

Conference Name: EduCon Kuala Lumpur – International Conference on Education, 06-07 May 2024

Conference Dates: 06-May- 2024 to 07-May- 2024

Conference Venue: Hotel Capitol, Bukit Bintang, Kuala Lumpur, Malaysia

Appears in: PUPIL: International Journal of Teaching, Education and Learning (ISSN 2457-0648)

Publication year: 2024

Yani et. al., 2024

Volume 2024, pp. 171-177

DOI- <https://doi.org/10.20319/ictel.2024.171177>

This paper can be cited as: Yani., Maryani, E., Yani, A. (2024). Implications of Using the Case Method to Improve Critical Thinking Skills in Indonesia. *EduCon Kuala Lumpur – International Conference on Education, 06-07 May 2024. Proceedings of Teaching and Education Research Association (TERA), 2024, 171-177.*

IMPLICATIONS OF USING THE CASE METHOD TO IMPROVE CRITICAL THINKING SKILLS IN INDONESIA

Yani

*Department of Geography Education, Faculty of Social Sciences Education, Indonesia
University of Education
yanigeo@upi.edu*

Enok Maryani

*Department of Geography Education, Faculty of Social Sciences Education, Indonesia
University of Education
enokmaryani@upi.edu*

Ahmad Yani

*Department of Geography Education, Faculty of Social Sciences Education, Indonesia
University of Education
ahmadyani@upi.edu*

Abstract

Forming human resources is the key to a country's progress. Quality human resources have good critical power. People who can think critically can use the information or ideas they have to solve problems. The formation of critical thinking skills can be developed through education. The case method is the answer to developing students' critical powers. The aim of this research is to see the effect of the case method on students' critical thinking abilities. The method used is a literature review by examining related articles. The results of the analysis of several articles show that the case method is a learning method that can improve critical thinking skills. It is

hoped that applying the case method will become a method that can be applied in more active and meaningful learning

Keywords

21st Century, Case Method, Critical Thinking

1. Introduction

The world has entered the 21st century which is very dynamic. 4C skills are needed, namely critical thinking, creativity, communication skills, and collaboration skills (Andrian and Rusman, 2019). Indonesian humans need competitive power and the ability to compete with other nations so that Indonesia can become a developed country (Syafitri et al., 2021). A nation can progress if it has quality human resources. Qualified human resources come from a good form of education.

In the era of industrial globalisation, students are expected to have critical thinking skills. Critical thinking is one of the skills that students must have. Students can seek the truth from the explanation given by the teacher, so that it becomes active learning (Juhji and Suardi, 2018). Critical thinking skills must always be trained so that they are able to analyse problems, solve cases, and create solutions to the problems faced (Fathiarah et al., 2019).

Critical thinking is an intellectual activity that includes judgement and making decisions effectively, independently, and rationally (Oktariani and Ekadiansyah, 2020) The ability to think critically does not only depend on the amount of information obtained but someone can use information to make decisions to solve problems. Indicators of critical thinking according to (Facione, 2011) include: interpretation, analysis, evaluation, inference, explanation, and self-regulation. To fulfil the critical thinking indicators, a learning method is needed that can improve critical thinking skills and is meaningful to students. Case method is one of the methods that can improve critical thinking. The case method uses cases as learning. Case method learning includes analysing problems, proposing solutions, evaluating, and solving problems.

The purpose of this research is to see the effect of using the case method on students' critical thinking. Critical thinking-based learning objectives can be successful when using meaningful learning (Rosidah et al., 2021). Case method can give a different impression from other methods because it uses contextualised cases to solve so that it is closely related to the problems around students.

2. Method

This study looked for the integration of disaster material in various subjects and levels of education. The research method used is systematic review. Systematic review is conducted by selecting writings related to the same research objectives (Garcia, 2021). Systematic reviews are used to own, identify, interpret and evaluate the results of research that has been done to answer the synthesis of new research objectives. Articles related to the integration of disaster education in Indonesia were collected through Google Scholar. The systematic review step of this research is broken down into four phases, namely the identification phase, the screening phase, the eligibility phase and the inclusion phase. The following flowchart of this research can be seen in Fig.1.

