



Basic Graphic Design Training for High School Students (SMK Sjakhyakirti)

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ABSTRACT

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Background : Graphic design is a visual skill that plays a crucial role in modern digital communication, particularly in marketing, social media, advertising, and branding. The growing industry demand for creative workers requires vocational education institutions, such as vocational high schools (SMK), to equip students with skills relevant to the times. However, many students still lack adequate conceptual and technical understanding in this field .

Contribution: To address these challenges, SMK Sjakhyakirti provides comprehensive basic graphic design training. This program aims not only to enhance students' theoretical understanding of visual design principles but also to develop technical skills in using professional design software. This training also serves as a model for implementing vocational training that is relevant and adaptive to developments in the creative industry .

Method: The training uses a *blended learning approach* that combines online and face-to-face learning, supported by *project-based learning methods* , tool demonstrations, hands-on practice, and formative and summative evaluations. Students are actively involved in visual media creation projects such as posters, logos, and brochures using Adobe Photoshop, Illustrator, and CorelDRAW .

Results : The evaluation showed significant improvements in five key aspects: understanding design concepts (87%), software proficiency (91%), creativity (78%), team collaboration (83%), and understanding design ethics (85%). The overall average score reached 4.24 on a scale of 5, indicating the training's effectiveness in improving student competency. This program is expected to provide a strong foundation for students to pursue careers in the increasingly competitive creative industry.

Conclusion: The basic graphic design training program at SMK Sjakhyakirti has proven to be an effective initiative in enhancing students' competencies in both conceptual understanding and technical execution of visual

communication. Through a well-structured blended learning model and hands-on project-based activities, students demonstrated notable progress across various competencies, including software proficiency, creativity, collaboration, and ethical design awareness. With an average achievement score of 4.24 out of 5, this program not only meets the demands of the current creative industry but also serves as a replicable model for other vocational institutions aiming to equip students with future-ready skills in digital design

INTRODUCTION

Graphic design is a form of visual art that utilizes elements such as text, images, colors, and shapes to convey messages or information effectively [1][6]. This skill has become very important in the digital era, where the need for creative workers has increased significantly [2][3]. The role of graphic design in social media, marketing, advertising, and branding requires vocational school students to master the basics of design from an early age [9][22]. In today's digital era, graphic design has become an essential skill that is widely needed in various sectors, including advertising, digital marketing, social media, and corporate identity and branding. Graphic design plays a role as an effective visual communication medium in conveying messages to target audiences, so this competency is mandatory for vocational school students in the industrial era 4.0 [10]. With the increasing need in industry for workers who have competencies in the field of visual design, mastering the basics of graphic design has become very important, especially for students at the vocational education level.

Vocational High Schools (SMK) have a strategic role in preparing skilled human resources ready to enter the workforce. The curriculum in SMK is designed with a competency-based approach, which emphasizes mastery of practical and applicable skills according to industry needs. SMK as a vocational education institution has the responsibility to equip students with applicable skills according to the world of work [7]. A competency-based curriculum must integrate graphic design learning adaptively, adjusting to the needs of the creative industry [10][20]. As shown in the research of Wulandari and Pramudya [10], an adaptive curriculum is important to face the demands of the ever-growing creative industry. Therefore, the integration of basic graphic design subjects in the SMK environment is very relevant as part of a strategy to strengthen vocational education. Through graphic design learning, students not only gain conceptual knowledge, but also technical skills that can be directly applied in the world of work or independent entrepreneurship. Vocational education must be able to adapt the curriculum to the dynamic needs of the creative industry [11].

At Sjakhyakirti Vocational School, basic graphic design training is carried out by utilizing technological facilities and professional educators. This is a real implementation of the principle of developing vocational skills based on industry needs [13][8][19]. The implementation of the basic graphic design program is a strategic step in supporting the school's vision to produce graduates who are competent, creative, and adaptive to the development of creative industry technology. This school has facilities and infrastructure that support technology-based learning processes, as well as competent educators in their fields. Thus, the implementation of graphic design learning at Sjakhyakirti Vocational School is expected to increase the competitiveness of graduates, both in facing the world of work and continuing to higher levels of education.

This program is designed to provide a deep understanding of the basic principles of graphic design, as well as technical skills in operating software such as Adobe Photoshop, Adobe

Illustrator, and CorelDRAW. In addition, students will be trained to apply these skills in creating various visual products, such as posters, brochures, logos, and other promotional media, that meet industry standards.

