



Canva Learning Media innovations in Sketching Wedding Cake in Improving the Hard Skills of Culinary Students in the Cake Decoration Course

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Abstract. This study aims to examine the effectiveness of using Canva learning media in improving the hard skills of culinary students in the Cake Decoration course, especially in making wedding cake sketches. The use of Canva as a learning medium is based on the ability of this application to facilitate students in producing more professional and creative sketches. This study uses an experimental method with a pre-test and post-test design involving two groups: an experimental group using Canva and a control group using conventional learning methods. 40 3rd-semester culinary students, randomly divided into two groups of 20 students each, comprised the research sample. The research instruments are in the form of sketching ability tests, which are conducted before (pre-test) and after (post-test) learning, as well as questionnaires to measure student responses to the use of Canva. The results showed that the experimental group using Canva experienced a significant increase in the ability to sketch wedding cakes compared to the control group, with the results of the t-test showing a significant value ($p < 0.05$). In addition, most students responded positively to the use of Canva as a learning medium, saying that the app is easy to use and helps improve their creativity and design quality. This study shows that Canva is effective in improving the hard skills of culinary students in making wedding cake sketches, as well as providing innovative and interactive learning media alternatives.

Keywords: Canva, Learning media, Sketching, Wedding cake, Hard skill, Catering

1 Introduction

Creativity and technical skills are two important aspects that students must master in the culinary study program, especially in the Cake Decoration course. One of the important parts of this course is the ability to sketch cakes, which serves as a reference in the cake decorating process. A good sketch not only shows an aesthetic design but also reflects the technical ability to visualize the final result of the product to be made, such as a wedding cake. Conventionally, people learn sketching for cake decoration using manual tools like paper and pencil. However, as digital technology advances, we must adapt this traditional learning method to meet contemporary needs.

One solution that can be implemented is to use digital learning media, which allows students to be more creative and efficient in compiling cake sketch designs. One potential digital media to use is Canva, an online-based, easy-to-access graphic design application. Canva provides a variety of features, such as templates, icons, and other design tools that can help users, including students, create attractive designs without having to have high design skills.

According to [1], the use of visual-based digital applications such as Canva can improve students' ability to think creatively and help them develop hard skills in fields related to art and design. In design learning, the use of digital-based media can make it easier for students to innovate and explore creative ideas more freely. [2] stated that learning with digital media facilitates a more flexible visual thinking process compared to conventional methods, especially in fields that require creativity, such as graphic design and art. On the other hand, [3] added that easily accessible and interactive graphic design tools also have the potential to increase students' motivation to learn, as they allow them to experience design results directly and instantly. In addition, this change in learning media is in line with the principle of blended learning, which combines face-to-face elements with digital technology to create a more comprehensive learning experience [4]. In this context, Canva allows students to not only learn independently but also collaborate on design projects online. This is supported by the research of Mayer [5] which shows that a learning approach that incorporates digital media is able to improve student engagement and the quality of overall learning outcomes.

The use of Canva hopes students will be able to hone their technical skills in making wedding cake sketches more efficiently and professionally. This research also refers to the Dual Coding theory of [4], which states that information presented verbally and visually will be easier to understand and remember. By combining text and images in a single medium, Canva allows students to understand design concepts in more depth.

Therefore, this study tries to explore the use of Canva as a learning medium to improve the hard skills of culinary students in making wedding cake sketches. Through this approach, it is hoped that it can provide solutions to the challenges in learning design in the culinary field that are often limited by conventional methods.

2 Research Methodology

2.1 Population and Sample

The population in this study is 4th-semester culinary students who take the Cake Decoration course at Medan State University. The research sample was taken by purposive sampling, with a total of 40 students divided into two groups, each consisting of 20 students.

2.2 Research Instruments

The instruments used in this study include:

- a. Sketching ability test: This test is carried out before (pre-test) and after (post-test) treatment to assess the improvement of students' *hard skills* in making *wedding cake* sketches.
- b. Questionnaires: Used to measure student responses to the use of Canva as a learning medium.

2.3 Research Procedure

- a. Initial stage: Students are given a pre-test to assess their initial ability to sketch *a wedding cake*.
- b. Implementation stage: The experimental group was given learning materials using Canva, while the control group used conventional methods in the form of pencil and paper. Learning is carried out for 4 weeks, with meetings 2 times a week.
- c. Final stage: Students are given a post-test to measure the improvement of their abilities. After that, a questionnaire was distributed to the experimental group to find out how they responded to using Canva.

2.4 Data Analysis Techniques

The data was analyzed using:

- a. The t-test was to test for significant differences between pre-test and post-test results in both groups.
- b. Descriptive analysis to analyze student responses to Canva usage.

