



Students' Reflective Thinking In Economic Learning

Devi Wulan Ashari¹, Fadhiya Ulhaq², Enceng Yana³, Hermansyah Hermansyah⁴

¹⁻⁴Universitas Swadaya Gunung Jati

Email: deviwulanashari5@gmail.com¹, fadhiya.ulhaaq0906@gmail.com², enceng_yana@ugj.ac.id³, hermansyah@ugj.ac.id⁴

Abstract. *The inability of students to grasp a concept or solve problems during the learning process is an inevitable occurrence. One such instance is when students encounter challenges in solving economic problems. Addressing the issue of students' inability to analyze questions in economics learning is essential, as every student inherently possesses the potential for analytical problem-solving abilities. This research is a qualitative research project involving high school students in Cirebon Regency as participants. The data collection techniques employed in this research include observation, data analysis, and in-depth interviews. The objective of this research is to investigate how students utilize their reflective thinking abilities in problem-solving within the context of economics learning. In this research, learning styles exert the greatest influence on economics learning in schools. Several factors contribute to students' reluctance to complete economics assignments, including differences in students' learning styles. Some students prefer theoretical learning, while others prefer practical learning. Additionally, obstacles arise from a lack of self-awareness, which hinders reflective thinking. In this research, learning styles emerge as the primary influencer on economics education within schools. Numerous factors contribute to students' reluctance to complete economics assignments, notably variances in their learning styles. While some students gravitate towards theoretical learning, others lean towards practical learning. Moreover, challenges arise from a deficiency in self-awareness, impeding reflective thinking.*

Keywords: *Reflective thinking, students, learning styles, economic learning.*

INTRODUCTION

This article examines students' reflective thinking abilities during the introduction of economics education and its influence on the teaching-learning process. The introduction of economics education in high schools aims to cultivate students' comprehension and reflective thinking skills in understanding the engaging process of economic learning. The reflective learning process is characterized by empowering students to engage in personal, unrestricted, and independent activities. Reflective practice is regarded as a method to cultivate awareness, empathy, collaboration, deep listening, engagement with diverse perspectives, and improved and creative responses to sustainability. The progression towards reflective teaching represents a significant advancement (Wijnands et al., 2021). Through reflective thinking, individuals aim to comprehend, critique, appreciate, explore alternative resolution strategies, and evaluate the challenges they encounter. Hence, the significance of reflection and the cultivation of reflective thinking have garnered significant attention among scholars and have been acknowledged in various fields and disciplines (Weerakoon, 2023).

Reflective thinking constitutes a component of higher-order thinking and holds great importance for students. It guides students to engage in reasoned actions through active, ongoing, and meticulous thought processes, leading them to arrive at new conclusions (Junaedi, Maryam, & Lutfi, 2022). In the present learning environment, it is imperative to cultivate

critical thinking skills in students right from the outset to prevent learning from being perceived as monotonous and tedious. Reflective thinking is also an active endeavor; it demands effort to articulate concepts and endeavor to connect ideas, thus comprehending their deeper significance by employing appropriate strategies. Therefore, reflective thinking involves understanding concepts and making decisions when facing problems. (Junaedi, Maryam, & Anwar, 2022). To generate deep learning and activity, academic or professional reflection of Superior Education professionals requires access to the highest critical level (critical reflection or transformation) to (re)incorporate new skills in expertise and abilities. (Sabariego Puig et al., 2019). Critical thinking is making rational decisions about what to believe and do. (Supriyatno et al., 2020).. Understanding economics at the high school level is an important foundation for understanding more complex concepts at the next academic level. In this context, reflective thinking becomes a key factor to improve learning effectiveness.

The examination of reflective thinking as a subset of educational research aims to cultivate high-quality and competitive human resources (Kholid1 et al., n.d.). One of the successes in education, especially in relation to reflective thinking, can be done by knowing the habits of students' learning styles (Jaenudin et al., 2017). Reflective thinking ability is the ability to recognise, analyse, and find alternative solutions to various economic problems faced. In this research, the ability to think reflectively in dealing with economic learning in high school will be studied. In this case, because it allows learners to determine facts, find ways to solve and identify formulas, reflective thinking is very practical for solving complex and sophisticated problems or tasks.

In the learning process, three aspects are considered: learning conditions that prioritize attention to the characteristics of the lesson, students, goals, and obstacles. Among these learning characteristics, emphasis must also be placed on course management and classroom management (Masturoh & Anggita, 2018). This happens, such as when the teacher is giving a lesson then there are students who are chatting with each other and not paying attention to the lesson, then the teacher can ask what has been taught to the students concerned, so that students want to pay attention to the lesson delivered again. Reflective learning allows learners to improve their thinking, leading to better actions towards well-being over time. Reflective learning helps to increase awareness of oneself, others, and society as a whole. Developing reflective and critical competencies is a key goal for higher education educators, who need to adapt to an ever-evolving curriculum and to changing technical and social environments.

