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Distinguishing Facts And Opinions: Enhancing Students' Critical Reading Skills Using Pair Checks Method

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Abstract: This study investigates the effectiveness of the Pair Checks method in improving eleventh-grade students' ability to distinguish between facts and opinions in discourse texts. Conducted through two cycles of Classroom Action Research (CAR), the study shows significant improvements in student performance, engagement, and collaboration. In Cycle I, students demonstrated moderate improvement in their ability to identify facts and opinions, with an average score increase from 63 to 74.44. However, challenges such as limited student engagement were addressed in Cycle II, leading to further enhancements, with the average score rising to 81.33 and 83.33% of students achieving the minimum competency level. Observational data revealed improved classroom behavior, increased participation, and reduced disruptions, demonstrating the positive impact of the method. The findings support the application of cooperative learning strategies in fostering critical thinking, analytical skills, and media literacy. This study highlights the value of iterative refinements in instructional methods and suggests that the Pair Checks method can be an effective tool for enhancing students' reading comprehension and critical engagement with texts. Future research could explore broader sample sizes and longitudinal studies to assess the long-term impact of this approach.

Keywords: *Pair Checks Method; Critical Reading; Fact and Opinion; Cooperative Learning; Classroom Action Research*

INTRODUCTION

Education is a fundamental pillar of human development, providing individuals with the knowledge and skills necessary for personal and societal advancement. In Indonesia, schools play a crucial role in delivering education, guided by a curriculum that aims to equip students with the competencies needed to succeed in a rapidly changing world. The current educational framework, the Kurikulum Tingkat Satuan Pendidikan (KTSP), emphasizes student-centred

learning, where teachers act as facilitators and mediators, helping students to actively engage in the learning process.

One of the competencies emphasized in the KTSP for eleventh-grade students is the ability to understand various types of written discourse, particularly in distinguishing between facts and opinions in editorial texts. This skill is essential for developing critical thinking and analytical abilities, which are foundational for academic success and informed citizenship.

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However, despite its importance, the ability to differentiate between facts and opinions remains a challenge for many students. Preliminary observations and interviews with the Indonesian language teacher of Class XI IPA 3 at SMA Negeri 1 Bungoro revealed that while students could define facts and opinions, they struggled to identify them accurately within discourse texts. This difficulty was compounded by the traditional lecture-based teaching method, which often led to a monotonous learning environment, reducing student engagement and motivation.

To address these issues, educational research has increasingly focused on cooperative learning methods, which have been shown to improve student engagement, collaboration, and academic outcomes. Among these methods, the *Pair Checks* technique has emerged as a promising approach. Developed by Spencer Kagan, *Pair Checks* involves students working in pairs to solve problems and verify each other's answers, fostering a more interactive and supportive learning environment (Kagan, 1994; Kagan & Kagan, 2009). Recent studies have continued to explore and validate the effectiveness of *Pair Checks* across various educational contexts. For example, Smith and Tan (2020) demonstrated that *Pair Checks* significantly enhance students' collaborative skills and knowledge retention in secondary education settings. Similarly, Iringan found (2021) that *Pair Checks* facilitate a structured environment where students can discuss and justify their problem-solving approaches, enhancing their ability to tackle complex tasks.

Furthermore, emerging research highlights the adaptability of *Pair Checks* to diverse subjects and learning objectives. A study by Auliah, & Salempa (2021) confirm that *Pair Checks* in science education and reported improved comprehension and application of scientific concepts among students. Another study by Barry (2022) discusses the implementation of *Pair Checks* in language arts, highlighting its effectiveness in helping students differentiate between factual and opinion-based statements.

The *Pair Checks* method involves students working in pairs to solve problems and check each other's work, promoting a deeper understanding of the material and the development of critical thinking skills. This method not only allows students to learn from one another but also fosters a supportive learning environment where students feel more comfortable engaging with the material and with each other. Given its emphasis on collaboration and active learning, the *Pair Checks* method aligns well with the goals of the KTSP, making it a suitable intervention for improving students' ability to distinguish between facts and opinions.