METHODOLOGY

The basic graphic design training methodology used at Sjakhyakirti Vocational School, namely *Blended Learning*, *Project-Based Learning* (PjBL), demonstration and hands-on practice, and periodic evaluation and feedback, is not a completely new method, but rather an evolving approach that has proven effective in vocational education and practical skills learning. The application of blended learning has been proven to increase the efficiency of digital skills-based vocational learning [12]. The Project-Based Learning (PjBL) method can improve student problem-solving through real-life projects [13]. Each of these methods has a strong theoretical basis and has been supported by various studies in the context of vocational education and digital skills-based education. The following is an explanation of the training methods applied in basic graphic design learning at Sjakhyakirti Vocational School:

1. *Blended Learning Approach*

Blended learning is an approach that combines the strengths of online and face-to-face learning, increasing flexibility and effectiveness, particularly in technology-based learning contexts. This aligns with the teaching model at Sjakhyakirti Vocational School, where students not only receive online material but also receive hands-on practical guidance in the classroom.

This learning method combines face-to-face classroom learning with online learning. Students will receive basic graphic design materials through an online learning platform, along with video tutorials, modules, and interactive quizzes to deepen their understanding of design concepts. Additionally, face-to-face classroom learning is used for hands-on practice, discussions, and instructor guidance.

2. *Project- Based Learning*

Project-Based Learning is effective in improving critical thinking skills and problem-solving abilities because students are trained to solve real problems through challenging projects. *The Project-Based Learning (PjBL)* method is very relevant in design training because it can encourage students' abilities in real-life problem solving [12][13][14]. PjBL provides direct experience in design creation projects such as logos, brochures, and social media. This method is suitable for application in graphic design training because the creative industry demands real and original products produced through complex and collaborative thinking processes.

Students will be given real-life graphic design projects that require them to design various types of design materials, such as logos, posters, brochures, and social media designs. This project-based approach aims to provide hands-on experience in addressing design problems frequently encountered in the industrial world. Students will be taught how to analyze design needs, plan design concepts, and evaluate their work.

3. *Demonstration and Hands-On Practice*

According to Prince (2004), *the demonstration and hands-on approach* is crucial in technical education because it provides opportunities for hands-on learning (*learning by doing*), which has been shown to improve retention of knowledge and practical skills. The demonstration and hands-on approach is also a key component of training. Students learn design steps through instructor-led demos, then experiment with Adobe Photoshop, Illustrator, and CorelDRAW [3][4][5]. This method improves retention of technical skills [3].

This training emphasizes hands-on practice, giving students the opportunity to use graphic design software such as Adobe Photoshop, Illustrator, or CorelDRAW. Instruction is delivered through live demonstrations by instructors, who explain the design creation process step by step. Students then try to follow these steps to create their own designs.

4. Periodic Evaluation and Feedback

Evaluation is conducted periodically through observation, practical tests, and portfolios. Formative feedback is used to help students understand their strengths and weaknesses in the design process [16][15]. Emphasizing the importance of formative feedback as a means of reflection and continuous improvement. Periodic evaluations, as implemented in training at SMK Sjakhyakirti, enable students to be aware of their strengths and weaknesses in real-time so they can immediately improve their work.

Throughout the training, evaluations will be conducted periodically to gauge students' understanding of the material covered. Assessments will be based not only on the final design results, but also on the creative process and technical skills demonstrated by the students. Instructors will provide constructive feedback to help students understand their strengths and areas for improvement in their designs.

RESULTS AND DISCUSSION

1. Activity Results

This basic graphic design training aims to equip students with theoretical understanding and technical skills relevant to the needs of the creative industry. Evaluation is both formative and summative, using written tests, practical observations, project assessments, and digital portfolios. The training results demonstrate the following achievements:

a. Improving Understanding of Graphic Design Concepts

Students demonstrated a good understanding of the basic principles of graphic design, such as balance, contrast, proportion, and unity. They were able to clearly explain how these elements are applied in creating effective designs. Many students successfully designed design materials such as posters, logos, and brochures, reflecting their understanding of the design principles they had been taught. Students demonstrated a good understanding of design principles such as balance, contrast, and proportion [1][6]. The average score of 82.5 indicated a significant increase in mastery of theory [14][19].