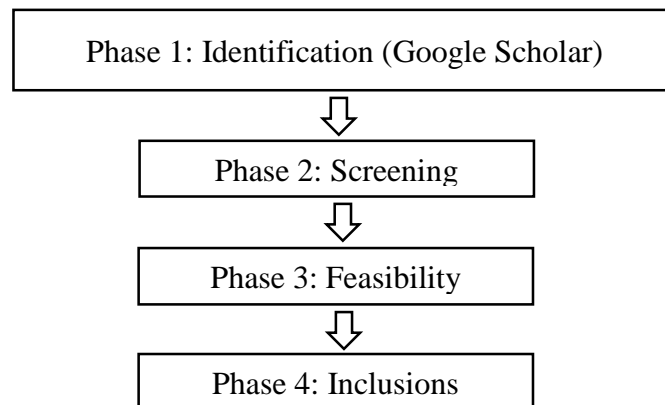


Figure 1. Research flow diagram

In the initial stage, we searched and identified literature reviews from Google Scholar. The journals were published between 2014 and 2024. The data recorded on Google Scholar searches from scientific disciplines, so it is not too specific to discuss education in full. The following is a detailed description of the number of articles included in each phase (Figure 2).

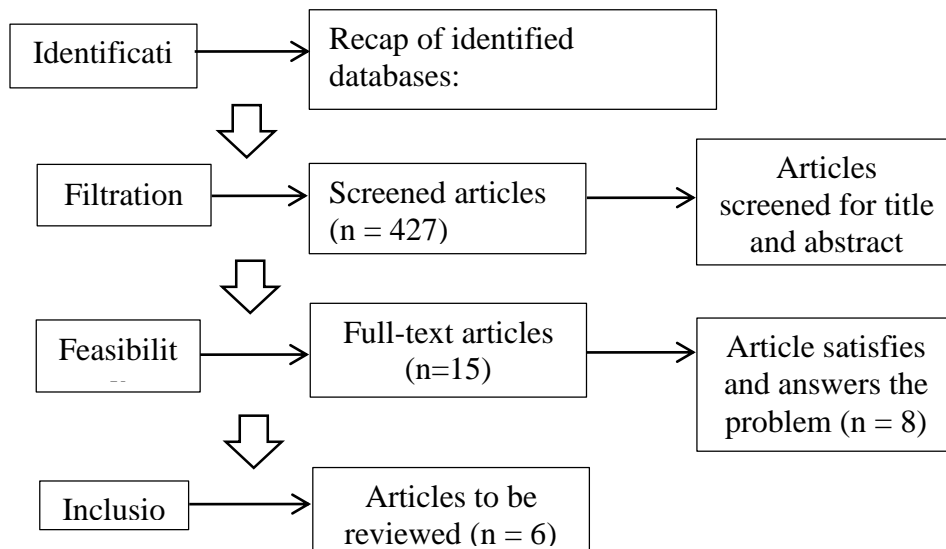


Figure 2. Details of the Number of Articles in Each Phase

The search mechanism with the help of keywords ‘Case Method on Critical Power in Indonesia’. The second stage is the screening phase. The titles and abstracts of the five databases were screened based on the match with the keywords. The third phase was a full-text review of the articles that were selected and directed to answer the problems in this study. The final step is inclusion where articles that are outside the focus of the study are separated, the focus of this research study is the use of case method learning on critical thinking skills and the selected articles are indexed either Sinta, DOI, or ISSN.

3. Results and Discussion

The source of the search for related articles was sourced from Google Scholar. The results of the review and meta-analysis found 6 articles that met the criteria for synthesis. Table 1 provides an overview of the research study title, author, journal name, year of publication, and discussion results.