The effectiveness of cooperative learning methods, including *Pair Checks*, in improving student outcomes is well-documented in educational research. According to Salu, Auliah, & Salempa (2021), applying the *Cooperative Learning Pair Checks Type*, through student worksheets, positively affected students' learning outcomes in reduction-oxidation reactions, demonstrating improved

comprehension and application of scientific concepts. This is particularly important in the context of reading comprehension and critical analysis, where students benefit from discussing and debating different interpretations of a text with their peers. Acharya, Sigdel, & Poudel (2024) emphasize that students learn more effectively when they actively engage in discussions and work collaboratively to solve problems. This approach is also supported by Marzano (1992) who highlights the role of peer explanation in reinforcing and expanding students' understanding of complex concepts.

Further studies have explored the specific benefits of the *Pair Checks* method in various educational contexts. For instance, Nurjannah (2016) demonstrated that the method significantly improved students' scanning reading skills, suggesting that this approach can be effectively adapted for other aspects of reading comprehension, such as distinguishing between facts and opinions. Additionally, the collaborative nature of the *Pair Checks* method aligns with Vygotsky's (1978) theory of social constructivism, which posits that learning is a socially mediated process. By working together, students can scaffold each other's learning, leading to a deeper understanding of the material.

Despite the proven benefits of cooperative learning methods, there is limited research on the application of the *Pair Checks* method specifically for teaching students how to distinguish between facts and opinions in discourse texts. This gap in the literature

highlights the need for further investigation into the effectiveness of this method in enhancing critical reading skills. The current study aims to fill this gap by exploring the impact of the *Pair Checks* method on students' ability to identify facts and opinions in discourse texts at SMA Negeri 1 Bungoro.

The primary objective of this research is to examine the effectiveness of the *Pair Checks* method in improving the ability of students at SMA Negeri 1 Bungoro to distinguish between facts and opinions in discourse texts. By doing so, this study aims to provide insights into the applicability of cooperative learning methods in enhancing critical reading skills and to identify best practices for implementing such strategies in educational settings.

METHODS

Design

This study utilized a Classroom Action Research (CAR) design, a widely recognized approach in educational research for systematically implementing and evaluating interventions to improve teaching and learning practices. The CAR model followed in this study is based on the Kemmis and McTaggart (1988) framework, which consists of a cyclical process of planning, action, observation, and reflection. The research was conducted in two iterative cycles, allowing for continuous improvement of the intervention.

Setting and Participants

The research was conducted at SMA Negeri 1 Bungoro, located in Bungoro District, Pangkep Regency, Indonesia. The study was

carried out over a three-month period from March to May 2017. Participants included 30 students from Class XI IPA 3, comprising 6 males and 24 females. This class was selected due to their observed difficulties in distinguishing between facts and opinions in discourse texts.

Research Procedure

Cycle I

1. **Planning** stage involved a collaborative discussion with the Indonesian language teacher to identify challenges related to students' ability to differentiate facts from opinions. A lesson plan aligned with the KTSP curriculum was then developed, focusing on the application of the Pair Checks method to enhance critical reading skills through specific activities, materials, and assessment tools. The materials included discourse texts relevant to the learning objectives, observation sheets for monitoring classroom activities, and pre-test and post-test instruments to evaluate students' abilities.

2. **Action** stage introduced the students to the *Pair Checks* method, who were then grouped into pairs and provided with discourse texts. Within each pair, one student focused on identifying facts in the text while the other identified opinions, and they subsequently checked each other's work. The activity, designed to span a full class period of approximately 90 minutes, was facilitated and monitored by the teacher, who provided

support as needed to ensure the students' progress.

3. **Observation:** The *Pair Checks* activities were conducted using a structured observation sheet to record key aspects of student behavior, including engagement, collaboration, and the accuracy of distinguishing facts from opinions. Additionally, the teacher and researcher documented qualitative data on student participation and challenges encountered throughout the activity.

4. **Reflection:** Following the completion of the first cycle, the teacher and researcher analyzed observation data and post-test results to identify student challenges and evaluate the effectiveness of the Pair Checks method. This reflection informed adjustments to the lesson plan, which were implemented in Cycle II to enhance instructional strategies and address identified difficulties.