An observable outcome in education is the cognitive process acquired through learning across various disciplines. Problem-solving skills hold paramount importance for students and their future endeavors. As teachers are tasked with designing the learning environment and

employing appropriate strategies, their actions are anticipated to play a pivotal role in student engagement (Hegarty & Thompson, 2019). A characteristic of high quality teachers is that they are highly knowledgeable about the material they teach students. However, it is crucial for students to recognize that teachers are also continuously engaged in the learning process. Researchers conducted a research in high schools in the city of Cirebon and identified an issue regarding economics education: students exhibited reduced interest due to the perceived complexity and monotony of the subject. Consequently, the authors were motivated to conduct research with the title "Reflective Thinking of Students in Economic Learning." The purpose of this research is to find out what factors influence the lack of interest in learning in economic lessons.

Students typically lack motivation to actively engage in learning activities. They often seek enjoyable learning experiences in the classroom, but accounting is a subject that students generally do not find very "fun." (Zhao, 2019). Within the framework of this research, the authors realise specific and general benefits, the expected benefits of this research are as follows: 1. Theoretical benefits as a means of complementing scientific references and research in the field of education 2. Practical benefits, for schools that have contributed to being allowed to this research, For teachers Increase teacher awareness and motivation, for students can arouse students' enthusiasm to take part in interesting learning activities, For parents Growing parents' awareness of the importance of their role in guiding and controlling their children in the learning process 3. For Researchers As an addition to future researchers, especially for research related to reflective ability. The practice of reflective thinking and engaging in the reflection process has the potential to improve analytical and decision-making skills. This equips students with the tools to improve their judgement.

Ruggerio defines learning as a mental activity that helps form or solve problems, make decisions, or satisfy curiosity. (Samura, 2019). Personality development is the process of formation as a result of activities controlled by a system of motives that characterise a person. Teachers are agents of change where the function of the teacher is not only an educator, but also a facilitator, motivator, innovator Ramdhani, M.R. & Adawiyah, R., 2023 in (Kunani, 2023). The varied activities of the teacher, along with the cultivation of their personal qualities, contribute to the teacher's interactions with themselves, colleagues, and students. In our view, all these elements constitute reflective thinking as an essential aspect of the teacher's practice and influence their professional growth. Learning is defined as a process wherein individuals exert effort to attain a comprehensive behavioral change.

METHOD

Research model

This research employed a qualitative research design, utilizing high school students in Cirebon Regency as the research participants. Data collection methods included observation, data analysis, and in-depth interviews. Thematic analysis was utilized to identify patterns and trends in students' reflective thinking skills. Observations were conducted to observe students' reactions and engagement in economic learning, focusing on the method of instruction. Observations were not limited to tangible events but also encompassed verbal interactions. The aim was for students to grasp the competencies taught and understand how to achieve positive learning outcomes.

Interviews were conducted to gain a deeper understanding of students' thoughts and views regarding economic learning. The data collected will be analysed qualitatively and presented in descriptive form. Meanwhile, to improve this understanding, the analysis needs to be continued by trying to find meaning. Reflective thinking forms students to connect prior knowledge to solve problems that are interrelated and arranged in the process of solving them by expressing ideas and ideas that are interconnected in the mind. So the activities of analysing qualitative data are combined with data collection activities, data reduction, data presentation and conclusions of research results.

The results of this research are based on data obtained through observation, data collection, and interviews with high school students in Cirebon district. Analysis of the data showed a positive effect of learning on improving students' thinking skills. Customised learning materials are important to increase student engagement (El-Sabagh, 2021). Noeng Muhadjir suggests the notion of data analysis as an effort to systematically search and organise records of observations, interviews, and others to improve the researcher's understanding of the case under research and present it as outcomes for others. (Rijali, 2018). The author will list the various field data that have been found as follows.

Observation

Education is considered a channel of economic growth because education is an intrinsic mechanism of knowledge absorption (Squicciarini, 2020). Classroom observation research to see students' learning possibilities is a method used to observe and collect data about students' behaviour and abilities during the learning process. In this type of research, the researcher will be directly in the classroom to observe the interaction between students, teachers, and the subject matter being taught. The classroom observation research process begins with designing specific objectives and research questions.

