community Learning Activity Centers (PKBM) in Greater Tangerang is PKBM Binar or Binar School, a school that focuses on high school age students majoring in Social Sciences (IPS) who live around Bintaro, South Tangerang.

The establishment of PKBM Binar was initiated by several volunteers who saw that quite a lot of high school age children were dropping out of school due to economic difficulties, which in turn made it difficult for these children to get opportunities to work. In mid-2020, volunteers initiated the establishment of PKBM Binar with the aim of providing opportunities for high school age children to increase their knowledge and improve their skills.

High school age children who have dropped out of school or cannot afford it can attend PKBM Binar for free. School students are prioritized for children from underprivileged families and have academic potential. This school is run at the expense of donors and foster parents.

In accordance with the initial aim of its establishment to contribute to improving the quality of human resources through increasing knowledge and skills, Binar School organizes various programs, including equality education, skills training and soft skills training.

Students at non-formal education schools for disadvantaged groups often face several main problems, including:

- a. Limited resources: Non-formal education schools often have limited resources such as facilities, textbooks and other educational equipment. This can affect the quality of students' learning and educational experiences.
- b. Difficult economic conditions: Students from disadvantaged backgrounds may experience economic difficulties which can affect the availability of time and energy for studying. They may have to work or help their families to meet their daily living needs.
- c. Limited access to higher education: Non-formal education schools may not always provide direct access to higher education or better career opportunities. This can be an obstacle for students who want to further their education or achieve their professional goals.
- d. Social stigma: Sometimes, students from disadvantaged backgrounds who attend non-formal education can experience social stigma or feel inferior because of their economic conditions. This can affect their motivation and confidence in learning.
- e. Lack of support and guidance: Students in non-formal education schools may lack the support and guidance needed to reach their full potential. Lack of mentorship and encouragement can hinder their academic and personal development.

To overcome these problems, a holistic and integrated approach is needed, involving support from the government, educational institutions, non-governmental organizations and the wider community. Efforts to increase access, quality and relevance of non-formal education need to be supported by inclusive policies and programs that pay attention to the special needs of students from disadvantaged groups. Creative workshops can be a good solution to motivate children and give them alternatives and fresh ideas to prepare as entrepreneurs.

One of the important skills that students at PKBM Binar need to master is creativity. Creativity can encourage students to think outside the box, solve problems, develop interest in art and culture, and create creative products.

Moreover, currently, one of the business sectors that is growing rapidly is business in the creative sector. Creative businesses are one of the sectors contributing to the largest Gross Domestic Product (GDP) with three main subsectors, namely culinary, fashion and crafts. Creative businesses provide added value so they can produce high-value products and contribute to the economy.

Information and creativity are the main keys in creative businesses where creative ideas and knowledge from human resources (HR) are the main production factors in economic activities.

Unfortunately, the limitations of the Binar School and its students often result in a lack of opportunities to learn various skills in the creative business sector, which generally require unaffordable costs.

One of the skills in the creative business sector that does not require a lot of money is Suminagashi skills, namely an ancient Japanese coloring technique using water as a medium to create marbled patterns or a color texture resembling marble. In general, Suminagashi is often applied to fabric surfaces, but can also be applied to other materials such as wood, synthetic leather and ceramics.

For this reason, it is planned to hold surface design training using the Suminagashi technique at the Binar School as an effort to equip students with creativity that can be applied. By mastering these skills, it is hoped that students will have the opportunity to develop new entrepreneurship in creative business fields, especially fashion, or get jobs in the same field.

METHOD

Surface design training using the suminagashi technique as an effort to improve the visual and functional appearance of a product. In general, surface design and suminagashi are often applied to fabric surfaces, but can also be applied

to other materials such as wood, synthetic leather and ceramics. The training series consists of: presentation of material, demonstration of suminagashi techniques and an overview of marketing methods.

This training is expected to encourage creativity and provide insight to participants. With tools and materials that are easily available in the family environment and fairly simple manufacturing techniques, it is hoped that this suminagashi technique can provide entrepreneurial ideas and the results of the training can be used as an alternative business.

