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The Use of Canva Learning Media to Improve the Learning Focus of Students with Special Needs at SLBN Balikpapan in the Subject of Flat Shapes

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Abstract: The purpose of this study was to determine how the application of Canva learning media could improve the learning focus of students with special needs at SLBN Balikpapan with flat building materials. The study was conducted at SLBN Balikpapan using flat building materials. The research subjects were students at SLBN Balikpapan. This study was descriptive and qualitative. There were 22 students at SLBN Balikpapan who were the research subjects, using purposive sampling. The data collection methods were: (1) observation; (2) interviews with 6 students and two teachers at SLBN Balikpapan; and (3) instruments/questionnaires regarding the use of Canva. The questionnaire was tested beforehand to prove its validity. Of the 25 questionnaires, 16 statements were deemed valid, and the reliability test was calculated using the Cronbach Alpha formula, yielding a reliability index of 73.76. Data analysis techniques included data reduction, data presentation, and conclusion drawing. For data validity, source triangulation was used. The questionnaire results regarding the use of Canva among SLB students showed an achievement rate of 81.22%. In conclusion, the use of Canva learning media at SLBN Balikpapan has contributed positively to improving the learning focus of students with special needs in flat shape subjects. Attractive and interactive visualizations make it easier for students to understand the material and actively participate in the learning process.

Keywords: Canva Learning Media; Student with Special Needs; Flat Shapes.

INTRODUCTION

Every school will teach mathematics lessons that encourage students to think critically when solving math-related problems. Students' problem-solving skills and ability to complete math problems motivate them to study hard (Dethan et al., 2024), especially those with special needs. Math for students with special needs can develop analytical, logical, critical, and systematic thinking skills, while encouraging collaboration among peers to creatively solve math-related problems, especially in the field of technology, which can be applied by students with special needs.

The use of technology cannot be separated from the learning process for SLB students. Special education for students who have difficulty following the learning process in regular schools due to emotional, mental, social, or physical disorders, but have potential intelligence and special talents.

SLB schools have not yet implemented and created images related to mathematics learning using technology (Waskitoningtyas, 2017). SLB students often struggle with thinking, so they need engaging learning media and technology related to mathematics in everyday life (Hala et al., 2024). Engaging learning technologies are needed in mathematics education. Students are required to understand mathematical concepts with an emphasis on cooperation among students with special needs. If students make mistakes when drawing mathematical pictures, they can use Canva as a learning tool to help students with special needs utilize technology (Pratama et al., 2018). That can be utilized in technology-based learning media and can increase students' motivation, ultimately contributing to improved mathematics learning outcomes for students with special needs (Lestari & Andrijati, 2024). Students with special needs need to be introduced to Canva learning media (Ulandary et al., 2023) because it makes learning mathematics easier.

The use of Canva learning media (Suryani, 2023) can make it easier for students with special needs to improve their learning in class, helping them avoid boredom with mathematics, which is often associated with formulas (Pratama et al., 2019).

Based on interviews with students with special needs at SLBN Balikpapan, during mathematics lessons, they have never used the Canva application to create images related to mathematics. Based on interviews with teachers, so far, students with special needs have only been trained in manual skills and memorization. Teachers at SLBN Balikpapan have never used the Canva application for students with special needs in mathematics lessons.

Therefore, in this study, the researcher was interested in using Canva as a learning medium to improve mathematics learning in accordance with curriculum requirements (Oktavia & Qudsiyah, 2023). The use of Canva learning media (Andriyani et al., 2025) for students with special needs is expected to foster enthusiasm for learning and increase enthusiasm for learning mathematics, while creating interactive learning experiences (Derin Asyri et al., 2024).

Learning to use Canva can make it easier for students with special needs to create flat shapes, develop creative ideas that encompass various mathematical concepts and principles, and improve their skills. In addition, Canva can be used to create images such as Balikpapan batik motifs (Waskitoningtyas & Susilo, 2020). Diligently study through a learning approach where students are encouraged to recognize, evaluate, and process mathematical concepts that often appear in everyday life (Waskitoningtyas, 2020), for example, local traditions, works of art, traditional technology, and problem-solving methods used in daily community activities (Maryanti & Suwardi, 2024). Learning to use Canva can foster close relationships between individuals to form flat shapes such as circles, triangles, and squares, which can promote local wisdom (Casmudi, 2025) and mathematics, and can also serve as a means to understand how cultural values are integrated into mathematical practice.

Canva is a learning tool for mathematics designed to help special needs students understand geometric shapes and facilitate their understanding of mathematical concepts (Nurhidayah & Waskitoningtyas, 2023). In this context, contextual learning is applied in the use of Canva as a learning tool (Sulistyani et al., 2022). Using Canva, students can incorporate local cultural uniqueness by embracing collaboration and mutual assistance when creating geometric shapes, especially for a special-needs student (Permatasari et al., 2023). In addition, students can integrate geometric elements such as circles, ovals, triangles, and squares to create motifs (Romiana & Nadya Afdholy, 2024).