The purpose could be related to students' understanding of the material, active participation in the learning process, or their ability to apply the concepts they have learnt. The researcher then selected the class to be observed and obtained approval from the teacher and students to conduct the observation. During the observation, the researcher actively observed students' interaction and behaviour during the learning process. This includes active participation in discussions, reactions to teacher questions, students' ability to solve problems, and their ability to apply the concepts that have been taught. The results of the observation research, the researcher concluded that learning with Quiz interludes, small group work and working on the blackboard in front of the class, giving rewards, giving appreciation and in a few weeks found a change from the first week to the last week students' interest continued to increase to follow and work on economic learning can increase students' enthusiasm for learning. Students use and apply the concepts in other situations and gain new experiences that start the next learning cycle. (Veine et al., 2020).

In the observation stage, the author made several discoveries from learning economics that students want. Like doing learning; 1) Using an interesting PPT, so that learning is more colourful because it does not only present counts and material but presents images on the PPT to make it not boring, 2) do games or quiz related to the material being studied, can be used after learning or before learning. At the time of the research, doing a quiz can be with the kahoot application. The goal is to be able to evaluate the extent to which students understand economic material. Kahoot! is an innovative formative assessment tool. (Muhd Al-Aarifin et al., 2019). 3) Group assignments, so that students can exchange ideas to solve a problem and find the final result. Students may feel disconnected with too little discussion or unclear assessment requirements, but they may feel overwhelmed and preoccupied if there is too much discussion or assessment requirements are too onerous. (Buelow et al., 2018).. 4) giving rewards, as a reference so that students work harder 5) giving appreciation, making students feel valued because their results get praise. Data collection

The researcher employed data collection methods commonly utilized for assessing students' learning abilities, primarily through tests. Each data collection method possesses distinct advantages and limitations, and may be employed independently or in conjunction to attain a more comprehensive understanding of students' learning capabilities. Tests represent one of the prevailing approaches for gauging student aptitude. Tests can be written or practical tests specifically designed to test the understanding and application of concepts that have been

learnt. Students need to have the ability to think, to find the right way to solve the mathematical problems they face (Sari et al., 2020).

Interviews constitute a data collection method entailing direct interaction between researchers and learners. Reflective thinking epitomizes the highest level of cognitive processes. Educators ought to strive towards cultivating this skill, as it assists individuals in planning subsequent steps, making informed decisions, and navigating through challenges and dynamic situations (Al Arood et al., 2020).. Through interviews, researchers can explore students' understanding and thinking in depth. Interviews can be conducted in the form of individuals or small groups. During the interview, the researcher can ask questions related to the subject matter, ask students to explain their understanding, and identify any difficulties or confusions they face. Interviews provide more detailed and nuanced qualitative information about students' abilities.

Interview

Interviews constitute a data collection method entailing direct interaction between researchers and learners. Reflective thinking epitomizes the highest level of cognitive processes. Educators ought to strive towards cultivating this skill, as it assists individuals in planning subsequent steps, making informed decisions, and navigating through challenges and dynamic situations (Al Arood et al., 2020).. Through interviews, researchers can explore students' understanding and thinking in depth. Interviews can be conducted in the form of individuals or small groups. During the interview, the researcher can ask questions related to the subject matter, ask students to explain their understanding, and identify any difficulties or confusions they face. Interviews provide more detailed and nuanced qualitative information about students' abilities.

RESULT

This research aims to elucidate students' motivation to learn Economics based on field research outcomes. The data obtained encompass several intriguing aspects.

1. The interest levels in economics classes vary among different students. Several factors contribute to this, as reported by Subject 2, Subject 3, and Subject 4, who express a fondness for economics classes due to their challenging nature. One of them stated, "challenging, can imagine like our own money is counted to balance."

It is different with Subject 1 who revealed that economics lessons are not only challenging but can be motivated from his aspirations to have his own company. "I like it because I want to have my own company so I can manage finances".

2. Students exhibit diverse learning styles, encompassing a preference for theoretical learning or practical learning. This divergence influences students' experiences during the learning process. Subject 1 and Subject 2, for instance, express a preference for theoretical learning over practical learning, emphasizing the necessity for initial theoretical explanations before engaging in practical application. They stated, "It must be explained first through theory and then go into practice."

It is different with Subject 3 and Subject 4 who prefer learning through practice compared to theoretical learning. "I think I understand more with practical learning, because it is directly applied clearly and directly."

3. Subject 1, Subject 2, and Subject 4 favored the group discussion learning approach. They expressed that "Group discussions are beneficial, as they facilitate the exchange of ideas to collectively arrive at solutions."

