

Community Service Program on Packaging Design for Student Product Innovation at MAN Sukamara

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Abstract. Packaging design plays an essential role in enhancing the attractiveness and competitiveness of local products, particularly for students who are encouraged to develop entrepreneurial skills within the educational environment. However, many students and school communities still face limitations in creating innovative and market-oriented packaging designs. This community service program was conducted at Madrasah Aliyah Negeri (MAN) Sukamara with the aim of providing training in packaging design for superior products developed by students. The training methods included interactive workshops, demonstrations, and mentoring sessions that combined theoretical knowledge with practical design skills. Participants were introduced to the principles of visual communication, branding, and the use of digital tools to support the creation of attractive and functional packaging. The results show that participants were able to produce creative packaging designs aligned with product characteristics, thereby increasing the commercial value of student products. In addition, the program raised awareness among students and teachers about the importance of design in product marketing and laid the foundation for fostering an entrepreneurial culture within the school. This program demonstrates that packaging design training not only improves technical skills but also contributes to strengthening the competitiveness of local products and empowering students to face real-world business challenges.

Keywords: Packaging Design; Community Service; Entrepreneurship; Madrasah Aliyah Negeri, Sukamara

INTRODUCTION

Packaging design serves not only to physically protect the product but also as a communication medium that conveys information and the identity or brand of a product to consumers. In addition, it functions as a marketing tool to attract consumer attention and build a long-term brand image (Chyntia et al. 2025). In the context of local products, effective packaging design can serve as a regional identity and distinctive feature that strengthens competitiveness and becomes a strategic advantage in an increasingly competitive market (Najib et al. 2022).

One of the efforts undertaken to support this is by providing training aimed at enhancing students' skills in understanding the importance of packaging design, as well as in designing and creating packaging for local products that represent the potential of a region (Abidin 2023) Sukamara. The skills provided aim to equip students with the ability to produce designs that meet market demands, thereby increasing the products' market value and competitiveness. Integrating an understanding of packaging design with the exploration of local potential serves as an effective means of preparing students to face economic challenges at the regional, national, and even global levels. These skills are not limited to producing visual products but also function as educational tools that foster the development of 21st-century competencies such as creativity, problem-solving, and innovation (Wulandari et al. 2025).

Madrasah Aliyah Negeri (MAN) Sukamara is one of the secondary education institutions that requires packaging design training for its students. This activity is highly relevant at present, as it aligns with the need to develop local potential and provide students with hands-on experience related to products originating from their own region. The training is expected to equip students with practical skills in designing attractive and functional product packaging, which can be utilized to support the sustainable development of local businesses and leading products in the Sukamara area.

The purpose of this community service program is to enhance students' understanding and practical skills in packaging design, enabling them to create innovative and market-oriented product packaging designs that support the development of local entrepreneurship in Sukamara. Furthermore, this program aims to strengthen collaboration between higher education institutions and schools in fostering creative, entrepreneurial, and technology-based learning that contributes to regional economic empowerment.

METHOD

The simulation and practice methods used in the packaging design training at MAN Sukamara were chosen because they provide students with both theoretical and practical learning experiences. First, students are given presentations and explanations on design, art, and packaging design concepts. The next method involves simulations and demonstrations, where students are taught design techniques and strategies for creating appealing packaging designs. The simulation method is applied by providing learning experiences that closely resemble real-world conditions, making it easier for students to understand specific concepts, principles, or skills. There are three models of computer-based learning delivery methods used in this approach: (1) guided practice, (2) tutorial, and (3) simulation. (Cotton 1993).

In the implementation of the training, the guided practice method was chosen and applied in the teaching and learning process because it promotes active and direct participation from students. This method helps students become familiar with the software used and enhances their skills in terms of speed, accuracy, and precision in producing the intended packaging design. It also allows participants to repeat certain stages of the process if discrepancies arise between the planned design and the actual results. One of the advantages of this method is that it encourages students to take responsibility for their work, including reviewing their outputs and providing feedback to fellow participants during the training (Zahara et al. 2024).

The stages of the training are illustrated through a schematic representation as shown in Figure 1.

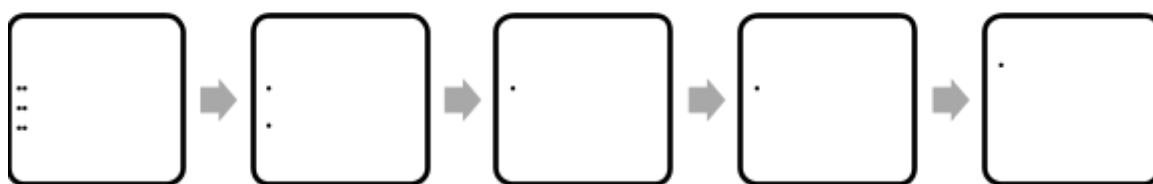


Figure 1: Flow of the Packaging Design Training Activities

Figure 1 illustrates the schematic stages of the packaging design training, which consist of three main phases: the preparation stage, the implementation stage, and the evaluation stage. The implementation stage includes three technical sub-stages, namely: Stage 1 – Material Delivery, Stage 2 – Practice, and Stage 3 – Design Creation. A more detailed explanation of each stage is provided as follows.