Cycle II

1. **Planning:** The lesson plan was refined based on reflections from Cycle I, incorporating clearer instructions for distinguishing between complex facts and opinions and adding more practice examples before the Pair Checks activity. Observation sheets were updated to address areas identified as needing improvement in Cycle I.

2. **Action:** The refined Pair Checks method was implemented in Cycle II, with students divided into pairs and tasked with analyzing more complex discourse texts to further

develop their analytical skills. The activity maintained the structure from Cycle I, with an added emphasis on reinforcing strategies for identifying and verifying facts and opinions.

3. **Observation:** Observations in Cycle II focused on whether the refinements improved student engagement and accuracy in distinguishing facts from opinions. A modified version of the observation sheet from Cycle I was used to ensure consistent and reliable data collection.
4. **Reflection:** Post-test results from Cycle II were analyzed and compared with those from Cycle I to assess overall improvement. The reflection session also examined the feasibility of sustaining the Pair Checks method as a regular classroom practice.

Data Collection

1. **Tests:** A pre-test was administered before the first cycle to assess baseline abilities in distinguishing facts and opinions. A similar post-test was given at the end of each cycle to measure improvement. The tests consisted of multiple-choice questions and short-answer items requiring students to classify statements as facts or opinions.
2. **Observations:** Observational data were collected during the Pair Checks activities. The observation sheet included criteria such as student participation, the accuracy of fact and opinion identification, and the quality of peer interaction. The observation methodology was based on the established

practices in CAR (McNiff, 2016; McNiff & Whitehead, 2002).

Data Analysis

The data were analyzed using both qualitative and quantitative methods:

1. **Qualitative Analysis:** Descriptive analysis was used to interpret the observational data. The focus was on identifying patterns of student behavior, engagement levels, and the effectiveness of the Pair Checks method in facilitating learning.
2. **Quantitative Analysis:** Test scores from the pre-tests and post-tests were analyzed using descriptive statistics, including mean, median, mode, and percentage of students achieving the passing score of 75 or higher. The improvement from Cycle I to Cycle II was evaluated by comparing the mean scores and the percentage of students who successfully distinguished between facts and opinions.

Indicators of Success

Success was defined by three criteria: at least 75% of students achieving a score of 75 or higher on the post-test, demonstrating proficiency in distinguishing facts from opinions; observational data indicating enhanced student engagement and active participation in Pair Checks activities; and the effective resolution of issues identified in Cycle I, resulting in improved implementation and higher student performance in Cycle II.

RESULTS AND DISCUSSION

Results

The implementation of the Pair Checks method was aimed to investigate the effectiveness of the pair-checks method in improving students' ability to identify facts and opinions in reading texts. The research was

conducted in two cycles, each comprising planning, action, observation, and reflection. The results from the pre-test and post-test evaluations indicate significant improvements in students' skills following the introduction of this cooperative learning strategy.

Table 1. Observation Results of Cycle I

No	The observed aspects	Meeting		average	Percentage (%)
		1	2		
1	Students' attendance	26	28	27	90.00
2	students asked questions	7	11	9	30.00
3	students sought questions	6	6	6	20.00
4	Students did not pay attention during the lesson	7	7	7	23.33
5	Students did not concentrate	8	6	7	23.33
6	Students went in and out the classroom	6	6	6	20.00
7	Students did tasks assigned	26	26	26	86.67
8	Students actively participated in group work	18	18	18	60.00

Cycle I

Observation

The Table 1 presents the observation results of Cycle I, summarizing the students' behaviours during the learning process. The table suggests that the majority of students attended the lessons consistently, with an average attendance rate of 90%. However, a significant number of students were observed not paying attention during the lessons (23.33%) and not concentrating (23.33%). While a moderate percentage of students asked questions and sought guidance from the teacher (30% and 20%, respectively), a smaller number actively participated in group work (60%). Overall, the table provides insights into the students' engagement and behavior during the first cycle

of the study.

