

# The Effectiveness of Discovery Learning Model Assisted by Canva Media in Enhancing Critical Thinking Skills on The Topic of Preserving My Nation's Culture (A Quasi-Experimental Study in Grade VIII at SMP Negeri 3 Purbalingga)

Devika Indah Andiyani<sup>1</sup>, Elly Hasan Sadeli<sup>2</sup>, Wildan Nurul Fajar<sup>3</sup>

<sup>1,2,3</sup>Faculty of Teacher Training and Education, Pancasila and Citizenship Education,  
Universitas Muhammadiyah Purwokerto  
Jl. KH. Ahmad Dahlan, Dukuhwaluh, Kembaran, Banyumas, Jawa Tengah 53182

---

## ARTICLE INFO

### Article history:

DOI:

[10.30595/pssh.v18i.1233](https://doi.org/10.30595/pssh.v18i.1233)

Submitted:

02 September, 2024

Accepted:

19 September, 2024

Published:

23 September, 2024

---

### Keywords:

Discovery Learning, Canva,  
Critical Thinking

---

## ABSTRACT

This study aims to determine the influence of the discovery learning model assisted by Canva media in enhancing students' critical thinking skill on preserving my nation's culture at SMP negeri 3 Purbalingga. The method used in this study is quasi-experimental with nonequivalent control group design. The sample consisted of class VIII A as the experimental class (n=32) and VIII B as the control class (n=32). Data collection techniques used in this study were questionnaires, observation, and documentation, which were analyzed using paired sample tests and independent sample t-tests, yielding results of 0.000 0.05, indicating that the discovery learning model assisted by Canva media significantly enhances students' critical thinking skills. The experimental class showed an 81% improvement, while the control class showed a 75% improvement. This improvement was evidenced by the students' increased abilities in providing basic explanations, building basic skills, drawing conclusions, providing further explanations, using strategies or tactics, demonstrating curiosity, analyzing arguments, and solving problems with accurate sources.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).



---

### Corresponding Author:

**Devika Indah Andiyani**

Universitas Muhammadiyah Purwokerto

Jl. KH. Ahmad Dahlan, Dukuhwaluh, Kembaran, Banyumas, Jawa Tengah 53182

Email: [devikaindah123@gmail.com](mailto:devikaindah123@gmail.com)

---

## 1. INTRODUCTION

The era of globalization or also known as the era of openness is experiencing rapid changes, especially in science and technology. With the rapid advancement of technology, the use of technology basically aims to facilitate various aspects of life. As is known in the current era of globalization, every individual is required to be active, creative, innovative, and participate in community life, both internationally and globally (global society) which is certainly full of competition (Priyanto et al., 2017: 176). This statement is in accordance with the concept of 21st century learning that Indonesian education needs to reconstruct the educational paradigm in order to continue to exist in the midst of a globalized educational era (Faiz & Farida, 2022).

Education has an important role in shaping the next generation of the nation who are intelligent, creative, and noble. One of the goals of education is to develop critical thinking skills. The US-Based Partnership for 21st Century (P21) identifies several learning skills that must be possessed by a student to face the 21st century (Wijaya in Mukhlisotin, 2022: 215). The skills that must be possessed in the 21st century are 4C (Critical Thinking,

Communication, Collaborative, Creativity). Critical thinking skills are one of the 21st century skills needed by students to be able to compete in the era of globalization. When students have good critical thinking skills, students will not easily believe without clear evidence (Badarudin et al., 2022: 155). Critical thinking skills refer to a person's ability to actively analyze, evaluate, and make decisions based on rational and logical thinking.

