BADRIDDUJA FULL DAY SCHOOL (FDS) JUNIOR HIGH SCHOOL (FDS) SCIENCE-BASED LEARNING TO MASTER GRAPHIC DESIGN

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Abstract:

Badridduja FDS Junior High School has its own learning system so that students have IT skills for graphic design. Considering their attachment to current internet technology, schools provide a very sophisticated learning system by relying on the technology and facilities available in the school. The aim of this research is to describe IT-based learning at Badridduja FDS Middle School to master graphic design. The research method uses the ABCD approach. The research subject was a graphic design teacher at Badridduja FDS Middle School. Data collection methods use interviews, observation and documentation. The data analysis technique uses descriptive analysis. The research results show that the IT-based learning strategy at Badridduja FDS Middle School involves the use of online collaboration tools, Power Point, and e-learning platforms such as Google Classroom, Kahoot, Quizizz, and WordWall. Apart from that, they master graphic design such as Corel Draw, Photoshop and Canva online. In every activity students are involved in making certificates, banners, academic diplomas and others. This mastery has been proven to increase student participation and facilitate access to learning resources. The implementation of this IT strategy has had a positive impact on the teaching and learning process at the school. The application of IT in learning at Badridduja FDS Middle School significantly enriches the learning experience and facilitates more interactive, collaborative learning. Mastering graphic design makes it easier for students to master other IT fields. Having a graphic design class can expand the creativity and innovation of Badridduja Middle School students.

Keywords: learning, technology, Badridduja Middle School, graphic design

INTRODUCTION

Learning is an interactive process carried out by students using learning resources both in class and outside the class in order to achieve science-based learning to master graphic design. (Wibowo, H. (2020) The achievement of learning is influenced by several factors including teachers, students, and the environment, methods and graphic design of learning used. Graphic design of learning is one of the important factors in achieving learning goals. Graphic design of learning can be used to convey learning materials so that it can surprise the attention, interests, thoughts and feelings of students in learning activities to achieve learning. (Hsb, 2018)

Graphic design in general is the art and practice of creating visual communication using elements such as images, text, colors, and shapes. The main goal is to convey messages, information, or emotions in a clear, attractive, and effective way. Graphic design can be found in various media, both digital and print, such as posters, advertisements, websites, logos, and product packaging. (Witabora, 2012)

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Some important elements in graphic design include:

1) Typography: Selection and arrangement of letters to make messages easier to read and more attractive; 2) Color: Use of color to evoke atmosphere, convey meaning, and create visual contrast; 3) Composition: Arrangement of design elements to look balanced and harmonious; 4) Images and Illustration: Use of photos or vector images to reinforce a message or provide visual appeal;4) Space: Arrangement of white space so that the design does not feel full and makes it easier for the eye to focus on important elements. (Hilmi, 2022)

Graphic design also involves several sub-fields, such as logo design, branding design, UX/UI design (for websites or applications), illustration design, and many more. The basic principles of graphic design are used to create works that are not only aesthetic, but also functional in conveying messages to the audience.

Many aspiring graphic designers do not have a strong understanding of the scientific concepts underlying graphic design. (Formen, 2020) Many graphic design students also lack tools such as not having a laptop, which hinders the learning process. In addition, the lack of students in learning graphic design is in combining colors and in using design elements so that the resulting design is less functional in conveying the message in a design to the viewer.

Through graphic design learning, students are encouraged to think analytically and critically, and to conduct experiments to explore existing design techniques and tools. And the learning system must be more extreme, such as by explaining one by one the functions of the tools in the design application used by students so that the results of students' designs can be conveyed properly by their readers, and the graphic design learning system utilizes a computer lab in an effort so that students who do not have the tools to design can follow and practice designing directly using computers owned by the school.

Science-based learning not only enriches technical knowledge, but also improves students' innovation and adaptation skills in facing complex design challenges. Thus, this approach is very relevant to equip a new generation of graphic designers to compete and contribute significantly in the increasingly competitive creative industry. Active learning, through methods such as case studies, group projects, and experiments, is very effective in helping students master scientific concepts that are often difficult to understand. (Marpaung, 2024). This research is very important to do because it can make it easier for students in the teaching and learning process at school such as using PowerPoint in their learning process, students can apply other media such as using online storage to store their assignments and important files.