It is different with Subject 3, who prefers an independent learning system. "I prefer to do it independently, because I am more focused on doing the assignment"

4. Environmental factors within the school setting can influence students' engagement in the learning process. One student remarked, "My school environment is very comfortable, so we thoroughly enjoy the learning experience at school."
5. Facility-related factors within the school environment can significantly affect students' learning experiences, particularly when essential facilities are lacking or inadequately maintained. For instance, the absence of key resources such as projectors and functioning toilets can impede students' access to necessary amenities. One student highlighted, "In my classroom, I cannot use the projector because the one provided is damaged, and there has been no repair. Consequently, when a lesson requires projector use, my class must borrow one from other classrooms." Additionally, while there may be an abundance of toilets available, their lack of maintenance results in frequent damage. As expressed, "There are many toilets here, but they are often out of order."
6. Organizational factors represent one of the influences on students during the classroom learning process, as busy organizational commitments can encroach upon students' research time. One student noted, "Many students participate in various organizations during class, but it's crucial for students to effectively manage their time between academics and extracurricular activities. Consequently, not all students who engage in these organizations may be able to maintain pace with their learning."

7. The classroom environment serves as a primary influence on the learning process, as a comfortable classroom can enhance the learning atmosphere. However, not all students may feel comfortable during the learning process in the classroom. One student explained, "In the classroom, there are cliques, so I feel more at ease with friends who are involved in organizations, as we have more interaction."

**Table
interview results**

	Subject 1	Subject 2	Subject 3	Subject 4
Students' interest in learning Economics	Challenging because I'm motivated by the dream of having my own company so I can manage my finances.	Challenging but no motivation to like learning economics	I really like economics because it's challenging and motivating to imagine our own money being counted to balance.	Interest is still 50.50, but I like it because learning economics is very challenging
Learning style	Theory	Theory	Practice	Practice
Learning system	Group	Group	Independent	Group

Image

test results



Note: picture 1

Subject 1. The results of the economics lesson test on the balance sheet material can be accurately completed. The outcomes from independently conducted tests revealed that Subject 1 successfully completed the test in its entirety. One of the motivating factors for Subject 1 is the aspiration to establish their own company. Despite Subject 1's preference for theoretical learning, it did not impede their ability to excel in practical tests on trial balance material, which they completed comprehensively. However, there were a few annotations evident from their test results.

BANGKAL MOBIL SEMPURNA
 Neraca Saldo
 Per 31 Desember 2017
 (dalam ribuan rupiah)

Kode Akun	Nama Akun	debit	Kredit
101	Kas	35.125,00	-
102	Piutang usaha	58.000,00	-
103	Sewa dibayar di muka	16.000,00	-
104	Persediaan barang	6.000,00	-
105	Utang gaji karyawan	13.000,00	-
111	Gedung	300.000,00	-
112	Ak. peny. gedung	-	75.000,00
113	Penataan bengkel	200.000,00	-
114	Ak. peny. penataan bengkel	-	60.000,00
201	Utang usaha	-	25.250,00
211	Pinjaman bank	-	100.000,00
301	Modal Andrew	-	90.360,00
302	Prive Andrew	10.500,00	-
401	Pend. jasa service	-	-
402	Pend. jasa reparasi	-	-
501	Bahan gaji pegawai	-	-
502	Bahan perlengkapan bengkel	-	-
503	Bahan asuransi (lempar)	-	-
504	Bahan listrik tenaga	-	-
505	Bahan rupa-rupa	-	-
511	Bahan pangan	-	-

Note: picture 2

Subject 2. The results of the economics lesson test on the balance sheet material cannot be completed to completion. The outcomes from the independently conducted test indicate that Subject 2 did not complete the test in its entirety due to various factors. Subject 2 possesses a theoretical learning style and lacks interest in learning economics, which contributes to their difficulty in completing the test fully.

BANGKAL MOBIL SEMPURNA
 Neraca Saldo
 Per 31 Desember 2017
 (dalam ribuan rupiah)

Kode Akun	Nama Akun	Debit	Kredit
101	Kas	35.125,00	-
102	Piutang Usaha	58.000,00	-
103	Sewa dibayar dimuka	16.000,00	-
104	Persediaan barang	6.000,00	-
105	Utang gaji karyawan	13.000,00	-
111	Gedung	300.000,00	-
112	Ak. Peny. Gedung	-	75.000,00
113	Penataan bengkel	200.000,00	-
114	Ak. Peny. Penataan bengkel	-	60.000,00
201	Utang usaha	-	25.250,00
211	Pinjaman bank	-	100.000,00
301	Modal Andrew	-	90.360,00
302	Prive Andrew	10.500,00	-
401	Pend. jasa service	-	-
402	Pend. jasa reparasi	-	-
501	Bahan gaji pegawai	-	-
502	Bahan perlengkapan bengkel	-	-
503	Bahan asuransi dan tetap	-	-
504	Bahan listrik tenaga	-	-
505	Bahan rupa-rupa	-	-
511	Bahan pangan	-	-
512	Bahan bengkel	-	-
Jumlah		740.745,00	740.745,00

Note: picture 3

Subject 3. The results of the economics lesson test on the balance sheet material can be completed correctly.