Table 1. Method

| Solution | Target |
|---|--|
| Surface design training using the suminagashi technique | Adding insight |
| | Encourage participants creativity and self-confidence |
| | Able to apply the sumanagashi technique to products well |
| | Provide entrepreneurial ideas that can be used as an alternative business. |

Qualitative descriptive methods are used to carry out this training activity. The stages carried out in this training consist of:

- 1) The presentation of surface design material using the suminagashi technique was opened with a material presentation activity (lecture) introducing the suminagashi technique. The material is provided as an introduction to introduce the origins of the suminagashi technique, the tools and materials to be used, the technique or method of mixing colors into an attractive combination and a description of the final product example along with how to market the product.
- 2) Demonstration of the process of making surface designs using the suminagashi technique which consists of; introduction to tools and materials, providing examples of how to make the final product and an overview of how to market the product.
- 3) Practice, after understanding the basic techniques, participants are given a surface design project using the suminagashi technique independently, and grouped into small groups who are then given time accompanied by practice.

Partner participation in implementing this community service is providing a place and human resources who are ready to be trained and willing to be monitored and evaluated, mentored and assessed on the achievements of the training that has been carried out between the team and partners. The proposing team facilitates and assists and develops partners from the beginning to the end of the program.

Including a motivation session by linking Suminagashi skills with business opportunities in the creative economy. Explaining how handmade products with unique designs have high market potential. Introducing examples of successful entrepreneurs who started from art and creative design, inspiring students to venture into their own businesses. Then, simulating the marketing of the products through digital platforms and social media, as well as determining competitive pricing. Through this, students are inspired to seize opportunities from their creativity, supported and facilitated by Sekolah Binar.

The training results evaluation process is carried out to determine the level of success of the training methods that have been carried out. Evaluation is seen from the level of participant attendance during training activities, the final product produced by the students and their interest in using the results of this training as an alternative business.

Roles and duties:

Member 1: Provides opening material.

Member 2 and 3: Provides introductory material on Suminagashi and provides a demonstration of the surface design creation process.

Student 1: Help prepare tools and materials for training activities.

Student 2: Help participants carry out the making process in groups.

RESULTS AND DISCUSSION

Outcomes achieved in community service activities with the practice of "Surface Design Training Using Suminagashi Technique". One way is that students gain skills in the suminagashi technique, which is a method of designing surfaces using ink on water to produce artistic patterns on a particular medium. Apart from that, this training encourages increased creativity, the ability to innovate in art, and the application of design aesthetics in their work. Participants also tend to better understand the elements and principles of design, such as harmony, proportion and rhythm in their work. Students not only develop artistic skills but can also produce products of marketable value. The suminagashi technique can be applied to various media such as cloth or paper which are then sold as unique products, such as clothing or decorative accessories. This training can equip participants with the ability to create creativity-based business opportunities, such as producing and marketing handmade products with distinctive designs that attract consumer interest.

Based on the program carried out by the Binar School as a Community Learning Activity Center (PKBM), one of which is by improving the quality of human resources through increasing knowledge and skills, by organizing various programs, including equality education, skills training and soft skills training. With this training, students gain skills in the creative business sector.

Based on a series of community service activities that have been carried out, the surface design training program using the suminagashi technique at PKBM Binar has been successfully implemented with the aim of increasing student creativity. This program is designed as a solution to students' limited access to innovative artistic skills, which is expected to open up new opportunities in developing entrepreneurship in the creative business sector.

Through this training, PKBM Binar students are given new skills that are easy to apply, as well as insight into the commercialization potential of the suminagashi technique. The results of the training show that students are able to master this technique and apply it to various materials, such as fabric, wood and ceramics, thus producing products with high aesthetic value.

Overall, this training was not only successful in improving students' artistic skills and creativity, but also grew their self-confidence and provided them with alternative business opportunities. It is hoped that similar activities can continue to be developed to provide wider benefits to the non-formal education community in Indonesia.

Also explain the future development opportunities. Articles can be strengthened with relevant documentation related to services or goods as outputs, or the main focus of activities. Documentation can be in the form of pictures of the application or implementation process, pictures of product prototypes, tables, graphs, and so on.

The output of the "Surface Design using Suminagashi Technique" training not only provides artistic skills to students, but also equips them with the ability to utilize creativity in the field of entrepreneurship. By producing unique products such as clothing and decorative accessories, students are encouraged to create business opportunities based on art and creativity. Through the program organized by the Binar School, human resource development is carried out by increasing knowledge and skills, encouraging the community to develop creative businesses and advancing the local economy.