RESEARCH METHODS

students at SMP Badridduja how the use of technology, especially the use of graphic design applications that can be useful for other students and especially can be useful for schools, observing the use of student learning processes through online design applications and other applications. The subject of the study was a graphic

design teacher at SMP Badridduja FDS, Interviewing the program and learning system

in graphic design and the positive and negative sides of students with design learning, The method of collecting data on the results of students' graphic design learning uses interviews, observations, and documentation. Data analysis techniques use descriptive analysis

The subjects of this study can focus on the implementation of technology or more theoretically regarding its development and application. This study involves stages starting from problem identification, data collection, analysis, to presentation and publication of results. Each stage needs to be carried out systematically to ensure accurate and accountable findings. Each research instrument must be adjusted to the research objectives, methods used, and characteristics of SMP Badridduja FDS or the object being studied. Valid and reliable instruments are essential to ensure the quality and accuracy of the data collected.

RESULTS AND DISCUSSION

Science-based graphic design learning provides students with a deeper understanding of design principles. By understanding the science behind graphic design, students can create more effective, creative, and innovative works. Through this work, SMP Badridduja FDS Junior High School students are able to continue their graphic design program at a higher level of education with abilities that can compete with various institutions out there. And it can be useful for other students such as graphic design students who design posters and words that can motivate their enthusiasm for learning at school, design school student council needs in terms of certificates, event signs, ID cards, student council event notification pamphlets and many other designs. Graphic design in general refers to the art and practice of creating visual communication to convey messages or information to the audience. (Wibowo, 2023)

The implementation of the program at SMP Badridduja is also very beneficial when they have entered the world of work and society which is still covered by graphic design and technology. Here are some examples of the design results of students from Badridduja Middle School in their learning process:
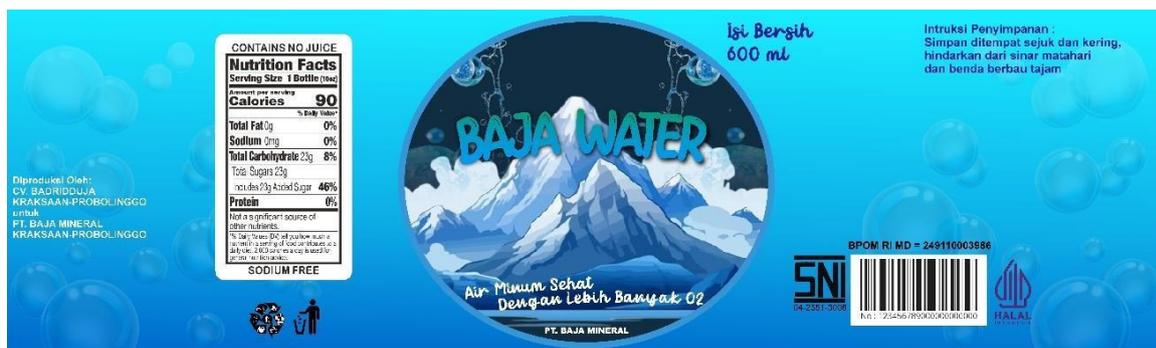
Keterangan: Desain Siswa SMP Badridduja FDS berupa kemesan botol

Keterangan: Salah satu Tugas Desain Bener Siswi SMP Badridduja FDS

During the practical session, students can focus on various aspects of design, such as the use of color, composition, typography, and other visual elements that match the design theme. By taking time every day, they can apply the theories they have learned in real projects, from creating posters, logos, to social media designs. This allows students to see how theory works in a practical context and to understand the challenges they may face in the creative process. For graphic design learning at SMP Badridduja FDS, it is important for students to truly understand the material taught by the teacher.

"According to Ustadz Fadholilahi, Graphic Design Teacher at SMP Badridduja FDS," An effective learning process does not only involve delivering theory, but also direct application in practice. So that what is taught is easy for his students to understand, he explains one by one the functions and uses of the tools in his design application. When he gives an explanation about graphic design, students are given the opportunity to immediately apply the knowledge they have just acquired.

Graphic design learning at SMP Badridduja FDS is carried out twice a week to practice the design theory that has been learned is an important step in developing skills and deep understanding in the field of graphic design. This consistent practice not only helps students to internalize the concepts that have been taught, but also allows them to experiment with various design techniques and styles.

The graphic design exam at SMP Badridduja FDS is a means to measure the extent to which students understand and master the material that has been taught. The graphic design exam system at SMP Badridduja FDS can be built with an approach that combines theory and practice. This exam aims to assess students' understanding of basic graphic design concepts and their ability to apply these concepts in real design projects.