The outcomes from the independently conducted test indicate that Subject 3 was able to complete the test entirely and accurately. Their workmanship appears to be very thorough, albeit with a few annotations evident in the test results. Subject 3 exhibits a keen interest in learning economics and favors a suitable learning style, namely practical application. This inclination facilitates their ease in completing practical tests in economics lessons.

Berkas: Masa Sampinga
Tubasa Solid
Per: 31. Desember 2017
(dalam ribuan Rupiah)

No. Re.	Nama Akun	Debit	Kredit
101	Kas	35.000,00	-
102	Piutang Usaha	50.000,00	-
103	Sewa dibayar dimuka	10.000,00	-
104	Pertanggungan Kantor	10.000,00	-
105	Pertanggungan bank	10.000,00	-
111	Gedung	300.000,00	-
102	Ak. Penjualan Gedung	-	10.000,00
113	Perawatan bengkel	100.000,00	-
114	Ak. Peny. Perawatan bengkel	-	10.000,00
201	Utang usaha	-	15.145,00
211	Pinjaman bank	-	100.000,00
301	-	90.345,00	
302	Divit Andreu	10.000,00	-
401	Denda Jasa Servis	-	115.100,00
402	Denda Jasa Represi	-	160.000,00
501	Beban gaji Pegawai	30.000,00	-
502	Beban listrik bengkel	500,00	-
503	Beban air listrik domeski	11.500,00	-
504	Beban uang lembur	8.000,00	-
511	Beban gaji suda	4.000,00	-

No. Re.	Nama Akun	Debit	Kredit
511	Beban bunga Jaminan	14.000,00	-
	Jumlah	440.745,00	440.745,00

Note: Figure 4

Subject 4. The results of the economics lesson test on balance sheet material can be completed correctly. The outcomes from the independently conducted test indicate that Subject 4 completed the test correctly. However, at the initial stages of the task, Subject 4 experienced confusion, resulting in some annotations on the test results. Subject 4's strong interest in learning and their preference for a practical learning style facilitate their ability to easily complete practice tests on balance sheet material.

The results of the conducted tests indicate that Subject 1, Subject 3, and Subject 4 successfully completed the economics assignment involving balance sheet material accurately. In contrast, Subject 2 did not complete the task entirely. This discrepancy is attributed to Subject 2's distinct learning style, characterized by a preference for theoretical methods. Consequently, when faced with practical applications in economics, Subject 2 encounters difficulty in engaging in reflective thinking, thus hindering their ability to complete assignments effectively.

CONCLUSION AND RECOMMENDATION

In the research of economics, students are required to analyze and solve problems. The outcomes indicate that some students were able to accurately complete calculations related to economic materials. However, there are several obstacles that lead students to procrastinate on

their economics assignments. These obstacles stem from various factors, including differences in students' learning styles and interests, as well as a lack of self-awareness that hinders reflective thinking. Learning style is a combination of several learning information that is absorbed then students can organise each of these information. (Undari & Desyandri, 2022). Self-awareness is an ability that can feel, understand yourself and know the cause of the feelings that arise. (Astuti et al., 2019). In the research found a different learning system in each student, namely choosing a group and independently, according to Suryosubroto (1996: 72) student activeness can be seen from: (1) confidence in understanding the material during learning; (2) understanding and distinguishing every knowledge gained (3) doing assignments independently (4) learning with groups; (5) exploring new things; (6) being able to express the results of thoughts orally and appearance. (Nurzaki Alhafiz, 2022). Furthermore, there are outcomes regarding the varying learning interests of students in economics classes. Learning interest serves as a motivating factor for individuals, driven by a sense of experience, pleasure, and conscious desire. (Rahmayanti, 2016) Additionally, learning interest influences academic achievement. The greater the creativity and interest exhibited by students during the learning process, the higher their enthusiasm and the better their academic performance (Nofrialdi, 2022). Fundamentally, reflective thinking entails a student's capacity to recall and utilize the knowledge stored in their memory to effectively address any challenges encountered in pursuit of their goals.