Students' Performance

Table 2. Students' Scores in identifying Fact and Opinion at cycle I

Score	Category	Frequency	Percentage (%)
85-100	Excellent	2	6.67
75-84	Good	16	53.33
60-74	Sufficient	12	40.00
40-59	Poor	0	0.00
0-40	Failed	0	0.00
Sum		30	100

Table 2 presents the central tendency of 30 samples' scores: the maximum score of 87 and a minimum score of 63, resulting in a range of 24. The average score was 74.44, the median was 77, and the mode was 67. These statistics provide a summary of the students' performance in the task at the first cycle of the study.

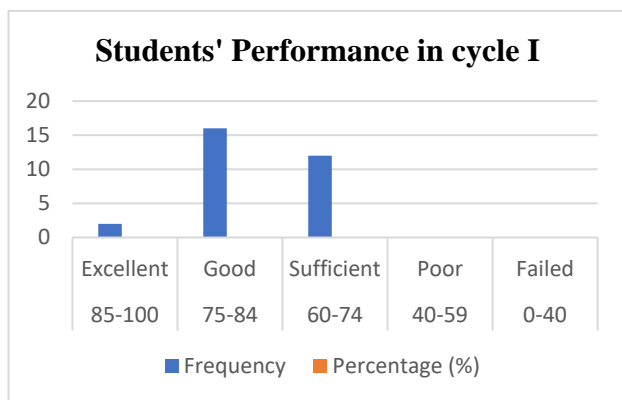


Diagram 1. Students' performance in identifying facts and opinions

The data in Table 2 suggest that the majority of students (16 out of 30) achieved "Good" category, followed by *Sufficient* with 12

students. Only two students achieved Excellent, while no students fell into the *Poor* or *Failed* categories. This indicates that the initial application of the Pair Checks method resulted in moderate improvements. The average score of students increased from a pre-test average of 63 to a post-test average of 74.44. While 60% of the students met the minimum competency level of 75, 40% remained below this threshold, highlighting the need for further intervention.

Cycle II

Observation

Table 3. Observation Results at Cycle II

No	The observed aspects	Meeting		Average	Percentage (%)
		1	2		
1	Students' attendance	28	30	29	96.67
2	students asked questions	8	14	11	36.67
3	students sought questions	12	16	14	46.67
4	Students did not pay attention during the lesson	6	4	5	16.67
5	Students did not concentrate	6	4	5	16.67
6	Students went in and out the classroom	5	3	4	13.33
7	Students did tasks assigned	28	30	29	96.67
8	Students actively participated in group work	20	22	21	70.00

The Table 3 presents the observation results of Cycle II, summarizing the students' behaviour during the learning process. The data is categorized into eight aspects, each with observations from two meetings. The average score and percentage for each aspect are also calculated.

Based on the table, the majority of students attended the lessons consistently, with an average attendance rate of 96.67%. There was a noticeable increase in the number of students

who asked questions (36.67%) and sought guidance from the teacher (46.67%). A smaller percentage of students were observed not paying attention during the lessons (16.67%) or lacking concentration (16.67%). Additionally, the percentage of students who entered and exited the classroom decreased to 13.33%. Most students actively participated in group work (70%), demonstrating improved collaboration and engagement. Overall, the table indicates positive changes in student behaviour and

participation during the second cycle of the study.

Students' Performance

The Table 4 presents the distribution of students' scores in Cycle II based on five categories: Excellent (85-100), Good (75-84), Sufficient (60-74), Poor (40-59), and Failed (0-40).

Table 4. Students' Scores in identifying Fact and Opinion at cycle I

Score	Category	Frequency	Percentage (%)
85-100	Excellent	11	36.66
75-84	Good	14	46.67
60-74	Sufficient	5	16.67
40-59	Poor	0	0.00
0-40	Failed	0	0.00
Sum		30	100

Table 4 showed that the majority of students (14 out of 30) fall into the "Good" category, followed by "Excellent" with 11 students. Five students are categorized as "Sufficient," while no students fell into the "Poor" or "Failed" categories. This indicates that most students have a satisfactory understanding of the material, with a significant number demonstrating excellent performance.