The graphic design exam aims to test the technical abilities and creativity of SMP Badridduja FDS students in creating designs that are in accordance with the given theme. Graphic design is an important skill in the world of visual communication, and the ability to design effective graphic elements is essential. In

this exam, they are asked to design a pamphlet or brochure for an Educational Institution.

The task in this exam is to design a brochure for an educational institution, especially SMP Badridduja FDS. The brochure must reflect an innovative, modern, and professional impression, and can be applied in various media such as websites, billboards, billboards, and others. The brochure is also expected to represent positive values and various school programs that can attract the

The Graphic Design subject at SMP Badridduja FDS is held on Thursdays in the first hour for boys and the last hour for girls. The material program is that in the first and second meetings, it focuses on design material that will be practiced in the third and fourth meetings. And for the third and fourth meetings, it is entering the design practice stage that has been explained in the first and second meetings, so students can produce 1 design project in one week. This aims to create visual works that are effective in conveying messages, attracting attention, and building better relationships between products or services and the target audience.

The material taught aims to provide insight into how to create a desired design plan. This meeting lasts for 2 hours each meeting.

Apart from that, with graphic design learning, they utilize online design applications in their learning, such as presentations using Canva as material for presentations.

Keterangan: Pemanfaatan Desain online dalam pembelajaran

Graphic design plays a very big role in everyday life, although we often don't realize it. Graphic design is not only limited to the world of art or advertising, but is also very integrated into various aspects of our daily lives. Graphic design plays a very important role in everyday life, although it is often not realized. Here are some of the main roles of graphic design in everyday life:
(footnot)

1. Visual Communication

   Graphic design is used to convey messages in an easy-to-understand and attractive way. For example, advertisements on social media, product packaging,

event posters, to infographics that make it easier for people to understand complex information.

2. Branding and Identity

   Graphic design helps build a brand or company identity. Logos, color palettes, typography, and other design elements create a consistent and easily recognizable image for consumers. It also creates an emotional connection with

3. 3.Marketing and Advertising

   In the world of marketing, graphic design plays a major role in attracting consumers' attention through posters, banners, brochures, or digital media. An attractive and professional design can increase the credibility and appeal of a product or service.

4. Education and Learning

   In the world of education, graphic design is used to make learning materials more interesting and easy to understand. Books, presentations, and educational videos often rely on graphic design to increase the appeal and effectiveness of information delivery.

5. Directions and Navigation

   In everyday life, graphic design is often used in making directions, road signs, or maps to help people find their way or understand certain procedures more easily.

6. Product Packaging

   Graphic design is very important in the world of product packaging. Attractive packaging not only protects goods, but also becomes an effective marketing tool. Packaging design can influence consumers' decisions to buy products, because attractive packaging can create a good first impression and strengthen brand image.

7. Letter and Report Rounding

   In the professional world, graphic design plays a role in creating letters, annual reports, company brochures, and presentations. Design elements such as layout, typography, and the right use of color will affect how information is received and understood, and give a professional impression.

8. Design for Event Needs

   For events such as concerts, seminars, exhibitions, weddings, or other celebrations, graphic design plays a role in creating various promotional and visual materials, such as invitations, posters, backdrops, tickets, and merchandise. Good design can give a strong impression of the theme and atmosphere of the event.

9. Interior Design

Graphic design is also present in the interior world, such as in the creation of signage in buildings, restaurants, or public places. In addition, graphic design elements such as posters, stickers, and wall art can create an attractive and comfortable atmosphere in a room.

aspect of our lives, whether we realize it or not. Graphic design not only serves to beautify, but also to facilitate communication, improve functionality, and create a better experience in many ways.

Through learning graphic design, SMP Badridduja FDS students can show significant improvements in their creative abilities. They not only learn to create designs, but are also invited to think creatively in solving visual problems, such as designing posters for school events or creating infographics for presentations. This creativity is an important foundation in their self-development. This achievement not only reflects developments in the field of graphic design, but can also contribute to students' personal and social development. The improvement in creative, technical, and collaborative skills they acquire can open up more opportunities for them in the future, both in further education and the world of work.

Badridduja FDS Middle School students have been able to produce various and inspiring achievements, even though they are still in the early stages of learning. Some of the achievements that can be achieved by Badridduja FDS Middle School students in the world of graphic design include:

1. Designing a Product that Can Be Useful for School

    For example, designing a logo for a school club, event posters, or school merchandise such as t-shirts or stickers. This is a great way to apply graphic design skills in a real-life context and gain recognition from friends and teachers.

