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# Empowering Scout Members of the 015-016 Scout Group through Digital Screen-Printing Training to Foster Creative Entrepreneurship in Dolok Ilir

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**ABSTRACT**
This community service program aimed to empower members of the 015-016 Scout Group at SMP Swasta Dolok Ilir, Indonesia, through digital screen-printing training to foster creative entrepreneurship. The program was implemented using a participatory and experiential learning approach, integrating digital graphic design training, hands-on practice with Direct-to-Film (DTF) screen-printing technology, product production, and basic entrepreneurial orientation. Training activities were supported by international collaboration with lecturers from Malaysia as part of strengthening Indonesia–Malaysia cooperation in education and community engagement. The results showed a clear improvement in participants' digital skills, creativity, and practical production abilities. Most participants were able to independently design and produce screen-printed products with acceptable quality standards. The provision of modern screen-printing equipment and the establishment of a Creative Entrepreneurial Corner within the school further supported program sustainability by enabling continuous practice and school-based entrepreneurial activities. Furthermore, participants learned how to package and brand their products while exploring e-commerce platforms to access broader markets. The establishment of a school-based Creative Entrepreneurial Corner under the Scout Group further strengthened program continuity, serving as a platform for ongoing practice and business development. Overall, this initiative demonstrates that integrating digital skills with entrepreneurial training can significantly enhance the self-reliance, creativity, and economic potential of rural youth, offering a replicable model for community development in similar contexts.

**Keyword:** Digital Printing, Scout Movement, Creative Entrepreneurship

## 1. Introduction

Community-based empowerment programs play a crucial role in strengthening youth capacity, particularly in rural and semi-rural areas where access to digital skills training and creative industry infrastructure remains limited [1]. This community service initiative was conducted at SMP Swasta Dolok Ilir, located in Dolok Batu Nanggar District, Simalungun Regency, North Sumatra, Indonesia. The school serves not only as an educational institution but also as a community hub for character building and extracurricular development, particularly through the Scout movement (*Pramuka*).

The local partner in this program, Mrs. Aidawani, serves as the Scoutmaster of the 015-016 Scout Group and plays an essential role in nurturing students' creativity and discipline. She has demonstrated strong commitment and potential in developing students' practical skills beyond conventional scouting activities. However, despite this potential, the creative capacity of Scout members has not yet been optimally utilized, particularly in areas related to digital design and screen-printing that could support school-based creative entrepreneurship [2].

**Figure 1**. Scout Group 015-016 in Dolok Ilir

One of the major challenges faced by the partner is the lack of structured training, adequate facilities, and clear strategies to transform Scout members into creative producers capable of generating digital screen-printing products. Although students show high enthusiasm and creativity, the absence of digital design competencies, modern printing technology, and business-oriented guidance has limited their ability to develop value-added products [3]. As a result, the potential of the Scout group as a driver of creative entrepreneurship within the school environment remains underdeveloped.

From a broader perspective, this condition reflects a gap between youth potential and access to skill-based empowerment opportunities, a challenge commonly found in rural educational contexts [4]. Addressing this gap is closely aligned with the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), which emphasizes inclusive and equitable access to relevant skills, SDG 8 (Decent Work and Economic Growth), which promotes youth entrepreneurship and productive employment, and SDG 9 (Industry, Innovation, and Infrastructure), which encourages the adoption of appropriate technology to support local innovation. However, the unique challenge in Dolok Ilir lies in integrating digital technology into extracurricular scouting activities while ensuring sustainability within school-based systems [5].

To respond to these challenges, this community service program introduced a structured digital screen-printing training model that integrates digital graphic design, modern Direct-to-Film (DTF) printing technology, product branding, and digital marketing. The involvement of lecturers from Malaysia, particularly from Universiti Putra Malaysia, represents a strategic follow-up to the strengthening of Indonesia–Malaysia collaboration in the fields of education and community engagement. This international collaboration provided participants with broader perspectives on creative industries, global market opportunities, and the importance of innovation-driven entrepreneurship.