REFERENCES

- Al Arood, M. A. S., Aljallad, M. Z., & Baioumy, N. (2020). The effectiveness of a cloud-based learning program in developing reflective thinking skills in Islamic education among students in UAE. *International Journal of Education and Practice*, 8(1), 158–173. <https://doi.org/10.18488/journal.61.2020.81.158.173>
- Astuti, J. P., Mayangsari, M. D., & Zwagery, R. V. (2019). Hubungan Kesadaran Diri Dengan Flow Akademik Pada Siswa di Daerah Lahan Gambut. *Jurnal Kognisia: Jurnal Mahasiswa Psikologi Online*, 2(2), 68–74.
- Buelow, J. R., Barry, T., & Rich, L. E. (2018). Supporting learning engagement with online students. *Online Learning Journal*, 22(4), 313–340. <https://doi.org/10.24059/olj.v22i4.1384>
- El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on development students' engagement. *International Journal of Educational Technology in Higher Education*, 18(1). <https://doi.org/10.1186/s41239-021-00289-4>

- Hegarty, B., & Thompson, M. (2019). a T Eacher ' S I Nfluence on S Tudent E Ngagement : Journal of Information Technology Education: Research, 18, 113–139.
- Jaenudin, J., Nindiasari, H., & Pamungkas, A. S. (2017). Analisis Kemampuan Berpikir Reflektif Matematis Siswa Ditinjau Dari Gaya Belajar. *Prima: Jurnal Pendidikan Matematika*, 1(1), 69. <https://doi.org/10.31000/prima.v1i1.256>
- Junaedi, Y., Maryam, S., & Anwar, S. (2022). Analisis Kemampuan Berpikir Reflektif Siswa Smp Pada Pembelajaran Daring Di Era Covid-19. *Wilangan: Jurnal Inovasi Dan Riset Pendidikan Matematika*, 3(1), 34. <https://doi.org/10.56704/jirpm.v3i1.14400>
- Junaedi, Y., Maryam, S., & Lutfi, M. K. (2022). Analisis Kemampuan Berpikir Reflektif Siswa SMP Pada Pembelajaran Daring. *Journal of Mathematics Education and Learning*, 2(1), 49. <https://doi.org/10.19184/jomeal.v2i1.30228>
- Kholid1, M. N., Sa'dijah2*, C., Hidayanto3, E., & and Hendro Permadi4. (n.d.). How are students' reflective thinking for problem solving? <https://doi.org/https://doi.org/10.17478/jegys.688210>
- Kunani, K. (2023). Optimalisasi Hasil Belajar: Pembelajaran Kooperatif Jigsaw pada Mata Pelajaran Peminatan Ekonomi MAN 2 Cirebon. *Progressive of Cognitive and Ability*, 2(4), 424. <https://doi.org/10.56855/jpr.v1i4.749>
- Masturoh, I., & Anggita, N. (2018). PENENERAPAN MODEL PROBLEM BASED LEARNING (PBL) UNTUK MENINGKATKAN HASIL BELAJAR SISWA PADA SUBTEMA PELESTARIAN SUMBER DAYA ALAM INDONESIA. IV.
- Muhd Al-Aarifin, I., Anisa, A., Jamilah, A.-M. M., Nik Mohd Rizal, M. F., Mohd Zarawi, M. N., & Mohamad Najib, M. P. (2019). Using Kahoot! as a formative assessment tool in medical education: A phenomenological study. *BMC Medical Education*, 19(1), 1–8.
- Nofrialdi, R. (2022). the Effect of Student'S Creativity and Learning Interest on Learning Achievement in Economic Students Class Xi Ips Sma Ekasakti Padang. *Journal International on Global Education*, 1(1), 37–46. <https://doi.org/10.31933/jige.v1i1.536>
- Nurzaki Alhafiz. (2022). Analisis Profil Gaya Belajar Siswa Untuk Pembelajaran Berdiferensiasi Di Smp Negeri 23 Pekanbaru. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat*, 1(8), 1913–1922. <https://doi.org/10.53625/jabdi.v1i8.946>
- Rahmayanti, V. (2016). Pengaruh Minat Belajar Siswa dan Persepsi atas Upaya Guru dalam Memotivasi Belajar Siswa terhadap Prestasi Belajar Bahasa Indonesia Siswa SMP di Depok. *SAP (Susunan Artikel Pendidikan)*, 1(2), 206–216. <https://doi.org/10.30998/sap.v1i2.1027>
- Rijali, A. (2018). Analisis Data Kualitatif Ahmad Rijali UIN Antasari Banjarmasin. 17(33), 81–95.
- Sabariego Puig, M., Sánchez Martí, A., & Cano Hila, A. B. (2019). Reflective thinking in higher education: Contributions from narrative methodologies. *Revista Complutense de Educacion*, 30(3), 813–830. <https://doi.org/10.5209/RCED.59048>
- Samura, A. ode. (2019). Kemampuan Berpikir Kritis dan Kreatif Matematis Melalui Pembelajaran Berbasis Masalah. *Journal of Mathematics and Science*, 5(1), 20–28.