2. Mastering Design Software

    Another significant achievement is the ability to master graphic design software such as Adobe Photoshop, Illustrator, or free design applications such as Canva. For middle school students who have succeeded in learning and mastering the basics of this software, this is an extraordinary achievement. In addition, Badridduja FDS Middle School students begin to understand how to create designs for social media, such as creating Instagram templates, YouTube banner designs, or interesting Facebook posts, showing strong abilities in the world of graphic design which is increasingly popular among teenagers.

3. Attending Workshops

    Attending graphic design courses or workshops, either offline or online, is a good achievement. Many online learning platforms such as Coursera, Udemy, or Skillshare offer design lessons for beginners, which can help SMP Badridduja FDS students deepen their skills.

    These achievements not only help SMP Badridduja FDS students hone their design skills, but also teach them about creativity, discipline, and time management. If you are interested, you can start by joining a design competition

or trying to create a personal design project. In addition, SMP Badridduja FDS students can also utilize their technological skills in many ways, such as using a large-capacity online storage application, namely Microsoft OneDrive, to store their assignment files, important data, and photos in the application and they also use the application as a means of sharing their files.
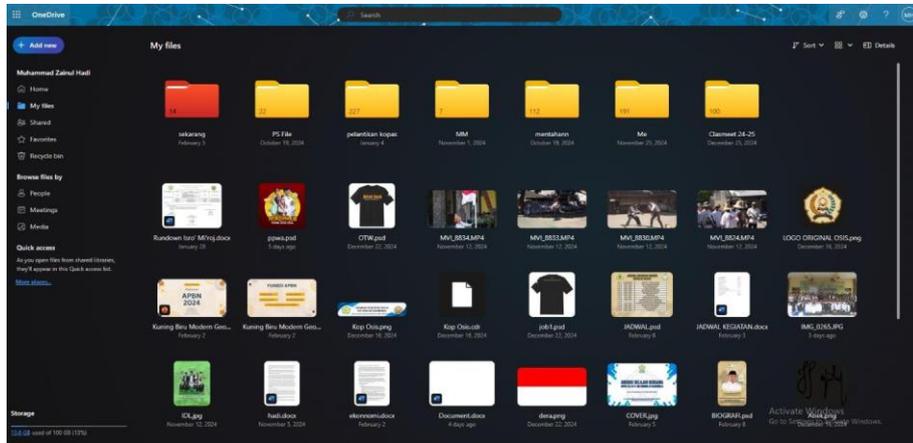
Keterangan: Salah satu Penyimpanan online siswa SMP Badridduja FDS\
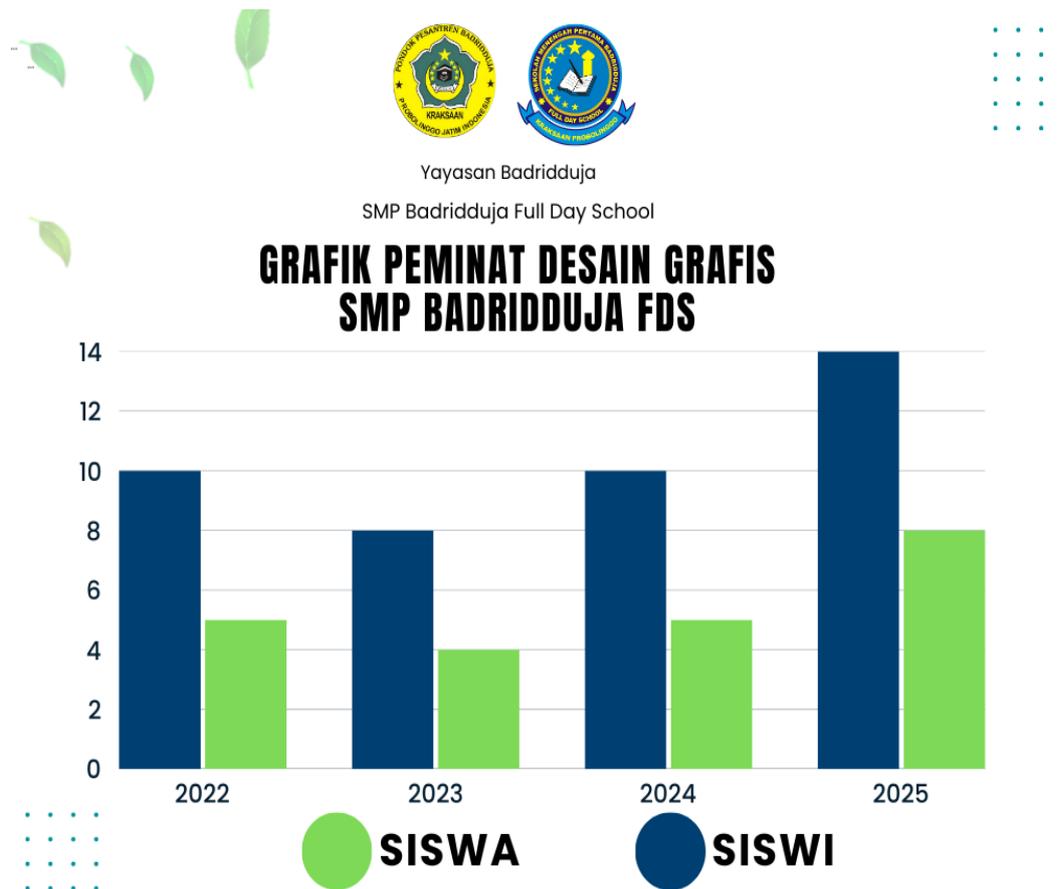
Over time, from year to year, students interested in graphic design at SMP Badridduja FDS continue to increase. It just decreased in 2023 due to certain reasons. Until now, Alhamdulillah, the program is still running and