Therefore, this article aims to analyze the implementation and impact of digital screen-printing training in empowering Scout members of the 015-016 Scout Group in Dolok Ilir, with a focus on enhancing creative skills, fostering entrepreneurial mindsets, and supporting sustainable youth empowerment. By combining local scouting potential with international academic collaboration and digital technology, this program offers a replicable model for community-based creative entrepreneurship development in similar educational contexts.

## 2. Methods

This community service program employed a participatory and experiential learning methodology, integrating capacity building, hands-on practice, and creative entrepreneurship development. The approach was designed to actively involve Scout members in every stage of the program while ensuring sustainability through school-based implementation and international collaboration.

### *2.1. Program Implementation Stages*

The implementation of this community service activity was conducted through two main phases, carried out in a structured and chronological sequence.

1) Human Resource Capacity Building
   The first phase focused on strengthening participants' knowledge and technical skills in digital creative production. At this stage, Scout members of the 015-016 Scout Group received training in digital graphic design using professional software such as Adobe Photoshop, Adobe Illustrator, and CorelDRAW. The training process combined short explanations, live demonstrations, guided practice, and collaborative activities to stimulate creativity and active participation.
   In addition to design skills, participants were introduced to modern digital screen-printing technology, particularly the use of Direct-to-Film (DTF) printers and heat press machines [6]. The learning process emphasized understanding the workflow rather than memorizing procedures, allowing participants to gradually build confidence in operating digital tools independently. The involvement of facilitators from Indonesia and Malaysia enriched the learning atmosphere by providing cross-cultural perspectives on creative industries and youth entrepreneurship.
2) Creative Product Production and Packaging
   The second phase focused on transforming acquired skills into tangible and marketable products. Participants were guided through the complete digital screen-printing process, starting from design preparation on a laptop, printing designs onto film media using DTF printers, powder application, curing, and transferring the design onto fabric with a heat press machine, until a finished T-shirt product was produced.


**Figure 2.** Digital Screen-Printing Process

During this stage, participants were encouraged to pay attention not only to technical accuracy but also to visual quality, durability, and product aesthetics [7]. Training on product finishing and packaging was provided to introduce basic principles of branding and professional presentation. This stage helped participants understand that creative entrepreneurship requires a combination of technical skills, creativity, and market awareness.

### *2.2. Training Methods and Learning Activities*

The collected data were analyzed using a descriptive qualitative and quantitative approach. Improvements in participant competencies were examined through descriptive summaries, while observational data and participant feedback were analyzed thematically to identify patterns of engagement, skill development, and

entrepreneurial orientation. This mixed descriptive approach ensured that the outcomes of the program could be evaluated empirically while still capturing the social and educational dimensions of community empowerment [8].

The methods applied during the implementation of the program included:

- Collecting and reviewing references from books, school curricula, and creative industry practices to design training materials relevant to the partner's needs.
- Conducting observations and discussions with the local partner to map challenges, student potential, and opportunities for increasing Scout members' creativity.
- Delivering training sessions in an interactive and participatory format to encourage active engagement and hands-on learning.
- Involving participants directly in the design and production process based on simple market-oriented concepts.
- Producing finished digital screen-printing products followed by joint evaluation sessions to assess quality and improvement areas.

To ensure sustainability, the program concluded with the establishment of a school-based Creative Entrepreneurial Corner, which functions as a continuous training and production space for Scout members. This corner allows students to practice digital screen-printing regularly, develop new product ideas, and gradually engage in small-scale entrepreneurial activities [9]. The methodological design thus extended beyond short-term training, embedding creative entrepreneurship within the school and scouting ecosystem.

## 3. Result and Discussion

The implementation of the digital screen-printing training program for members of the 015-016 Scout Group at SMP Swasta Dolok Ilir demonstrated substantial outcomes in terms of skill enhancement, creative engagement, and entrepreneurial awareness. Overall, the program was executed smoothly and was well received by participants, school representatives, and community partners, indicating the relevance of technology-based empowerment initiatives for rural youth development.