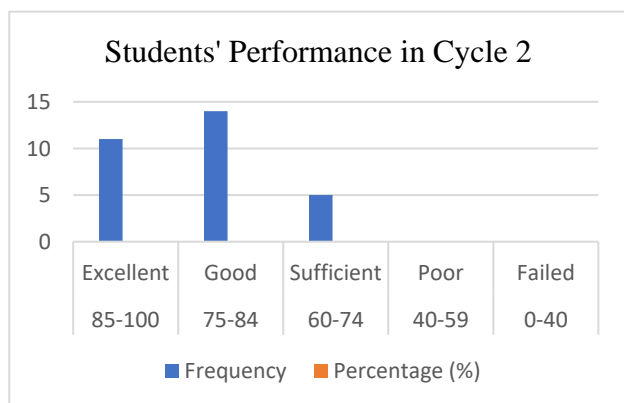


Diagram 2. Students' performance in identifying facts and opinions

Adjustments made in Cycle II, based on the reflections from Cycle I, led to more meaningful improvements. The average score increased further to 81.33, with 83.33% of the students achieving the minimum competency level. This indicates a successful application of the Pair Checks method in enhancing the students' ability to critically analyze discourse texts.

The key findings from the two cycles reveal that the Pair Checks method significantly improves students' skills in distinguishing between facts and opinions, with a marked increase in both average scores and the percentage of students meeting the competency criteria from Cycle I to Cycle II.

Discussion

The primary objective of this study was to assess whether the Pair Checks method could improve students' skills in distinguishing between facts and opinions in reading texts. The research was conducted in two cycles, with the method showing a progressive improvement in students' performance and engagement. In Cycle I, while there was a moderate increase in students' performance and engagement, Cycle II showed more pronounced improvements. The average score increased from 74.44 in Cycle I to 81.33 in Cycle II, and the percentage of students meeting the minimum competency level rose from 60% to 83.33%. This indicates that the Pair Checks method effectively addresses the research question by enhancing students' analytical skills.

The improvements observed in this study align with the research objectives outlined in the Introduction. In Cycle I, the observation data revealed that a significant proportion of students did not pay attention or concentrate during lessons. This lack of engagement could have been a barrier to fully benefiting from the Pair Checks method. However, adjustments made in Cycle II led to substantial improvements in attendance, participation, and behavior. The decrease in students not paying attention and concentrating during lessons suggests that the method, along with its refinement, facilitated a deeper understanding of the material by fostering active participation and peer learning, in line with the principles of cooperative learning. The increased participation in group work from 60% to 70% further supports the effectiveness of the Pair Checks method in fostering better collaborative learning environments.

The decrease in disruptive behaviors and increased question-asking and guidance-seeking in Cycle II indicate that the students were more engaged and responsive to the Pair Checks method. The reduction in classroom disruptions and improved concentration highlight the method's impact on creating a more conducive learning environment. These behavioral changes also suggest that the method facilitated a more focused and interactive classroom atmosphere, contributing to the overall improvement in students' performance.

The findings of this study are supported by several theoretical frameworks and recent

studies. Social Interdependence Theory (Deutsch, 1949; Johnson & Johnson, 1989; Weber, 1993) underpins the cooperative learning strategies used in this study. The theory asserts that positive interdependence among group members fosters mutual support, leading to enhanced learning outcomes. The collaborative nature of the Pair Checks method aligns with this theory, as it promotes shared responsibility and peer learning.

Vygotsk's Constructivist Learning Theory (1978) emphasizes social interaction as a critical element of learning, supporting the success of the Pair Checks method. The scaffolding provided by peers in this cooperative structure can be linked to the development of higher-order thinking skills, such as distinguishing facts from opinions. This theoretical underpinning reinforces the role of collaborative learning in enhancing students' cognitive abilities.

Cognitive Load Theory (Sweller, 1988) suggests that structured cooperative activities like Pair Checks can reduce cognitive load by dividing complex tasks into manageable parts. This allows students to focus on critical aspects of the learning process, contributing to the effectiveness of the method observed in this study.