Literacy and critical thinking skills are a combination that cannot be separated because literacy skills can stimulate students' critical thinking skills (Anisa et al., 2021: 1). However, in reality, many students in Indonesia still have a low level of literacy, which has an impact on their low critical thinking skills. Based on statistical data from The United Nations Educational, Scientific and Cultural Organization (UNESCO), public interest in reading in Indonesia is very alarming, namely only 0.001%. This shows that, out of 1,000 people in Indonesia, there is only 1 person who reads diligently (Anisa et al., 2021: 4). In addition, low critical thinking skills are also due to the learning process that has been applied so far has not been able to improve students' critical thinking skills because the cognitive aspects are only emphasized on the results, not the process aspects that involve students' critical thinking skills (Suhirman et al., 2021: 218).

Research that has been carried out by Sofri et al (2020: 323) Nopianur et al (2023: 21) Kiranadewi et al (2021: 1) has almost the same problem which shows that the role of students is still not interested in the learning media used by the teacher, students are still not active in the learning process, lack of teacher skills in using learning models that can direct students to think critically. This shows that students tend to only pay attention to the teacher without analyzing, criticizing, or evaluating what is conveyed by the teacher.

Based on observations that have been carried out at SMP Negeri 3 Purbalingga, it shows that the low level of critical thinking skills in class VIII students, seen from students who have difficulty in identifying problems, are less able to analyze information properly, and tend to have difficulty in evaluating existing solutions. This can be seen in the low active participation of learners in discussions, both in giving opinions and responding to opinions from others. Learners rarely ask questions and have difficulty in making logical arguments supported by evidence. Most learners tend to be passive and only receive information without criticizing. In addition, learners are only provided with material and do not participate in any activities that can improve critical thinking skills. Teachers apply learning that focuses only on the teacher and have not fully implemented learner-centered learning.

Innovation is needed in media and learning models that can encourage students to think critically. The discovery learning model is one of the learning models proposed in the Merdeka Curriculum. According to Sa'diyah et al (2019: 57) through the discovery learning learning model, students are given a stimulus to make temporary conjectures, then students are directed to make observations to draw a conclusion. The discovery learning model is one of the learning models that can be used to improve students' critical thinking skills (Handayani et al., 2022: 545).

Media is a component of the teaching and learning process that cannot be separated, because it plays an important role in achieving educational goals, especially learning goals at school Arsyad in (Sadeli et al., 2022: 87). One of the media that can be used to support learning is canva. By using canva, it can increase students' interest in the learning process and can increase students' motivation (Tri Wulandari & Adam Mudinillah, 2022: 103).

Researchers use learning materials that are closely related to the development of critical thinking skills, namely the material for preserving the culture of my nation. National culture is a heritage that must be maintained and preserved by the next generation. The obligation for every layer of society to defend it, where the role of the younger generation is expected to continue to strive to inherit the nation's culture (Nahak, 2019: 165). Through learning about the material of preserving the culture of my nation, students can develop their critical thinking skills in analyzing, evaluating, and solving problems related to culture and national identity. Based on the above problems, through this study the authors want to find out whether there is an effect of the discovery learning model assisted by canva media in improving students' critical thinking skills on the material of preserving the culture of my nation.

## 2. METHOD

This study uses quantitative research aimed at directly testing the effect of a variable on other variables and to test the hypothesis of a cause-and-effect relationship. The type of research is quasi experimental or quasi experimental. research design nonequivalent control group design. In this design, the experimental group and control group are not randomly selected but with certain considerations.

The research begins with a pretest that will be given to the experimental class and control class before being given treatment (treatment) and ends with a posttest. The research was conducted at SMP Negeri 3 Purbalingga. The following research was conducted in January-May 2024. The population in this study were all VIII grade students of SMP Negeri 3 Purbalingga with a total of 256 students. In this study using class VIII A as the experimental class and class VIII B as the control class.

In this study, the data sources used were primary data and secondary data. The sampling technique used is non-probability sampling using purposive sampling technique. Data analysis techniques used in this study include:

validity test, reliability test, distinguishing power, level of difficulty, descriptive analysis, table analysis, and statistical analysis.