### *3.1. Enhancement of Digital Literacy and Creative Skills*

One of the most significant outcomes of the program was the measurable improvement in participants' digital literacy and creative competencies. Prior to the training, most Scout members possessed only basic familiarity with computers and had limited experience with professional graphic design software. Through structured and interactive learning sessions, participants gradually developed the ability to operate design tools, apply basic design principles, and translate creative ideas into digital formats suitable for screen-printing.


**Figure 3.** Documentation of digital screen printing training activities guided by Prof. Tulus as the Head of the Community Service Team.

The improvement was not only observed cognitively but also behaviorally. Participants showed increased engagement during training sessions, actively asking questions, experimenting with design variations, and collaborating with peers. This behavioral shift reflects the effectiveness of experiential learning approaches in fostering creativity and confidence among students. The quality of digital designs produced at the end of the training further confirmed that participants were able to move beyond imitation toward independent creative expression.

The hands-on production phase played a crucial role in transforming abstract knowledge into practical skills. Participants were guided through the complete digital screen-printing workflow, starting from design preparation, printing designs onto film using DTF technology, powder application, curing, and transferring designs onto fabric using a heat press machine. The decision to divide participants into small groups allowed for more equitable access to equipment and ensured that every student experienced each stage of production.

**Figure 4.** Participants take part in practical use of DTF printers and heat press machines in digital screen printing training activities.

Observational data indicated a clear progression in technical competence. Initially, participants relied heavily on instructor guidance; however, by the end of the program, many were able to perform production tasks independently or with minimal supervision. The finished T-shirts produced during the training served as concrete evidence of this skill development. Assessment of product quality—based on print clarity, color consistency, and durability—demonstrated that participants achieved outputs aligned with basic industry standards.

### *3.2. Influence of International Collaboration on Motivation and Perspective*

The involvement of an international academic partner from Malaysia added a distinctive dimension to the program. This session broadened participants' perspectives by situating digital screen-printing within a global creative industry context. Instead of focusing solely on technical mastery, the international partner emphasized innovation, adaptability, and market awareness as essential competencies for future entrepreneurs.

**Figure 5.** Prof. Nuraini Abdul Aziz provides training and motivation about the importance of digital screen printing skills for the future of participants.

Participant responses revealed heightened motivation and ambition following this session. Many students expressed new aspirations to continue developing their skills and to explore small-scale entrepreneurial ventures. This finding highlights the importance of international collaboration not only as a means of knowledge exchange but also as a motivational catalyst that strengthens students' confidence and global outlook.

Another key result of the program was the provision of digital screen-printing equipment to the school and Scout group. The handover of DTF printers, heat press machines, and supporting materials represented more than material support it symbolized institutional trust and long-term commitment to capacity building. The availability of these facilities enabled participants to continue practicing and refining their skills beyond the limited duration of the training program.

**Figure 6.** Group photo of the community service team and participants during the handover of digital screen printing technology items.

From an institutional perspective, the presence of printing equipment within the school environment facilitated the integration of creative entrepreneurship into extracurricular activities. Teachers and Scout leaders acknowledged that these resources increased the feasibility of sustaining digital production activities and encouraged the development of a more productive and skill-oriented scouting program.

The socio-educational impact of the program was evident in increased student engagement, teamwork, and self-confidence. Participants demonstrated greater initiative in proposing design ideas and showed improved collaboration during production tasks. The local partner, represented by the Scoutmaster, positively evaluated the program and highlighted noticeable changes in students' discipline, creativity, and willingness to take responsibility during activities.

The partner further noted that the program shifted perceptions of scouting activities—from being primarily character-building and routine-based to becoming skill-enhancing and economically oriented. This transformation is particularly important in rural educational settings, where opportunities for vocational exposure are limited. The partner's response confirms that the program addressed genuine needs and aligned with local educational priorities.