Therefore, researchers took the initiative to utilize media as a learning tool (Riadiyani et al., 2025), such as special needs students learning to use Canva, which is integrated with local wisdom in the school environment, such as mutual cooperation (Sugianto, 2025), such as creating circles, ovals, triangles, and squares to form patterns. This approach is expected to make the learning process more relevant to students' lives and to increase their interest and understanding of the material.

The application of local wisdom (Casmudi et al., 2025) can improve SLB students' learning experiences, making them feel more comfortable. This approach is expected to make the learning process more relevant to students' lives and to increase their interest and understanding of the material.

The difference between this study and previous studies is its application at SLBN Balikpapan to flat-shaped materials used in public schools.

METHOD

This study uses a qualitative descriptive approach. This approach was chosen because the study aims to describe the process of implementing Canva learning media in flat-shape drawing lessons at SLBN Balikpapan and to understand students' responses to its use.

This research was conducted at Balikpapan State Special School (SLBN) in July 2025. Through this approach, the researcher was able to describe in depth how Canva was used as a visual aid to increase student motivation and understanding in drawing flat shapes.

Data collection methods included observation, interviews, questionnaires, and drawing assessment sheets. Observation guidelines were used to assess the learning process in Canva, teacher-student interactions, and student engagement during activities. Interview guidelines were given to 6 students and 2 teachers and used to explore their opinions on the ease, difficulties, and benefits of using Canva.

Documentation consisted of photos of activities and questionnaires. Image Assessment Sheets were used to assess students' work in terms of neatness, accuracy of flat shapes, and creativity. Questionnaires were administered at the Tunas Bangsa Balikpapan Special School. For the validity test, 25 questionnaires were used, and 16 statements were considered valid. Then, the reliability test continued with Cronbach's Alpha, which yielded a reliability index of 73.76.

The data analysis techniques used were data reduction, data presentation, and conclusion drawing. Data reduction involved selecting, focusing, and simplifying data from observations, interviews, and documentation. Data presentation is the collection of information in a narrative form to make it easy to understand. Conclusions are interpretations of the data results that determine the effectiveness and students' responses to the application of Canva in learning to draw flat shapes.

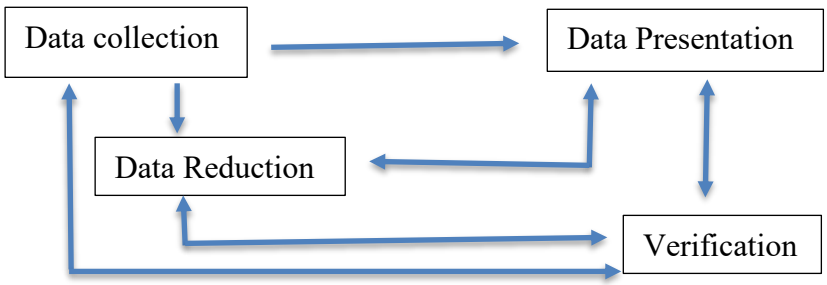

Figure 1. Data Analysis Steps

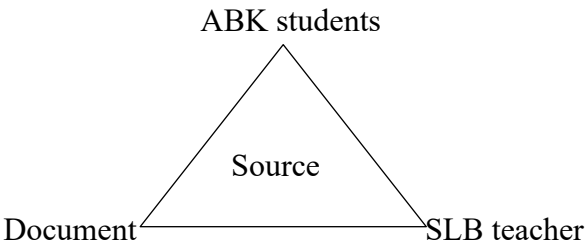

Figure 2. Data Validity Triangulation Sources

FINDING AND DISCUSSION

Finding(s)

SLBN Balikpapan is a school that provides educational services for students with special needs, such as those with intellectual disabilities, autism, hearing impairments, and physical disabilities.

Learning activities at SLBN Balikpapan prioritize interactive and contextual methods, tailored to each student's characteristics. Teachers at this school actively seek engaging, easy-to-use learning media, including the Canva application, to support the teaching and learning process.

The subjects of this study were six students with mild intellectual disabilities at SLBN Balikpapan who took the Flat Shapes course. In addition, arts and mathematics teachers served as key informants in the implementation and evaluation of the Canva learning media (Riadiyani et al., 2025).

Based on observations during Canva lessons, the characteristics of students with special needs who were the subjects of this study included: (a) They had basic cognitive abilities but easily lost focus during learning; (b) They were more interested in visual and interactive activities; (c) They needed direct guidance and concrete examples in understanding flat shapes.