### 3. RESULT AND DISCUSSION

There is a difference in critical thinking skills between experimental classes that apply discovery learning models compared to control class students who apply conventional learning models. Critical thinking skills in experimental and control class students have a significant difference, namely  $<0.05$ . To measure students' critical thinking skills, researchers measure using a Likert scale questionnaire which contains statements related to the steps of the discovery learning model, according to Faisal (in Wulan & Ahmad, 2020: 1473) there are 6 steps in the discovery learning model, namely:

#### 1. Stimulus

At this stage, the teacher provides a stimulus in the form of reading materials, pictures, and stories in accordance with the learning material being discussed. This is to arouse curiosity about certain phenomena.

#### 2. Problem identification

At this stage, the teacher provides opportunities for students to be able to identify problems and ask questions related to the material being discussed.

#### 3. Data collection

At this stage, learners are given the experience to search, observe, and try. Learners collect relevant information in order to answer the questions that have been identified, can be done through group discussions or reading literature.

#### 4. Data processing

At this stage, learners discuss the results of the observations that have been obtained. The teacher can guide and help learners who have difficulties.

#### 5. Proof

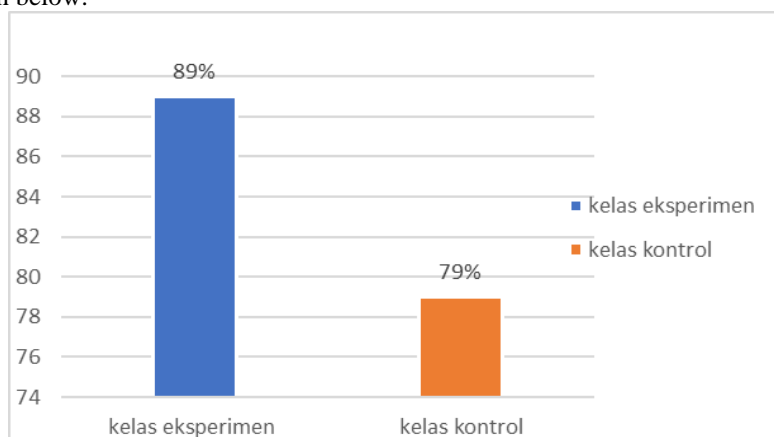
At this stage, students prove whether the information obtained is in accordance with what was formulated.

#### 6. Drawing conclusions

At this stage, students are directed to report the results of their discussion to be presented in front of the class so that other students can respond. The teacher and learners can conclude simultaneously.

In addition to the steps in the discovery learning model, it also contains eight critical thinking indicators including providing basic explanations, building basic skills, concluding, providing further explanations, strategies and tactics, curiosity, analyzing arguments, solving problems with the right sources. The critical thinking skills variable in the experimental class got a percentage of 76% and for the control class critical thinking skills got 72% by using a conventional learning model. In addition, to measure the level of understanding of preserving the culture of my nation to students, researchers conducted a multiple choice test of 20 questions related to critical thinking skills.

Based on the data on the percentage of critical thinking skills on the material of preserving the culture of my nation between the experimental class and the control class has a comparison of 89% and 79%. This shows that there is a difference in skills. The magnitude of the difference in critical thinking skills on the material of preserving the culture of my nation between students in the experimental class who apply the discovery learning model assisted by Canva compared to control class students. The magnitude of the difference in critical thinking skills between the experimental class and the control class on the material of preserving the culture of my nation can be seen from the graph below:



**Image 1.** Differences in Critical Thinking Skills on the Material of Preserving My Nation's Culture

The graph explains if the experimental class is higher than the control class, with this significant difference, there is an effect of the discovery learning model in improving students' critical thinking skills. This is in line with the research of Sefriyani & Fuadiyah (2024: 7421) and Ainiyyah (2023: 35) which explains that the discovery learning model has an effect in improving students' critical thinking skills rather than using conventional learning models. Besides being able to improve critical thinking skills, the discovery learning model assisted by Canva can also improve the three aspects that students must master in learning such as knowledge, attitudes and skills, in accordance with the opinion conveyed by Tuti & San (2024: 19) that the application of the discovery learning model and Canva learning media can develop the cognitive, affective and psychomotor aspects of students. From this explanation, it can be seen that learning models and media influence students to gain in-depth knowledge, develop positive attitudes towards learning, and can improve students' practical skills.