Media Literacy Theory (Hobbs, 2010) further emphasizes the importance of developing the ability to analyze, evaluate, and create messages in various forms. The focus of this study on distinguishing between facts and opinions aligns with the goals of media literacy, highlighting the relevance of the Pair Checks

method in fostering critical media literacy skills.

Relevant empirical studies also support the findings of this research. Ahmed & AbdAlgane (2024) research demonstrates that EFL students exposed to cooperative learning outperform their peers in traditional settings, particularly in reading comprehension tests. Gillies (2016) reviewed cooperative learning methods and their impact on students' academic and social outcomes, supporting the effectiveness of techniques like Pair Checks in promoting active engagement and critical thinking. Similarly, Panitz and Panitz (2018) demonstrated the role of peer collaboration in fostering higher-order cognitive skills, including distinguishing between fact and opinion, in secondary education settings.

Sarwat et al. (2024) demonstrated that iterative approaches to cooperative learning in language education significantly improved students' engagement and performance, aligning with this study's emphasis on iterative refinements in Cycle II. Ramdani et al. (2022) explored the long-term impact of cooperative learning methods on media literacy, reinforcing the value of strategies like Pair Checks in addressing critical reading and fact-checking skills. Ailiyyah et al. (2024) highlighted the importance of promoting collaborative learning to build critical thinking skills, further validating the positive outcomes observed in this study.

The effectiveness of the Pair Checks method in promoting critical engagement with texts is consistent with prior research highlighting the benefits of cooperative learning

strategies. For instance, a study by Tok (2023) demonstrated that the Pairs Check technique significantly enhanced reading comprehension among 3rd-grade students in Turkish courses, indicating that cooperative methods can improve students' reading skills and engagement. Similarly, Ningsih and Rosa (2019) found that the Pair Check strategy effectively improved reading comprehension of narrative texts among junior high school students, supporting the method's applicability in diverse educational contexts. Additionally, Ovavia et al. (2022) reported that the Pair Checks model positively impacted learning outcomes and critical thinking abilities in elementary school students, further validating its effectiveness in enhancing critical engagement with learning materials.

The significant improvements in students' performance, particularly in distinguishing between facts and opinions, extend the application of Pair Checks to a specific and nuanced cognitive skill. While previous research has generally focused on broader aspects of reading comprehension, this study adds a new dimension by emphasizing the importance of media literacy and critical thinking skills. Johnson, Johnson, & Smith (2024) study supports the broader applicability of cooperative learning methods in enhancing academic performance and engagement, which aligns with the findings of this study.

The successful application of the Pair Checks method suggests broader implications for its use in language education. In an era where media literacy and critical thinking are

increasingly important, the ability to distinguish between facts and opinions is essential. The Pair Checks method offers a practical and effective approach for educators seeking to develop these skills in their students. The iterative nature of the Classroom Action Research (CAR) design used in this study allowed for continuous refinement and improvement of the teaching strategy, leading to more effective outcomes, as noted in Marsh & Hau (2003). This research highlights the importance of iterative adjustments in educational interventions to achieve better results.

However, there are limitations to this study. The sample size was confined to a single class of 30 students, which may limit the generalizability of the findings. Future research should consider expanding the sample size and including diverse educational settings to further validate the effectiveness of the Pair Checks method. Additionally, longitudinal studies could explore the long-term impact of this method on students' critical reading skills and overall academic performance, as emphasized in Kagan's (1994) work discussing the importance of longitudinal research in assessing the sustained impact of educational methods.

The study highlights the need to address potential engagement and behavioral issues during the initial implementation of new teaching methods. The improvements observed in Cycle II, following adjustments based on Cycle I's feedback, suggest that educators should be prepared to make iterative refinements to enhance the effectiveness of new strategies.

This approach can help overcome initial challenges and ensure that the methods are well-suited to the needs of the students.