*3.3. Sustainability through the Creative Entrepreneurial Corner*

Sustainability was strategically addressed through the establishment of the Creative Entrepreneurial Corner (Pojok Entrepreneur). This space functions as a dedicated hub for continuous practice, experimentation, and small-scale production of digital screen-printing products within the school environment. Unlike conventional classrooms, the Creative Entrepreneurial Corner is designed as a workshop-style laboratory where students can actively engage in hands-on digital screen-printing activities using professional equipment in a real production setting.


**Figure 7.** The community service team together with the school reviewed the Entrepreneur Corner as a center for the sustainability of digital screen printing training.

The Creative Entrepreneurial Corner enables students to apply their acquired skills in real-life contexts, reinforcing learning through repetitive practice and problem-solving. By functioning as a production workshop, this space allows students to routinely design, print, and finish screen-printed products while adhering to basic quality control and workflow standards. More importantly, it serves as an institutionalized learning environment that supports the transition from training to entrepreneurship, providing students with practical experience similar to that of a small-scale creative industry laboratory.

From a sustainability perspective, the Creative Entrepreneurial Corner provides a strong foundation for developing school-based entrepreneurial initiatives that can generate economic value while enhancing students' technical and creative competencies. The integration of this workshop into the school's extracurricular and scouting activities ensures continuity of skill development beyond one-time training interventions. By embedding digital screen-printing practices within an institutional structure, the program supports long-term capacity building, encourages student ownership, and strengthens the potential for replication in other schools and community settings.

Despite its success, the program faced several challenges. Differences in initial digital literacy levels among participants required instructors to adopt flexible teaching strategies. Time constraints limited opportunities for individualized mentoring, and the technical nature of digital equipment demanded ongoing supervision and maintenance. These challenges underscore the importance of phased training programs and sustained institutional support. Nevertheless, these challenges also offered valuable lessons. They highlight the need for continuous mentoring, gradual skill progression, and capacity building for teachers and Scout leaders who will oversee future activities. Addressing these factors will enhance scalability and replicability of the program in other schools and communities.

## 4. Conclusion

This community service program demonstrated that digital screen-printing training can serve as an effective and sustainable approach to empowering rural youth through creative entrepreneurship. By integrating digital graphic design, modern screen-printing technology, and entrepreneurial orientation within the Scout activities of the 015-016 Scout Group at SMP Swasta Dolok Ilir, the program successfully transformed students from passive learners into active creators and potential young entrepreneurs. The results indicate clear improvements in participants' digital literacy, creative competence, and practical production skills. Scout members were able to independently design and produce screen-printed products using Direct-to-Film (DTF) technology and heat press equipment, demonstrating meaningful skill acquisition beyond theoretical understanding. The quality of the products produced during the training served as tangible evidence of learning outcomes and reflected participants' growing confidence and technical proficiency.

The involvement of an international academic partner from Malaysia significantly strengthened the program by broadening participants' perspectives on creativity, innovation, and global market opportunities. This collaboration enhanced motivation, inspired entrepreneurial aspirations, and highlighted the importance of cross-border knowledge exchange in community engagement initiatives. The program therefore contributed not only to skill development but also to the cultivation of a future-oriented mindset among students. Sustainability was effectively addressed through the establishment of the Creative Entrepreneurial Corner (Pojok Entrepreneur), which functions as a workshop-style laboratory for continuous practice and small-scale production within the school environment. This institutionalized space ensures that digital screen-printing activities can be maintained beyond the duration of the training program, embedding creative skills development into the school's extracurricular and scouting ecosystem. By providing a real production setting, the Creative Entrepreneurial Corner supports long-term learning, experimentation, and entrepreneurship, rather than one-time skill transfer.

Despite challenges such as varying initial digital literacy levels and limited training duration, the program demonstrated that participatory, experiential, and technology-driven community service can generate meaningful educational and socio-economic impacts. The findings confirm that combining hands-on training, institutional support, and international collaboration creates a strong foundation for sustainable youth empowerment.

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