This training not only increases students' creativity and skills, but also has a significant impact on the development of the creative economy in society. This program combines education, creativity and entrepreneurship to generate new, sustainable business opportunities, while encouraging community development through innovation and art.

a. Creativity and Design Skills Improvement

Post-training assessments showed a statistically significant increase in student creativity and design skills compared to pre-training levels. Specifically: Design Skill Proficiency: Evaluations of design projects revealed that students demonstrated a more advanced application of surface design techniques, including more innovative use of the Suminagashi patterns.

b. Student Feedback

Survey responses highlighted that: Skills Acquisition: students felt they had acquired valuable new skills that could be applied in future design projects.

c. Project Quality

The final projects, assessed by a panel of experts, showed:

- Originality: There was a noticeable increase in the originality of designs, with many projects showcasing novel interpretations of Suminagashi patterns.
- Technical Proficiency: Students exhibited improved technical proficiency in applying the Suminagashi technique, resulting in more refined and professional-looking designs.

d. Impact on Creativity

The results suggest that the Suminagashi technique effectively enhanced students' creativity. The traditional and hands-on nature of the technique appears to have provided a fresh perspective and stimulated creative exploration. The increase in creativity scores supports the notion that unique artistic methods can significantly influence creative thinking.

e. Skill Development

The improvement in design skills indicates that the training was successful in not only teaching the Suminagashi technique but also in integrating it into broader design practices. This suggests that practical, technique-focused training can lead to tangible improvements in both creative and technical skills.

f. Student Engagement

The high level of engagement reported by students aligns with the idea that novel and interactive learning methods can boost motivation and interest. The Suminagashi technique's hands-on approach likely contributed to a more engaging learning experience, reinforcing the importance of incorporating such methods in educational programs.

g. Implications for Future Training

The positive outcomes of this training program highlight the potential benefits of integrating traditional techniques into modern design curricula. Future training sessions could build on this success by exploring additional traditional techniques or expanding the program to include more advanced design concepts.

h. Limitations and Recommendations

The study's limitations include a relatively small sample size and a short duration of training. Future research could address these limitations by including a larger and more diverse participant group and extending the training period to assess long-term effects. Additionally, incorporating follow-up evaluations to gauge the sustainability of creativity improvements would provide further insights. In conclusion, the Suminagashi surface design training was effective in enhancing student creativity and design skills, demonstrating the value of innovative and culturally rich techniques in educational settings.

CONCLUSION

The conclusion of the "Surface Design Training Using Suminagashi Technique to Increase Student Creativity in PKBM Binar, South Tangerang" likely involved assessing the impact of this specific training on students' creative skills. Suminagashi, a traditional Japanese marbling technique, can offer a unique approach to surface design, potentially leading to enhanced creativity among participants. The key outcomes might include:

- a. Increased Creativity: Students may have demonstrated a higher level of creativity in their surface design projects, showcasing more innovative and diverse approaches.
- b. Skill Development: Participants could have acquired new technical skills in the Suminagashi technique, which might be applied in various design contexts.
- c. Engagement and Motivation: The hands-on, artistic nature of Suminagashi may have increased student engagement and motivation in their creative endeavors.
- d. Feedback and Reflection: There might have been positive feedback from students about the training's impact on their creative thinking and design capabilities.

The effectiveness of the training would be measured through student feedback, project evaluations, and possibly comparing pre- and post-training assessments of creativity and design skills.

The "Surface Design using Suminagashi Technique" training has succeeded in having a significant impact on improving students' artistic skills and creativity. Through the introduction of this ancient technique from Japan, students not only learn to design unique artistic patterns, but also understand basic art concepts such as harmony, proportion, and rhythm which are then applied in their work. This encourages students to think more creatively, create

products with high aesthetic value, and stimulate their innovative abilities in producing works of art that have the potential to be marketable. Products such as clothing and accessories produced using the Suminagashi technique have great potential to attract consumer interest and create business opportunities.

Apart from that, in the context of the creative economy, this training makes a real contribution in opening up opportunities for students to develop creativity-based entrepreneurship. This program, which is organized by the Binar School as PKBM, has provided inspiration and new insight to students regarding how artistic skills can be transformed into sustainable business opportunities. Support from the school environment and community in providing access to this training shows that developing human resources through increasing knowledge and skills can contribute to advancing the local economy. This training, ultimately, serves as a solution to empower students with practical skills that can be applied in real life, especially in the fast-growing creative business sector.

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