- Sari, A. D., Hastuti, S., & Asmiati, A. (2020). Pengembangan Model Creative Problem Solving (CPS) Untuk Meningkatkan Kemampuan Berpikir Reflektif Siswa. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 4(2), 1115–1128. <https://doi.org/10.31004/cendekia.v4i2.318>
- Squicciarini, O. M. P. (2020). Pengabdian dan Pembangunan : Religiusitas , Pendidikan , dan Kemajuan Ekonomi di Prancis Abad Kesembilan Belas †. 110(11), 3454–3491.
- Supriyatno, T., Susilawati, S., & Hassan, A. (2020). E-learning development in improving students' critical thinking ability. *Cypriot Journal of Educational Sciences*, 15(5), 1099–1106. <https://doi.org/10.18844/CJES.V15I5.5173>
- Undari, M., & Desyandri. (2022). Pandangan Aliran Rekonstruksionisme Terhadap Gaya Belajar Dalam Penerapan Kurikulum Merdeka. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 7(2), 1252–1261.
- Veine, S., Anderson, M. K., Andersen, N. H., Espenes, T. C., Søyland, T. B., Wallin, P., & Reams, J. (2020). Reflection as a core student learning activity in higher education - Insights from nearly two decades of academic development. *International Journal for Academic Development*, 25(2), 147–161. <https://doi.org/10.1080/1360144X.2019.1659797>
- Weerakoon, C. (2023). Exploring the synergy of digital competence and photo-driven reflection: A pilot study on reflective thinking skill development in business education. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2282304>
- Wijnands, A., Rijt, J. van, & Coppens, P. A. (2021). Learning to think about language step by step: a pedagogical template for the development of cognitive and reflective thinking skills in L1 grammar education. *Language Awareness*, 30(4), 317–335. <https://doi.org/10.1080/09658416.2021.1871911>
- Zhao, F. (2019). Using quizizz to integrate fun multiplayer activity in the accounting classroom. *International Journal of Higher Education*, 8(1), 37–43. <https://doi.org/10.5430/ijhe.v8n1p37>
- Al Arood, M. A. S., Aljallad, M. Z., & Baioumy, N. (2020). The effectiveness of a cloud-based learning program in developing reflective thinking skills in Islamic education among students in UAE. *International Journal of Education and Practice*, 8(1), 158–173. <https://doi.org/10.18488/journal.61.2020.81.158.173>
- Astuti, J. P., Mayangsari, M. D., & Zwagery, R. V. (2019). Hubungan Kesadaran Diri Dengan Flow Akademik Pada Siswa di Daerah Lahan Gambut. *Jurnal Kognisia: Jurnal Mahasiswa Psikologi Online*, 2(2), 68–74.
- Buelow, J. R., Barry, T., & Rich, L. E. (2018). Supporting learning engagement with online students. *Online Learning Journal*, 22(4), 313–340. <https://doi.org/10.24059/olj.v22i4.1384>
- El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on development students' engagement. *International Journal of Educational Technology in Higher Education*, 18(1). <https://doi.org/10.1186/s41239-021-00289-4>