The success of the Pair Checks method underscores the importance of incorporating cooperative learning strategies in educational settings. Educators should consider using similar methods to promote critical thinking and collaborative skills among students. The positive outcomes observed suggest that such methods can be effective in improving students' analytical abilities, provided that they are carefully implemented and refined based on ongoing observations and feedback.

CONCLUSION

This study examined the effectiveness of the *Pair Checks* method in improving eleventh-grade students' ability to distinguish between facts and opinions in discourse texts. Conducted in two cycles within the framework of Classroom Action Research (CAR), the study demonstrated significant improvements in student performance, engagement, and collaborative skills. The findings revealed that the *Pair Checks* method facilitated not only higher average test scores but also improved classroom participation and reduced disruptive behaviors.

In Cycle I, while moderate improvements were observed, key challenges such as limited student engagement and understanding of complex concepts were noted. These challenges were addressed in Cycle II through refined lesson plans, resulting in increased student performance and higher levels of classroom

collaboration. The average score rose from 74.44 in Cycle I to 81.33 in Cycle II, with 83.33% of students achieving the minimum competency level. The iterative refinement of instructional strategies contributed to the success of the intervention, underscoring the value of adaptability in educational methods.

The study's findings align with existing literature on the benefits of cooperative learning, particularly in fostering critical thinking and analytical skills. By encouraging peer interaction and active participation, the *Pair Checks* method provided a supportive and interactive learning environment conducive to deeper comprehension of the material. The study extends the application of cooperative learning methods to a specific cognitive skill highlighting its relevance in promoting critical media literacy.

Despite its promising outcomes, this study has limitations, including its focus on a single class of 30 students in a specific educational context. Future research should consider larger and more diverse samples to validate the findings further. Additionally, longitudinal studies could explore the sustained impact of the *Pair Checks* method on critical reading skills and overall academic performance.

To summary, the *Pair Checks* method proved to be an effective and adaptable instructional strategy for enhancing critical reading skills. Its successful implementation highlights the potential of cooperative learning approaches in fostering critical thinking and analytical abilities, essential for navigating an increasingly complex informational landscape.

Educators are encouraged to adopt and refine similar strategies to address specific learning objectives and promote student engagement and collaboration.

REFERENCES

- Acharya, B., Sigdel, S., & Poudel, O. (2024). Analysis of Effectiveness of Collaborative Pedagogy Practices. *NPRC Journal of Multidisciplinary Research*, 1(4), 172. Doi: 10.3126/nprcjmrv1i4.70965.
- Ahmed, A. O. A., & AbdAlgene, M. (2024). An Investigation of Cooperative Learning Strategies in Improving Students' Comprehension Skills in the Context of English as a Foreign Language (EFL). *Education and Linguistics Research*, 10(2), 1. Doi: 10.5296/elr.v10i2.22096.
- Ailiyyah, E. T., Pambudi, D. S., Fatekurohman, M., Kurniati, D., & Susanto. (2024). Development of LSLC-Based Collaborative Learning Model Learning Tools And Their Effects on Critical Thinking Skills. *VYGOTSKY*, 6(2), 71–86. Doi: 10.30736/voj.v6i2.1014.
- Barry, G. (2022). Facts vs. Opinions: Helping Students Overcome the Distinction. *Teaching Philosophy*, 45(3), 267–277. Doi: 10.5840/teachphil2022413161.
- Deutsch, M. (1949). A Theory of Co-operation and Competition. *Human Relations*, 2(2), 129–152. Doi: 10.1177/001872674900200204.
- Gillies, R. (2016). Cooperative Learning: Review of Research and Practice.