1. Preparation Stage

The preparation stage begins with conducting an observation at the madrasah, followed by analyzing the conditions of the institution that will serve as the site for the community service activity. The team then sends an official request letter to the madrasah as a partner institution to obtain approval and readiness for the implementation of the program, in this case, the training. Once the partner institution accepts the request, as evidenced by an official response letter from the madrasah, the next step involves organizing the implementation schedule and preparing technical aspects such as the training venue, speakers and instructors, required equipment and materials, necessary administrative documents, and documentation plans.

2. Implementation Stage 1

The first phase of the implementation stage begins with an opening session led by the community service team, explaining the objectives of the session and the materials to be delivered. During this stage, participants are introduced to topics related to design and art, followed by hands-on practice in creating packaging designs based on provided examples. The presentation of the material aims to give participants a comprehensive understanding of graphic design principles, including the use of color, form, and layout to produce designs that are visually appealing and appropriate for their intended purpose (Tiawan et al. 2020). The next activity involves practicing packaging design based on the provided examples. Visual elements of packaging—such as color and typography—significantly influence consumers' perceptions of product quality and their purchasing decisions (Belliza and Kusumawati 2024).

3. Implementation Stage 2

The second phase of the implementation stage is a continuation of the first, in which the completed packaging design drafts are collected and printed using a printer. The printed designs are then cut and assembled according to the planned packaging design, allowing participants to visualize and produce a tangible prototype of their work.

4. Implementation Stage 3

The third phase of the implementation stage involves participants creating packaging designs for featured local products from Sukamara. This phase requires focus and dedication to produce optimal design results. The completed product designs are then printed and assembled according to the planned layout. Finally, each participant's work is displayed in the training room as part of the exhibition of outcomes.

5. Evaluation Stage

The evaluation stage serves as the final part of the training process, focusing on assessing and reviewing the packaging design outcomes created by the participants for local products in Sukamara. The resulting packaging designs are provided with feedback, suggestions, and encouragement to help students further develop and refine their work. This reinforcement also aims to prepare the participants for producing future designs and engaging in subsequent related activities.

RESULTS AND DISCUSSION

Kegiatan pelatihan telah dilaksanakan pada tanggal 30 Juli 2025 bertempat di The activity took place in the Computer Laboratory of Madrasah Aliyah Negeri (MAN) Sukamara, Central Kalimantan. The implementation lasted approximately six hours and was attended by 15 students. This activity was a collaborative effort between the community service team from Politeknik Negeri Pontianak and the partner school. The documentation shows participants registering before joining the training session. The photographic documentation can be seen in Figure 2.



Figure 2: Foto Peserta Pelatihan Sedang Melakukan Registrasi

During the training, participants received both theoretical and practical instruction on packaging design using CorelDRAW software. The results of the activity showed that each participant successfully produced two packaging box designs for snack products and three paper bag designs for Sukamara's signature souvenir products. The products used as design objects included *amplang* and *kerupuk basah*, which are among the region's prominent local specialties.

The implementation of the activity was carried out through three main stages, namely:

1. **Implementation Stage 1: Material Presentation**
2. In this stage, participants were introduced to the fundamental principles of design, visual arts, and the aesthetic functions of packaging. The instructor explained how color, form, and visual layout can influence consumer perception of a product. In addition, participants were introduced to graphic design software (CorelDRAW) as a tool to digitally implement their design ideas. One of the instructors, Mr. Rekso Prastama Putra, delivered a session on Visual Arts and Design. The documentation photo of the instructor presenting the material can be seen in Figure 3.



Figure 3: Photo of the Instructor Delivering the Visual Arts and Design Session

3. Implementation Stage 2: Simulation and Practice

Participants engaged in simulation and practice sessions using a training module

prepared by the community service team. In this session, participants were guided by two instructors in creating simple logos and packaging designs. This method proved effective, as students learned directly through hands-on activities using a *learning by doing* approach. During the simulation and practice stage, the instructor was assisted by two students who helped guide participants in using design software to create their packaging designs. The documentation of the simulation and practice session is shown in Figure 4.



Figure 4: Photo of the Simulation and Practice Session.