#### 4. CONCLUSION

A teacher must have creativity in carrying out the learning process. According to (Tuti & San, 2024: 15) argues that teacher creativity in using learning models and media has a crucial role in increasing the effectiveness of the learning process. When teachers can use the right learning models and media, student learning outcomes tend to improve. From this explanation, it can prove that learning media and models are very influential in the learning process.

The discovery learning model can be a solution in solving problems regarding the low critical thinking skills of students in learning Pancasila Education, because this learning model emphasizes more on exploration and discovery by the students themselves, thus encouraging students to be more active in participating such as being able to identify problems, analyze, and evaluate problems which are part of the critical thinking skills process. Learners also become more active in asking questions, answering, discussing and presenting the results of discussions during the learning process.

Based on the discussion above, it can be seen that in this study, the discovery learning model assisted by Canva has an effect in shaping students' critical thinking on the material of Preserving My Nation's Culture at SMP Negeri 3 Purbalingga. This is indicated by the results of the comparison between the experimental class and the control class, where the experimental class obtained higher results and an improvement in the learning process when compared to the control class.

#### REFERENCES

- Ainiyyah, F. Z., & Saraswati, U. (2023). Pengaruh Model Discovery Learning Terhadap Kemampuan Berpikir Kritis Siswa Pada Materi Manusia dan Sejarah Kelas X IPS di MA Al Asror Tahun Pelajaran 2022/2023. *Historia Pedagogia*, 12(1), 34–43.
- Anisa, R. A., Ipungkarti, A. A., & Saffanah, N. K. (2021). Pengaruh Kurangnya Literasi serta Kemampuan dalam Berpikir Kritis yang Masih Rendah dalam Pendidikan di Indonesia. In *Conference Series Journal* (Vol. 01).
- Badarudin, B., Muslim, A., Sadeli, E. H., & Nugroho, A. D. (2022). Model Problem Based Learning Berbasis Literasi Untuk Meningkatkan Kemampuan Berpikir Kritis dan Kemandirian Belajar Siswa Kelas IV Mi Muhammadiyah Kramat Kembaran. *Khazanah Pendidikan*, 16(1), 154. <https://doi.org/10.30595/jkp.v16i1.13359>
- Faiz, A., & Farida. (2022). Program Guru Penggerak Sebagai Sumber Belajar. In *Jurnal Pendidikan dan Pembelajaran* (Vol. 14, Issue 1).
- Fatar Kiranadewi, D., Tyas, A., & Hardini, A. (2021). Perbandingan Efektivitas Model Pembelajaran Problem Based Learning Dengan Model Problem Solving Terhadap Kemampuan Berpikir Kritis Pada Pembelajaran PPKn. *Journal for Lesson and Learning Studies*, 4(1), 1–7.
- Handayani, N., Basariah, B., & Sawaludin, S. (2022). Penerapan Model Discovery Learning untuk Meningkatkan Kemampuan Berpikir Kritis Siswa. *Jurnal Pendidikan Indonesia*, 3(6), 542–552. <https://doi.org/10.36418/japendi.v3i6.993>
- Nahak, H. (2019). Upaya Melestarikan Budaya Indonesia di Era Globalisasi. *Jurnal Sosiologi Nusantara*, 5(1), 65–76. <https://doi.org/10.33369/jsn.5.1.65-76>
- Nopianur, Y. A., Waluyati, A., & Saputra, A. (2023). Melior : Jurnal Riset Pendidikan dan Pembelajaran Indonesia Peningkatan Keaktifan Belajar Peserta Didik Melalui Model Discovery Learning Pada Mata Pelajaran PPKn. <https://journal.actual->