- Australian Journal of Teacher Education*, 41(3), 39–54. Doi: 10.14221/ajte.2016v41n3.3.
- Hobbs, R. (2010). *Digital and Media Literacy: A plan of action*. Washington DC: Aspen Institute.
- Iringan, E. M. (2021). Instructional Exposure of Senior High School Students to Approaches that Promote Critical Thinking and Problem-Solving Skills. *Journal of Asian Research*, 5(1), p1. Doi: 10.22158/jar.v5n1p1.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and Competition: Theory and research*. Edina: Interaction Book Company.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (2024). Cooperative Learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching*, 25(3 & 4), 85–118.
- Kagan, S. (1994). *Cooperative Learning*. San Clemente, CA: Kagan Cooperative Learning.
- Kagan, S., & Kagan, M. (2009). Why Do We Need Cooperative Learning? In *Kagan Cooperative Learning*. Clemente, CA: Kagan Cooperative Learning.
- Kemmis, S., & McTaggart, R. (1988). *The Action Research Planner*. Melbourne: Deakin University Press.
- Marsh, H. W., & Hau, K.-T. (2003). Big-Fish-Little-Pond Effect on Academic Self-Concept: A cross-cultural (26-country) test of the negative effects of academically selective schools. *American Psychologist*, 58(5), 364–376. Doi: 10.1037/0003-066X.58.5.364.
- Marzano, R. J. (1992). *A Different Kind of Classroom: Teaching with dimensions of learning*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- McNiff, J. (2016). *You and Your Action Research Project*. London: Routledge. Doi: 10.4324/9781315693620
- McNiff, J., & Whitehead, J. (2002). *Action Research: Principles and practice*. London and New York: RoutledgeFalmer.
- Ningsih, P., & Rosa, R. N. (2019). *The Use of Pair Check Strategy in Teaching Reading Comprehension on Narrative Text to Junior High School Students*. 8(1), 1–12. Doi: 10.24036/jelt.v8i1.102979.
- Nurjannah, A. (2016). Peningkatan Pembelajaran Membaca Memindai Melalui Model Pembelajaran Kooperatif Tipe Pair Check pada Siswa Kelas VIII Mts Masdarul Ulum Ogan Ilir. *Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 12(2), 105–116.
- Ovavia, C., Sufyarma, S., Atmazaki, A., & Miaz, Y. (2022). The Effect of the Pair Checks Model on Learning Outcomes and Critical Thinking Ability in Elementary School. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 1563–1582. Doi: 10.35445/alishlah.v14i2.

- 1833.
- Panitz, T., & Panitz, P. (2018). Encouraging the Use of Collaborative Learning in Higher Education. In *University Teaching* (pp. 161–202). United Kingdom: Routledge. Doi: 10.4324/9780429459092-7.
- Ramdani, D., Susilo, H., Suhadi, S., & Sueb, S. (2022). The Effectiveness of Collaborative Learning on Critical Thinking, Creative Thinking, and Metacognitive Skill Ability: Meta-Analysis on Biological Learning. *European Journal of Educational Research*, 11(3), 1607–1628. Doi: 10.12973/eu-jer.11.3.1607.
- Salu, D. L., Auliah, A., & Salempa, P. (2021). Pengaruh LKPD pada Model Pembelajaran Kooperatif Tipe Pair Checks Terhadap Hasil Belajar Peserta Didik Kelas X SMA Negeri 1 Enrekang Kabupaten Enrekang (Studi Pada Materi Pokok Reaksi Reduksi-Oksidasi). *ChemEdu*, 2(1), 36. Doi: 10.35580/chemedu.v2i1.20426.
- Sarwat, S., Iftikhar, I., Sahito, J. K. M., & Shahzad, W. (2024). Impact of Student Engagement in Language Support Classes Through Cooperative Learning: A Study of Pakistani Educational Institutions. *Research Journal for Societal Issues*, 6(1), 199–210. Doi: 10.56976/rjsi.v6i1.192.
- Smith, A., & Tan, W. (2020). Enhancing Collaborative Skills through Pair Checks in Secondary Education. *Journal of Educational Research*, 113(4), 455–470.
- Sweller, J. (1988). Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Science*, 12(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4.
- Tok, Ü. (2023). Effects of Cooperative Learning Method of Pairs Check Technique on Reading Comprehension. *Elementary Education Online*, 7(3), 748–757. Retrived from: <https://ilkogretim-online.org/index.php/pub/article/view/1202>.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Weber, E. G. (1993). *Varieties of Questions in English Conversation* (S. A. Thompson & P. J. Hopper (eds.)). USA: John Benjamins Publishing Co.