4. Implementation Stage 3: Featured Product Design Creation

In the final stage, participants were tasked with creating packaging designs tailored to the characteristics of Sukamara's signature products. They applied the theories and techniques learned to produce packaging designs that were attractive, functional, and reflective of local identity. During this design creation session, students were observed working diligently, following the guidance provided by the community service (PKM) mentoring team. The documentation photo of students during the packaging design session can be seen in Figure 5.



Figure 5: Photo of Students During the Packaging Design Creation Process

The design process took approximately two hours to complete. The final designs were saved in CorelDRAW (.cdr) and image (.jpg) formats. Participants then printed their works, cut them using scissors and cutters according to the required shapes, and assembled them into actual packaging prototypes ready for display. Afterward, participants took photos with their respective design creations. One of the participants, Geulan Ramadhan, showcased his design work, as shown in Figure 6.



Figure 6: Foto Geulan Ramadhan dan Hasil Karya Desainnya.

After completing the training session, the participants, instructors, and the PKM team took a group photo as a form of appreciation and documentation for reporting purposes. The documentation photo of the training participants and the PKM team is presented in Figure 7.



Figure 7: Photo of Participants with the PKM Team After the Training Session

After the training session, participants were given an evaluation questionnaire administered through Google Forms, consisting of several questions related to the training activities. The results of the evaluation questionnaire for the training on designing featured product packaging at MAN Sukamara are presented in Table 1.

Table 1: Hasil Evaluasi

No.	Question	Evaluation Result	
		Rating	Percentage
1	How do you rate the quality of the training materials delivered?	Excellent	100%
2	How relevant were the training materials to your work needs?	Relevant	6.7%
		Highly Relevant	93.3
3	How clear were the training materials presented?	Clear	6.7%
		Very Clear	93.3
4	Did the instructor deliver the materials clearly and understandably?	Skilled	13.3%
		Highly Skilled	86.7%
5	Was the training duration sufficient to understand all the materials presented?	Appropriate	20%
		Very Appropriate	80%
6	How were the facilities and equipment provided during the training (e.g., computers, software, training room)?	Good	6.7%
		Excellent	93.3
7	Do you feel confident in applying the skills learned during the training?	Confident	6.7%
		Very Confident	93.3

Based on the questionnaire distributed via Google Forms, most participants provided highly positive feedback, indicating that the training materials were relevant to their needs, the instructors delivered the content clearly and comprehensibly, and the training facilities effectively supported the activities. Furthermore, more than 91.41% of participants expressed confidence in applying the design skills they had learned to their future academic or entrepreneurial endeavors.

In terms of impact, this activity significantly improved students' digital skills and creativity. Before the training, most participants were unfamiliar with graphic design software and had limited understanding of visual aesthetics principles. After the training, students were able to create original works that were not only visually appealing but also highlighted Sukamara's local identity. This finding aligns with Sosianika's research, which states that visually attractive packaging design plays an important role in enhancing a product's market value and perceived quality in the eyes of consumers (Sosianika et al. 2022) (Atmojo et al. 2025). The visual design of packaging significantly influences consumers' perceptions of product quality and value (Patel et al. 2024).

Furthermore, this training also fostered the development of entrepreneurial spirit among students. By acquiring the ability to design their own product packaging, students have the opportunity to develop small businesses based on local products. The collaboration between the higher education institution and the secondary school in this activity serves as a concrete example of the implementation of the *link and match* concept between the education sector and the needs of the local creative industry.

Overall, the results of the training indicate that the simulation and hands-on practice approach was highly effective in enhancing students' technical skills and creativity. This program not only produced packaging design products but also fostered awareness of the importance of design as an integral part of marketing strategies and the strengthening of regional economic potential.

CONCLUSION

Kegiatan pengabdian kepada masyarakat dalam bentuk pelatihan desain kemasan di MAN Sukamara successfully achieved its main objective enhancing students' understanding and practical skills in designing innovative, market-oriented local product packaging. Through simulation and hands-on practice methods, participants gained comprehensive learning experiences, ranging from understanding the fundamental principles of design and utilizing graphic design software to producing functional packaging prototypes.

Scientifically, this activity contributes to strengthening the implementation of technology-based and creativity-oriented learning at the secondary education level. The training results demonstrate that the *learning by doing* approach effectively improves participants' digital skills, self-confidence, and creative thinking abilities, key components of 21st-century competencies. In addition, this program reinforces collaboration between higher education institutions and schools in supporting local potential development and design-based entrepreneurship.

These findings enrich the literature on the effectiveness of computer-based packaging design training within the context of education and regional product development. In the future, similar programs could be expanded by involving local MSMEs and government institutions, allowing students' design outputs to be practically applied to Sukamara's local products. Further research is also needed to evaluate the long-term

impact of such training activities on students' entrepreneurial interests and innovative capabilities.

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