Table 1. Article Review Results

No.	Title of The Journal	Author's Name	Name of Journal	Year of Issue	Results of the Discussion
1.	Building Students' Critical Thinking Skills through Case Based Learning on Vibration Materials.	Siti Fatimah & Tutut Nurita	Pensa E-Journal: Science Education Vol. 11, No. 3 pp. 273-277 December	2023	There was an increase in the test results of students' critical thinking skills after using the case method. The increase was 0.78 (Fatimah and Nurita, 2023).
2.	Case Study Method Innovation Using Classroom Blogging and BMKG Web on Environmental Pollution Materials to Improve Students' Critical Thinking Ability	Nisrina Nur Rahmi, Nisa Ayunda Rahmi Mutia, Bambang Supriatno, dan Riandi	BIODIK: Scientific Journal of Biology Education ISSN 2580-0922 (online), ISSN 2460-2612 (print) Volume 08, Number 03, Year 2022, Page. 149 - 156	2022	Case study learning aims to train students to be able to solve problems around them. This method trains critical thinking skills and is a must-have skill in the 21st century (Nur Rahmi et al., 2022).
3.	The Effort to Increase The Critical Thingking Ability Using Case Study Method on Social Studies Leraning.	Isti Yuadarma	Indonesian Journal of Basic Education Volum 2 Number 2 in September 2017.	2017	The results of the research using case studies in social studies learning were able to improve critical thinking skills. The learning process through recognising symptoms, analysing problems, making hypotheses, finding sources of information from existing problems, making solutions to problems, and finally making

					conclusions. There is an increase in students' critical thinking skills, pre-action the percentage is (42%), then in cycle 1 action it rises to (67%). Then the percentage increased to (79%) in cycle 2 (Isti, 2017).
4.	Application of Case Based Learning (CBL) Model to Developing Students' Critical Thinking Skills in Geography Learning at SMA Negeri 1 Kuta Utara	Ni Putu Irma Dharmayanthi	Undiksha Journal of Geography Education Volume 10, Number 3, December 2022, pp. 291-300	2022	The use of case-based learning in the geography subject of SMA Negeri 1 Kuta Utara in class XI IPS 2 resulted in a good category with an average score of 79.35. Critical thinking skills also increased compared to the application of conventional methods (Dharmayanthi, 2023).
5.	Application of Case Study Learning Method Assisted by Module to Improve Critical Thinking Skills	D.R.Arum, S.Minangwati	Chem in Edu 3 (2) (2014) Chemistry in Education	2014	Of the 30 students who were given the case method action experienced an increase in critical thinking skills. In cycle one there were 20 students with an average score of 77.46, then in cycle II it rose to 25 students who got an average score of 85.00. And in cycle III it increased to 26 students with an average score of 85.22. In addition, students' enthusiasm for learning has also increased (Arum and Minangwati, 2014).
6.	Case Method in Building Students' Critical Thinking In the subject of PPKN	Tiominar Sianipar ,Enjelina Flora ,Adellina Ahmad Zain Nainggolan, Sri Yunita, Jamaludin	INNOVATIVE: Journal Of Social Science Research Volume 3 Nomor 5 Tahun 2023 Page 6928-6937	2023	Learning using the case method has a significant effect on critical thinking skills, but there are obstacles, namely minimal interest in participating in learning (Sianipar et al., 2023).

Learning with the case study method from six articles explained that there was an influence on critical thinking skills. The ability to think critically is a skill that must be mastered in this day and age, because in dealing with problems there needs to be critical thinking in responding to and filtering the information received. If people already have critical thinking, it will have an impact on every line of life and create an advanced nation.

4. Conclusion

A review of each article shows the significant effect of the case method on critical thinking skills. Every subject can innovate by including this method in the learning system, so that students can stimulate their reasoning and critical thinking. It is hoped that by learning through cases students will get an idea of solving problems from the analysed cases and can be applied in everyday life.