Stages of implementing Canva learning media: (a) The teacher introduces the Canva application using a projector. Students are shown various shapes, such as triangles, squares, and circles, with attractive colors and animations; (b) Students are invited to try drawing shapes directly using Canva templates. The teacher guides them in selecting shapes, changing colors, and labeling them. At this stage, students appear to be more focused during the activity than in conventional learning; (c) Students create a collage of flat shapes using Canva. The results are displayed to the class to boost confidence.

> *"Children become more focused when they see colorful images on Canva. They are happy because the display is not boring like on a blackboard." (Interview with Teacher A, August 15, 2025)*

Teachers' perceptions of Canva as a learning medium indicate that its use is very helpful in visualizing two-dimensional shapes in an engaging way (Hasna Nabila et al., 2023). The color, image, and simple animation features available in Canva can attract students' attention, especially for those who are easily distracted (Ulandary et al., 2023).

> *"Usually, children can only focus for about 10 minutes, but with Canva, they can focus for up to 20–25 minutes. They also often ask to be shown other pictures." (Teacher B, August 15, 2025)*

Increased Focus and Enthusiasm of Students in Learning (Neela Afifah, 2022). The teacher also explained that after using Canva, students appeared more enthusiastic and had longer attention spans during lessons. Whereas previously students would quickly lose focus, they now actively observe and imitate the flat images displayed on the screen (Khusna et al., 2022).

> *"I like the images on the screen, with lots of colors and shapes." (Student 1)*
> *"Learning is fun, I can see triangles, circles, and squares." (Student 2)*

Most students said they enjoyed learning with Canva because of its colorful appearance and many interesting images. This aligns with Pratama (2023), who states that learning with Canva can make learning more engaging.

"I like looking at circles; they remind me of balls." (Student 3)

During the learning process, students focused more on the teacher's explanations through Canva. They also found it easier to remember flat shapes because they were accompanied by real images and striking colors. This is relevant to the statement by Aprilia et al. (2022) that the use of attractive learning media should be tailored to students' needs. Canva learning media is also needed in special-needs school curricula (Firman et al., 2025).

Some students still have difficulty following instructions when asked to interact directly using Canva, especially students with severe concentration difficulties. However, with guidance and repetition in Canva learning, SLB students can refocus on their studies. The difficulties experienced by SLB students make it easier for teachers to evaluate their learning outcomes by assessing the work they create in Canva. This is consistent with Jaya et al. (2021), who argue that learning outcomes can be used to evaluate SLB students' learning.

Figure 3. Canva Learning Media

During the learning process, teachers are assisted by language interpreters for deaf students using sign language. There are 22 special needs students participating in the learning process, one of whom is deaf. This lesson teaches students how to use Canva to create flat shapes. The obstacles in this activity are the diverse characteristics of students with special needs, including the type of needs, cognitive ability level, and learning style, which make this medium not always suitable for all students. Therefore, it is necessary to adjust the material design to suit the individual needs of SLB students. Canva learning media facilitates cognitive understanding for special-needs students through visualization (Andriyani et al., 2025), unlike conventional methods, which are often limited, especially for abstract material.

Another limitation is the digital literacy skills of teachers and students, which also affects the optimal use of Canva in the learning process. Differences in skill levels can lead to variations in learning outcomes, so the learning process requires two teachers: one who understands how to use Canva for mathematics lessons and one who is a sign language teacher for deaf students.

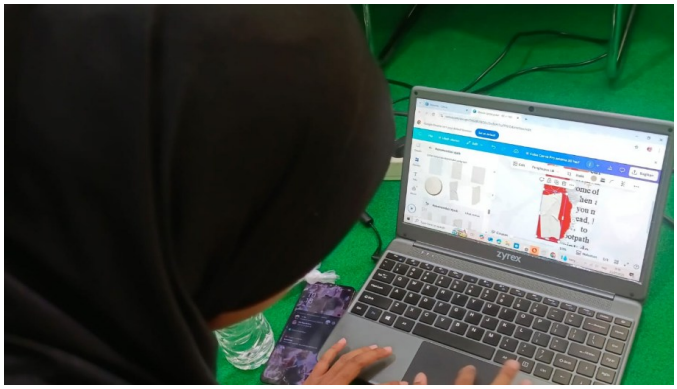

Figure 4. Creating Flat Shapes with Canva

Figure 4 shows that students are trying to create flat shapes. When creating flat shapes in Canva, they also encounter internet connection issues, so they have to use the laboratory room, which has Wi-Fi access and an internet quota, using mobile phones. Therefore, the effectiveness of this medium depends heavily on the availability of technological devices and reliable internet access, which are not always equally accessible to all students.

This medium is relatively effective for students with mild to moderate special needs who have fairly good visual and cognitive abilities. However, for students with severe intellectual disabilities, visual impairments, or significant motor impairments, the use of Canva requires more in-depth modifications or a combination with other more suitable learning media. Thus, the transfer of Canva's application across various special education contexts must be adaptive, flexible, and based on the individual needs of students.