b. Mastery of Graphic Design Tools

Mastery of design software is a benchmark for the success of industry-based graphic design training [14]. Most students successfully master graphic design software such as Adobe Photoshop, Illustrator, and CorelDRAW. They are able to use these tools to create designs with varying levels of complexity. Most students are able to operate Adobe Photoshop, Illustrator, and CorelDRAW [4][5][3]. Mastery of this software is an important indicator of readiness to face the creative industry [14][18]. Students can also use various features and techniques in the software to improve the quality of their designs. The quantitative value is 91% of students master at least two of the three main software, and the average -average technical practice score (using tools & visual effects): 86.3/100.

c. Creativity in Design Making

Students showed improvements in creativity and innovation skills. Many of them produced unique and interesting designs, both for individual and collaborative assignments. Students produced innovative and original designs, although some still used conventional templates. The project-based learning model has been proven effective in developing

creativity [13][14][17]. Team-based projects allow students to share ideas and enrich their design results, resulting in more diverse and creative work. Quantitative Values: 78% of students scored ≥ 85 on the creativity aspect and 68% produced work with unique and interesting visual concepts.

d. Collaboration and Presentation Skills

Through collaborative assignments, students were able to work together in teams to produce more complex designs. Students demonstrated good communication skills in group discussions and were able to provide constructive feedback to fellow teammates. Students' presentation skills also improved, with many students able to present their design ideas clearly and confidently in front of the class. Collaboration skills were enhanced through group assignments that required collaboration in creating design products [15][21]. Students were also able to convey their ideas through clear and coherent presentations. Quantitative scores were 83% of students demonstrating the ability to work effectively in teams, and the average group presentation score: 80.4/100.

e. Understanding Ethics and Social Responsibility

During the training, students also gained a better understanding of graphic design ethics, particularly regarding copyright and the legitimate use of visual resources. Students demonstrated a higher awareness of the importance of respecting copyright and social responsibility in creating designs that do not violate applicable laws and norms. Students gained a good understanding of the ethics of image use, copyright, and plagiarism [15][16]. This learning is important to instill social responsibility in professional design practice. Quantitative Values are 85% of students are able to identify copyright infringement in case studies and the average average design ethics reflection score: 81.7/100.

Table 1 Activity Results

Competency Aspects	% of Students Passing Standard (>75)	Average Score (100 Scale)
Understanding Design Concepts	87%	82.5
Mastery of Graphic Design Software	91%	86.3
Design Creativity	78%	84.2
Collaboration & Presentation	83%	80.4
Ethics & Social Responsibility	85%	81.7

2. Discussion

Although the training went well, challenges in applying design principles were found in some students who were not yet able to integrate design elements harmoniously [1][3][22]. They still need further guidance, including visual reflection-based evaluation [16][19].

Some students faced technical obstacles at the beginning of the training, especially in operating graphics software [4][18]. However, through hands-on demonstrations and practice, their mastery improved [5][21]. Several points need to be discussed regarding the challenges faced and some important findings during the activity:

a. Technical Skills and Software Proficiency

One of the primary goals of this graphic design training is to develop students' technical skills in using design software. Using tools like Adobe Photoshop and Illustrator allows students to master a variety of design techniques applicable in the professional world. Project-based learning gives them the opportunity to practice these skills directly, further enhancing their mastery of these tools. However, some students who were initially less

familiar with design software required more time to master advanced features, although overall, they successfully overcame the challenge.

b. Creativity in Design

This program emphasizes the importance of creativity in producing designs that are not only attractive but also functional. Based on the project results, most students demonstrated the ability to think creatively and apply new ideas to their designs. However, some students still relied on templates or more conventional designs. This suggests that although students understand the basics of design, they still need more encouragement to experiment with original ideas and dare to adopt more innovative approaches.

c. Collaboration and Teamwork

One important aspect of this training is the development of collaborative skills through group assignments. Students learn to work in teams, share ideas, and combine their expertise to produce more comprehensive designs. In some projects, students demonstrated the ability to work well together, but there were also challenges in terms of coordination and equitable distribution of tasks. This indicates that although students possess strong individual design skills, they still need further education on the importance of teamwork and how to contribute effectively in group projects.

d. Ethics in Graphic Design

The ethics of using visual works in graphic design need to be instilled from an early age, especially regarding copyright and plagiarism [16]. Students demonstrate an adequate understanding of ethics in graphic design, especially regarding copyright and the use of digital resources. Learning about copyright and legitimate resources helps them avoid breaking the law and prepares them for a career with integrity in the design industry. This learning is important because ethical awareness is an often overlooked, yet crucial, aspect in the professional world of graphic design.

e. Challenges in Applying Design Principles

While many students have a good grasp of design theory, their application of it in their designs is not always consistent. Some students still struggle to balance design elements, such as text and images, resulting in designs that sometimes lack harmony. This highlights the importance of further practice in applying design principles in practice. More intensive guidance in this area will help students develop a deeper understanding and more solid design skills.