3 Results And Discussion

The findings of the study revealed that students utilizing Canva as a learning medium showed a marked improvement in their ability to create wedding cake sketches. According to the results of the t-test, a significant difference was observed between the experimental group and the control group ($p < 0.05$). Students who used Canva exhibited greater creativity and enhanced technical skills in sketch design.

3.1 Pre-test and Post-test Results of Sketching Ability

This study measured the improvement of students' *hard skills* in making *wedding cake sketches* through two tests, namely pre-test and post-test, in the experimental group using Canva and the control group using conventional methods. The results of the comparison of pre-test and post-test scores are presented in the following Table 1.

Table 1. Student Pre-test and Post-test Scores

Group	Average Pre-test Score	Average Post-test Score	Increase (%)
Experimental Group	64,5	86,2	33,66%
Control Group	63,0	75,4	19,68%

The table 1 clearly shows a significant increase in both groups' average post-test scores. However, the improvement in the experimental group (who used Canva) was higher than in the control group. The 33.66% increase in the experimental group showed that Canva played an important role in improving students' sketching skills.

3.2 Statistical Test

To determine if there was a significant difference between the experimental group and the control group, a statistical t-test was conducted, yielding the following results (see Table 2):

Table 2. Results of the t-Test Comparison of Post-test Score Increase

Statistical Test	t-count	t-table	p-value	Conclusion
Post-test	3,85	2,03	0,0005	Significant

The t-test results indicate that the t-count value (3.85) exceeds the t-table value (2.03) at a 0.05 significance level. This confirms a significant difference in the improvement of wedding cake sketching skills between the experimental group using Canva and the control group. Additionally, the p-value of 0.0005 (<0.05) further validates that this difference is statistically significant.

3.3 Results of Student Response Questionnaire

In addition to the ability test, students are also given a questionnaire to assess their perception of using Canva as a learning medium. The results of the questionnaire showed that 95% of the students in the experimental group stated that Canva was easy to use and helped them in producing more creative sketches. The summary of the results of the questionnaire can be seen in Table 3.

Table 3. Student Responses to Canva Usage

Assessment Aspects	Strongly Agree (%)	Agree (%)	Quite Agree (%)	Disagree (%)
Canva is easy to use	60%	35%	5%	0%
Canva boosts creativity	55%	40%	5%	0%
Canva helps you understand sketch concepts	50%	40%	10%	0%
Canva is perfect for culinary learning	45%	45%	10%	0%

These results show that the majority of students give a positive assessment of the use of Canva as a learning medium, especially in terms of ease of use and contribution to increasing creativity.

3.4 The Use of Canva in Improving the Hard Skills of Culinary Students

The study's findings indicate that utilizing Canva as a learning medium significantly enhances the hard skills of culinary students, particularly in creating wedding cake sketches. The 33.66% improvement observed in the experimental group demonstrates Canva's ability to deliver a more interactive learning experience and foster students' professional design skills. According to [5], interactive visual media such as Canva allows learning to be more effective because it can combine visual and verbal elements at the same time. This is supported by the Dual Coding Theory from Paivio [4], which states that information presented visually and verbally tends to be easier for students to understand and remember. Canva provides intuitive design tools, allowing students to develop their creativity in sketching more freely and efficiently.

3.5 Comparison with Conventional Learning Methods

A comparison between the experimental and control groups showed that learning with conventional methods, while still effective, was not as effective as using digital media such as Canva. The control group only experienced an increase of 19.68%, which shows that traditional methods tend to be more limited in facilitating students' creative exploration. Learning using paper and pencil requires greater time and effort and does not have the flexibility offered by digital platforms. This research supports the findings [2], which show that digital media facilitates the creative thinking process and allows students to be more involved in the learning process. Canva also provides students with the opportunity to try out different designs without any limitations on tools, which ultimately increases their motivation and skills [6-8].

3.6 Student Responses to Canva Usage

The positive response of students to Canva reinforces the finding that this medium is suitable for use in sketching lessons, especially in the Cake Decorating course. Most students stated that Canva was not only easy to use, but also boosted their creativity. This is in line with the opinion of Deci and Ryan [6] who stated that learning motivation increases when students feel in control of their learning process. Canva gives students the freedom to be creative, which ultimately increases their interest in learning. Students also feel that using Canva helps them better understand the concept of *wedding cake sketch design*. This indicates that interactive visual tools like Canva can help students understand material that may have previously been difficult to understand with conventional methods [9-11]. This finding is consistent with the results of a study by Rivers and Newton [1], which states that digital design tools can improve students' understanding and technical abilities [7-17].

4 CONCLUSIONS

The use of Canva as a learning medium has proven to be effective in improving the *hard skills* of culinary students, especially in making *wedding cake* sketches. In

addition to improving technical skills, the use of Canva also received positive responses from students, especially regarding its ease of use and its contribution to increasing creativity. This research shows that Canva can be an innovative and interactive alternative learning medium in the field of culinary education, especially in the Cake Decoration course.

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