- Priyanto, E., Kartikawati, R., & Fajar, W. N. (2017). Membangun Karakter Mahasiswa Melalui Lesson Study Mata Kuliah Pendidikan Pancasila.
- Mukhlisotin, A. F. (2022). Pengaruh Model Pembelajaran Project Citizen Terhadap Kemampuan Berpikir Kritis Siswa Pada Mata Pelajaran Pendidikan Pancasila dan Kewarganegaraan. *Jurnal Ilmiah Pendidikan Pancasila Dan Kewarganegaraan*, 7(1), 214–227. <http://journal2.um.ac.id/index.php/jppk>
- Sadeli, E. H., Zakiyah, I. H., & Faridli, E. M. (2022). Pengaruh Media Film Merah Putih Terhadap Sikap Nasionalisme Peserta Didik Pada Materi Memperkuat Komitmen Kebangsaan (Studi Kuasi Eksperimen Kelas VIII di SMP Negeri 3 Belik). *Khazanah Pendidikan*, 16(2), 86. <https://doi.org/10.30595/jkp.v16i2.1394>
- Sa'diyah, A., & Dwikurnaningsih, Y. (2019). Peningkatan Keterampilan Berpikir Kritis Melalui Model Pembelajaran Discovery Learning. *Edukasi*, 11(1), 55–66. <http://journal.ummgl.ac.id/nju/index.php/edukasi>
- Sefriyani, R., & Fuadiyah, S. (2024). Pengaruh Model Pembelajaran Discovery Learning terhadap Keterampilan Berpikir Kritis Peserta Didik pada Materi Keanekaragaman Hayati Fase E di SMAN 15 Padang. *Pendidikan Tambusai*, 8(1), 7414–7423.
- Sofri Fikri Arif, D., Zaenuri, & Nur Cahyono, A. (2020). Analisis Kemampuan Berpikir Kritis Matematis Pada Model Problem Based Learning (PBL) Berbantu Media Pembelajaran Interaktif dan Google Classroom.
- Sudewa, K. A., Sugihartini, N., Gede, D., & Divayana, H. (2021). Pengembangan Media Pembelajaran E-Learning Berbasis Edmodo Dengan Discovery Learning Pada Mata Pelajaran PPKN Kelas VIII Di SMP Lab Undiksha Singaraja. *Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika (KARMAPATI)*, 10(1).
- Suhrman, S., Prayogi, S., & Asy'ari, M. (2021). Problem-Based Learning with Character-Emphasis and Naturalist Intelligence: Examining Students Critical Thinking and Curiosity. *International Journal of Instruction*, 14(2), 217–232. <https://doi.org/10.29333/iji.2021.14213a>
- Suprijono Agus. (2019). Model-Model Pembelajaran Emansipatoris. Pustaka Belajar.
- Tri Wulandari, & Adam Mudinillah. (2022). Efektivitas Penggunaan Aplikasi CANVA sebagai Media Pembelajaran IPA MI/SD. *Jurnal Riset Madrasah Ibtidaiyah (JURMIA)*, 2(1), 102–118. <https://doi.org/10.32665/jurmia.v2i1.245>
- Tuti, N., & San, D. (2024). Penerapan Model Discovery Learning Berbantuan Media Canva Untuk Meningkatkan Motivasi Siswa Pada Pembelajaran Menulis Surat Pribadi. *Bahasa Dan Matematika*, 2(4), 10–21. <https://doi.org/10.61132/arjuna.v2i4.1012>
- Wulan, F., & Ahmad, S. (2020). Model Discovery Learning Sebagai Upaya Meningkatkan Kemampuan Berpikir Kritis Siswa SD. *Pendidikan Tambusai*, 4(2), 1469–1479.