Canva learning media is growing in popularity due to its attractive, varied appearance, allowing students to actively participate through visual displays and digital activities. In contrast, conventional learning is relatively low because the methods tend to be monotonous and one-way, teacher-centered.

Based on the results of a questionnaire on Canva learning among special-needs students, the achievement rate was 81.22%. Based on survey results on learning media, Canva has seen an increase in popularity among students with special needs.

Discussion

The interview results indicate that using Canva positively impacts students' focus on learning. This is demonstrated by: (a) an increase in the duration of students' attention during learning activities; (b) an increase in active participation in flat shape drawing activities; (c) an increase in students' motivation and enthusiasm for visual learning. This data is consistent with visual-auditory learning theory, in which visual media such as Canva can help students with special needs understand abstract concepts more concretely and engagingly. This is also in line with Naeemy & Yoneda (2024), who argue that students with special needs have physical, intellectual, developmental, mental, or emotional abilities that affect their learning development.

The use of Canva's visual and technology-based learning media provides significant benefits to the learning process compared to conventional methods (Andriyani et al., 2025). Canva presents material in an attractive visual form, such as illustrations, icons, animations, and structured layouts, thereby increasing students' attention, focus, and motivation to learn. This visualization greatly helps students understand abstract concepts (Riadiyani et al., 2025), especially in subjects that require an understanding of shapes, space, and patterns, such as flat shapes.

In addition, the use of technology in Canva enables more interactive and participatory learning. Students are not only recipients of information, but can also be actively involved in the learning process through observation, discussion, and exploration of visual materials. This interactivity encourages cognitive and emotional engagement among students, ultimately improving learning outcomes.

The transformation of science and information technology is a form of adaptation to increasingly advanced social changes, and this can be implemented in the education sector. Currently, technology plays a crucial role as a learning support tool. One approach to supporting the teaching and learning process is to develop learning media (Waskitoningtyas, 2016). Learning media plays a crucial role in supporting learning activities (Waskitoningtyas, 2018), because it not only helps educators convey material but can also increase student interest and motivation. Through media such as PowerPoint presentations, Canva educational videos, and interactive games, the learning process becomes more engaging and encourages active student participation.

Educators are expected to be creative in determining appropriate learning media (Hasibuan et al., 2024). In this regard, using Canva for mathematics instruction can be an effective means of delivering material while simultaneously increasing student motivation (Damayanti et al., 2024).

For optimal learning, learning media must be engaging and encourage active student participation (Casmudi & Sugianto, 2024). This is crucial for creating a conducive, enjoyable learning environment and for providing meaningful learning experiences through interactive multimedia (Nadzif et al., 2022).

Along with the development of media using Canva in today's educational world, Canva learning media is emerging as an innovation compared to previous media forms. This media combines various elements, such as text, audio, images, and video, on a digital platform (Legina & Sari, 2022). Therefore, the use of engaging and interactive learning media is essential to create a fun and meaningful learning experience for students, while also leveraging technological advances in the development process (Casmudi et al., 2023b). Furthermore, it can foster a culture of local wisdom in mathematics lessons (Sugianto, 2024).

Canva learning media can support conceptual understanding and train students' critical thinking skills. This media is also flexible because it can be accessed via computer, making it easy to use (Wahyudi & Aan Putra, 2022). Therefore, selecting the right interactive media is the teacher's responsibility to ensure optimal learning (Casmudi et al., 2023a).

Based on the results of the study, the use of Canva learning media has been proven to: (a) Improve the learning focus of students with special needs, because visually appealing media can hold their attention longer; (b) Facilitate understanding of flat shapes, because students can see real examples through clear colors and images; (c) Increase learning motivation, because learning becomes fun and interactive. This is in line with Naeemy & Yoneda (2024), who argue that teachers must create an engaging learning environment to increase students with special needs' enthusiasm. Using Canva can improve critical thinking skills (Al-Kindi & Al-Mekhlafi, 2017).

CONCLUSION

The use of Canva learning media at SLBN Balikpapan has been shown to positively improve the focus and engagement of students with special needs in learning flat-shape materials. Attractive visualizations, varied colors, and interactive presentation of material create a more enjoyable and conducive learning atmosphere. This helps students understand concepts more easily, improves concentration during learning, and encourages active participation in class activities. Thus, Canva can be used as an effective learning medium to

support the achievement of learning objectives, particularly in improving the focus and understanding of students with special needs in mathematics, specifically in flat shapes.
Its limitations are (1) the effectiveness of this medium is highly dependent on the availability of technological devices and adequate internet access, (2) differences in the level of digital literacy among teachers and students also affect the optimal use of Canva in the learning process, and (3) the diverse characteristics of special needs students, both in terms of their needs, cognitive abilities, and learning styles.

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