3. Table

A table of results from basic graphic design training for Sjakhyakirti Vocational School students. This table highlights several aspects evaluated in the training, as well as the students' achievements in various graphic design skill areas.

Table 2. Table of Results of Basic Graphic Design Training Activities for High School Students

Evaluation Aspects	Result Description	Score (1-5)
Understanding Graphic Design Principles	Students can identify and apply design principles such as balance, contrast, proportion, and unity well.	4.5
Design Software Mastery	Most students are able to use Adobe Photoshop, Illustrator, and CorelDRAW to create complex designs.	4.3
Creativity in Design	Students showed good creativity in producing unique designs, although some still followed standard templates.	4.2
Collaboration Skills in a Team	In group assignments, most students worked well together, but there were some challenges in dividing up the work.	4.0
Design Presentation Skills	Students are able to present their designs clearly and convincingly in front of the class.	4.4
Understanding Graphic Design Ethics	Students have a good understanding of copyright and the ethics of using resources in design.	4.6
Application of Design Principles in Work	Some students still have difficulty balancing design elements in their work, such as text and images.	3.8
Individual Project Achievements	Students successfully completed individual projects with designs that met professional standards, although there was room for improvement.	4.3
Group Project Achievements	Group projects show good collaboration results, but there is a slight imbalance in the distribution of tasks and ideas.	4.1

Based on the evaluation results summarized in Table 2, the basic graphic design training conducted at Sjakhyakirti Vocational School demonstrated positive and significant learning outcomes across most aspects of graphic design skills. The overall average score was around 4.24 on a scale of 5, reflecting the effectiveness of the training approach in improving student competency.

The results of the training activities indicate that the applied methods such as *blended learning*, *project-based learning*, and hands-on practice have succeeded in significantly improving students' graphic design competencies. The highest achievements are in the aspects of understanding ethics, design principles, and presentation skills. However, challenges remain in technical implementation and collaboration, which need to be followed up with advanced approaches based on *mentoring* or *peer review*. In general, when compared with similar research, this training shows performance above the national average in vocational graphic design training at the vocational school level, and has the potential to become a model that can be replicated in other schools.

4. Activity Photos

Training activities are thoroughly documented to record the entire series of events, from the opening and training sessions, practice sessions, and closing. This documentation serves as evidence of implementation, reporting material, and a means of publicizing community service activities.



Picture 1. Graphic Design Software Introduction Session

In the photo, a teacher is shown explaining how to use Adobe Photoshop to students in a computer lab. The students are focused on their monitors while following the instructor's directions. This is the initial training session, where students are introduced to the interface and basic functions of the design software.



Picture 2. Interaction between Speaker and Participants

The resource person actively interacted with participants, answering questions and providing personalized guidance when they encountered technical difficulties. This photo demonstrates the participatory and collaborative atmosphere of the training.

CONCLUSION

Basic Graphic Design training conducted at Sjakhyakirti Vocational School has been successful and has had a positive impact on improving students' knowledge and skills in graphic design. Through a variety of learning methods, such as project-based learning, hands-on practice, and group work, students are able to understand basic design principles and apply them to various creative projects. During the training, students demonstrated significant improvements in their mastery of design software such as Adobe Photoshop and Illustrator. They also grew more confident in communicating ideas through presentations and class discussions. Their teamwork skills and understanding of design ethics also developed well.

Despite some challenges, such as the inconsistent application of design principles and needing improvement in group coordination, overall, this training has successfully provided students with a solid foundation to advance to advanced design or enter the creative industry. With ongoing guidance and adequate support facilities, it is hoped that Sjakhyakirti Vocational School students will continue to develop their potential in graphic design and be ready to compete in the increasingly competitive digital era.