the quality of students continues to increase every year. With this graph, we can find out the strengths and weaknesses of each year. Through this, we can conduct a comprehensive evaluation. From this graphic design learning, we can dig deeper into the talents of students related to graphic design and make it easier for students regarding all school activities related to technological developments. Graphic design is not only limited to the world of art or advertising, but is also very integrated into various aspects of our daily lives.

The first evaluation in learning graphic design is to measure the extent to which students understand the basic concepts of graphic design itself. Graphic design is not only about creating attractive images or visual compositions, but also about how these visuals can communicate certain ideas or messages. In this case, the evaluation focuses on students' knowledge of the basic elements of design such as typography, color, lines, space, and shape. Understanding these concepts is important because they are the foundation for effective and functional design in the context of visual communication.

At the junior high school level, students should understand how each of these elements work together to create a clear and understandable design. For example, typography (the selection and arrangement of letters) plays a very important role in ensuring that the message conveyed can be read clearly and easily understood. Likewise, color, which not only provides aesthetics, but can also add meaning or a certain nuance to the design. Evaluation here can be in the form of tests or practical assignments that test students' ability to use these basic design elements appropriately.

In addition to understanding graphic design theory, evaluation also needs to cover the technical skills that students have in using graphic design tools. At the junior high school level, students are usually introduced to basic software for graphic design such as Microsoft Paint, Canva, or other simpler design applications. This technical evaluation aims to assess the extent to which students can operate the software to produce the desired design. The ability of students to master design tools is very important, because modern graphic design relies heavily on digital software. Through technical evaluation, students are expected to understand how to edit images, arrange layers, combine visual elements, and use various features in design tools to create quality work.

Designs must have visual balance, meaning that elements such as text, images, and white space must be positioned in an attractive but not confusing or distracting way. Evaluation in this aspect will focus on how students can create designs that are not only aesthetic, but also functional and communicative.

In this evaluation, students are given the freedom to experiment with various design concepts, try different approaches, and present fresh ideas. This creativity evaluation not only prioritizes aesthetic aspects, but also how effective the creative idea is in conveying messages in new and interesting ways.

Graphic design evaluation at the Badrdduja FDS junior high school level not only measures students' technical skills in using design tools, but alsoassesses their understanding of basic design concepts, creativity, application of design theory, and visual communication skills. This evaluation is very important in developing design skills that can be applied in the future, both in the world of further education and the world of work. By providing a comprehensive evaluation, students not only learn to create aesthetic designs, but also how to produce effective and communicative designs.

CONCLUSION

contribution in developing students' creative and technical skills. With an approach that combines theory and practice, students not only understand the principles of graphic design, but are also able to apply these concepts in various real projects. And it is very helpful for school organizations in holding contemporary events that really need graphic design in the event.

Graphic design learning at SMP Badridduja FDS is carried out twice a week to practice the design theory that has been learned is an important step in developing skills and in-depth understanding in the field of graphic design. This consistent practice not only helps students to internalize the concepts that have been taught, but also allows them to experiment with various design techniques and styles.

Overall, graphic design learning at SMP Badridduja FDS provides enormous benefits in equipping students with skills that can be applied in the real world. In addition to developing technical skills in design, students are also taught to think creatively, solve problems visually, and communicate messages effectively to a wider audience.

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