5. ACKNOWLEDGEMENT

The authors would like to thank the Lembaga Pengelolaan Dana Pendidikan (LPDP) and the Ministry of Education, Culture, Research and Technology in Indonesia for supporting this publication.

REFERENCES

- Andrian, Yusuf, and Rusman Rusman. 2019. "Implementasi Pembelajaran Abad 21 Dalam Kurikulum 2013." *Jurnal Penelitian Ilmu Pendidikan* 12(1): 14–23.
- Arum, D, R., & Minangwati, S. 2021. "Chemistry in Education." 10(2252): 15–21
- Cholifah Tur Rosidah, Pana Pramulia, and Wahyu Susiloningsih. 2021. "Analisis Kesiapan Guru Mengimplementasikan Asesmen Autentik Dalam Kurikulum Merdeka Belajar." *Jurnal Pendidikan Dasar* 12(01): 87–103.
- Dharmayanthi, Ni Putu Irma. 2023. "Penerapan Model Case Based Learning (CBL) Untuk Mengembangkan Critical Thinking Skills Siswa Dalam Pembelajaran Geografi Di SMA Negeri 1 Kuta Utara." *Jurnal Pendidikan Geografi Undiksha* 10(3): 291–300.
- Facione, Peter a. 2011. Insight assessment *Critical Thinking : What It Is and Why It Counts*. <https://www.insightassessment.com/CT-Resources/Teaching-For-and-About-Critical-Thinking/Critical-Thinking-What-It-Is-and-Why-It-Counts/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF>.
- Fathiara, Anggit, Badarudin Badarudin, and Aji Heru Muslim. 2019. "Meningkatkan Keterampilan Berpikir Kritis Dan Gemar Membaca Peserta Didik Melalui Model Predict Observe Explain Berbasis Literasi." *Muallimuna : Jurnal Madrasah Ibtidaiyah* 4(2): 92.
- Fatimah, Siti, and Tutut Nurita. 2023. "PENSA E-JURNAL : PENDIDIKAN SAINS." 11(3): 273–77.
- Garcia, Rizaldy E. 2021. "European Journal of Educational Research." *European Journal of Educational Research* 11(1): 127–39.
- Isti, Yuardarma. 2017. "Upaya Meningkatkan Kemampuan Berpikir Kritis the Effort To Increase the Critical Thinking Ability Using Case." *Jurnal Pendidikan Guru Sekolah Dasar* (d): 578–89.
- Juhji, and Adila Suardi. 2018. "Profesi Guru Dalam Mengembangkan Kemampuan Berpikir Kritis Peserta Didik Di Era Globalisasi." *Jurnal Pnedidikan Agama Islam* 5(1): 16-24.

- Nur Rahmi, Nisrina, Nisa Ayunda Rahmi Mutia, and Bambang Supriatno. 2022. "Inovasi Metode Studi Kasus Menggunakan Classroom Blogging Dan Web BMKG Pada Materi Pencemaran Lingkungan Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa." *BIODIK: Jurnal Ilmiah Pendidikan Biologi* 8(3): 149–56. <https://online-journal.unja.ac.id/biodik>.
- Oktariani, Oktariani, and Evri Ekadiansyah. 2020. "Peran Literasi Dalam Pengembangan Kemampuan Berpikir Kritis." *Jurnal Penelitian Pendidikan, Psikologi Dan Kesehatan (J-P3K)* 1(1): 23–33.
- Sianipar, Tiominar et al. 2023. "Metode Case Method Dalam Membangun Critical Thinking Siswa Pada Mata Pelajaran PPKN." 3: 6928–37.
- Syafitri, Ely, Dian Armanto, and Elfira Rahmadani. 2021. "AKSIOLOGI KEMAMPUAN BERPIKIR KRITIS (Kajian Tentang Manfaat Dari Kemampuan Berpikir Kritis)." *Journal of Science and Social Research* 4(3): 320.