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developing students' skills in graphic design and increasing their readiness to face the challenges of the workplace and the creative industry.

References

- [1] A. Ambrose and P. Harris, *Basics Design 01: Format*. Lausanne: AVA Publishing, 2011.
- [2] D. Dabner, S. Stewart, and E. Vickress, *Graphic Design School: The Principles and Practices of Graphic Design*, 7th ed. Hoboken, NJ: Wiley, 2020.
- [3] J. Landa, *Graphic Design Solutions*, 6th ed. Boston, MA: Cengage Learning, 2018.
- [4] Adobe Inc., "Adobe Photoshop User Guide," Adobe Help Center, 2023. [Online]. Available: <https://helpx.adobe.com/photoshop/user-guide.html>
- [5] Corel Corporation, "CorelDRAW Graphics Suite Tutorials," CorelDRAW Official, 2023. [Online]. Available: <https://www.coreldraw.com/en/pages/tutorials/>
- [6] R. Williams, *The Non-Designer's Design Book*, 4th ed. Berkeley, CA: Peachpit Press, 2015.
- [7] M. Purba, "Designing Student Value Applications at State Elementary School 23 Palembang," *SISFOKOM*, vol. 6, no. 2, pp. 93–97, Sep. 2017.
- [8] M. Purba, "Student Grade Data Processing Application at Public Elementary School 152 Palembang Using the Waterfall Method," *Jusim: Musi Rawas Information Systems Journal*, vol. 8, no. 1, Jun. 2023.
- [9] S. Putra and A. Sari, "Graphic Design Competencies for Vocational High School Students in the Digital Era," *Journal of Vocational Education*, vol. 13, no. 2, pp. 155–164, 2023.
- [10] D. Wulandari and H. Pramudya, "Adaptive Curriculum for Vocational Education Facing the Creative Industry," *Journal of Vocational and Technology*, vol. 6, no. 1, pp. 45–53, 2022.
- [11] M. Rahman, S. Dewi, and I. Saputra, "The Effectiveness of Blended Learning in Vocational Education during the Pandemic," *Journal of Educational and Teaching Innovation*, vol. 7, no. 1, pp. 33–42, 2021.
- [12] Y. Yuliana and R. Hasanah, "Implementation of Project-Based Learning to Improve Problem Solving Skills of Vocational High School Students," *Journal of Technology and Vocational Education*, vol. 21, no. 2, pp. 89–98, 2023.
- [13] S. Suryani and D. Nugroho, "Development of Graphic Design Skills Based on Creative Industries," *Journal of Information Technology and Education*, vol. 15, no. 2, pp. 112–120, 2022.
- [14] R. Fadillah, B. Kurniawan, and N. Pratiwi, "Project-Based Learning Model for Developing Graphic Design Creativity," *Journal of Design Education*, vol. 4, no. 1, pp. 25–35, 2021.
- [15] H. Santosa, "Professional Ethics of Graphic Design in the Digital Era," *Journal of Visual Communication and Design*, vol. 5, no. 2, pp. 50–60, 2022.
- [16] A. Fitriani and D. Hartono, "Evaluation of Graphic Design Training for Vocational High School Students," *Journal of Community Service*, vol. 3, no. 3, pp. 145–152, 2021.
- [17] L. Oktaviani, "Improving Soft Skills Through Graphic Design Training," *Journal of Creative Education*, vol. 5, no. 1, pp. 90–97, 2022.
- [18] A. Ramadhani and B. Kusuma, "The Effect of Online Learning on Graphic Design Skills," *Edutech Journal*, vol. 12, no. 4, pp. 230–238, 2023.
- [19] P. Setiawan, "Development of Digital Graphic Design Module," *Journal of Educational Technology*, vol. 14, no. 1, pp. 60–68, 2022.
- [20] N. Arifin, "The Role of Teachers in Developing Graphic Design Competencies," *Journal of Vocational Education*, vol. 9, no. 2, pp. 120–130, 2023.
- [21] T. Sukmawati, "Use of Interactive Media in Graphic Design Learning," *Journal of Educational Information and Communication Technology*, vol. 8, no. 1, pp. 77–85, 2021.
- [22] I. Zulkifli, "Graphic Design and Prospects of the Creative Industry," *Scientific Journal of Design and Visual Communication*, vol. 6, no. 2, pp. 95–104, 2023.