- Hegarty, B., & Thompson, M. (2019). a T Eacher ' S I Nfluence on S Tudent E Ngagement : Journal of Information Technology Education: Research, 18, 113–139.
- Jaenudin, J., Nindiasari, H., & Pamungkas, A. S. (2017). Analisis Kemampuan Berpikir Reflektif Matematis Siswa Ditinjau Dari Gaya Belajar. *Prima: Jurnal Pendidikan Matematika*, 1(1), 69. <https://doi.org/10.31000/prima.v1i1.256>
- Junaedi, Y., Maryam, S., & Anwar, S. (2022). Analisis Kemampuan Berpikir Reflektif Siswa Smp Pada Pembelajaran Daring Di Era Covid-19. *Wilangan: Jurnal Inovasi Dan Riset Pendidikan Matematika*, 3(1), 34. <https://doi.org/10.56704/jirpm.v3i1.14400>
- Junaedi, Y., Maryam, S., & Lutfi, M. K. (2022). Analisis Kemampuan Berpikir Reflektif Siswa SMP Pada Pembelajaran Daring. *Journal of Mathematics Education and Learning*, 2(1), 49. <https://doi.org/10.19184/jomeal.v2i1.30228>
- Kholid1, M. N., Sa'dijah2*, C., Hidayanto3, E., & and Hendro Permadi4. (n.d.). How are students' reflective thinking for problem solving? <https://doi.org/https://doi.org/10.17478/jegys.688210>
- Kunani, K. (2023). Optimalisasi Hasil Belajar: Pembelajaran Kooperatif Jigsaw pada Mata Pelajaran Peminatan Ekonomi MAN 2 Cirebon. *Progressive of Cognitive and Ability*, 2(4), 424. <https://doi.org/10.56855/jpr.v1i4.749>
- Masturoh, I., & Anggita, N. (2018). PENENERAPAN MODEL PROBLEM BASED LEARNING (PBL) UNTUK MENINGKATKAN HASIL BELAJAR SISWA PADA SUBTEMA PELESTARIAN SUMBER DAYA ALAM INDONESIA. IV.
- Muhd Al-Aarifin, I., Anisa, A., Jamilah, A.-M. M., Nik Mohd Rizal, M. F., Mohd Zarawi, M. N., & Mohamad Najib, M. P. (2019). Using Kahoot! as a formative assessment tool in medical education: A phenomenological study. *BMC Medical Education*, 19(1), 1–8.
- Nofrialdi, R. (2022). the Effect of Student'S Creativity and Learning Interest on Learning Achievement in Economic Students Class Xi Ips Sma Ekasakti Padang. *Journal International on Global Education*, 1(1), 37–46. <https://doi.org/10.31933/jige.v1i1.536>
- Nurzaki Alhafiz. (2022). Analisis Profil Gaya Belajar Siswa Untuk Pembelajaran Berdiferensiasi Di Smp Negeri 23 Pekanbaru. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat*, 1(8), 1913–1922. <https://doi.org/10.53625/jabdi.v1i8.946>
- Rahmayanti, V. (2016). Pengaruh Minat Belajar Siswa dan Persepsi atas Upaya Guru dalam Memotivasi Belajar Siswa terhadap Prestasi Belajar Bahasa Indonesia Siswa SMP di Depok. *SAP (Susunan Artikel Pendidikan)*, 1(2), 206–216. <https://doi.org/10.30998/sap.v1i2.1027>
- Rijali, A. (2018). Analisis Data Kualitatif Ahmad Rijali UIN Antasari Banjarmasin. 17(33), 81–95.
- Sabariego Puig, M., Sánchez Martí, A., & Cano Hila, A. B. (2019). Reflective thinking in higher education: Contributions from narrative methodologies. *Revista Complutense de Educacion*, 30(3), 813–830. <https://doi.org/10.5209/RCED.59048>
- Samura, A. ode. (2019). Kemampuan Berpikir Kritis dan Kreatif Matematis Melalui Pembelajaran Berbasis Masalah. *Journal of Mathematics and Science*, 5(1), 20–28.

- Sari, A. D., Hastuti, S., & Asmiati, A. (2020). Pengembangan Model Creative Problem Solving (CPS) Untuk Meningkatkan Kemampuan Berpikir Reflektif Siswa. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 4(2), 1115–1128. <https://doi.org/10.31004/cendekia.v4i2.318>
- Squicciarini, O. M. P. (2020). Pengabdian dan Pembangunan : Religiusitas , Pendidikan , dan Kemajuan Ekonomi di Prancis Abad Kesembilan Belas †. 110(11), 3454–3491.
- Supriyatno, T., Susilawati, S., & Hassan, A. (2020). E-learning development in improving students' critical thinking ability. *Cypriot Journal of Educational Sciences*, 15(5), 1099–1106. <https://doi.org/10.18844/CJES.V15I5.5173>
- Undari, M., & Desyandri. (2022). Pandangan Aliran Rekonstruksionisme Terhadap Gaya Belajar Dalam Penerapan Kurikulum Merdeka. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 7(2), 1252–1261.
- Veine, S., Anderson, M. K., Andersen, N. H., Espenes, T. C., Søyland, T. B., Wallin, P., & Reams, J. (2020). Reflection as a core student learning activity in higher education - Insights from nearly two decades of academic development. *International Journal for Academic Development*, 25(2), 147–161. <https://doi.org/10.1080/1360144X.2019.1659797>
- Weerakoon, C. (2023). Exploring the synergy of digital competence and photo-driven reflection: A pilot study on reflective thinking skill development in business education. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2282304>
- Wijnands, A., Rijt, J. van, & Coppens, P. A. (2021). Learning to think about language step by step: a pedagogical template for the development of cognitive and reflective thinking skills in L1 grammar education. *Language Awareness*, 30(4), 317–335. <https://doi.org/10.1080/09658416.2021.1871911>
- Zhao, F. (2019). Using quizizz to integrate fun multiplayer activity in the accounting classroom. *International Journal of Higher Education*, 8(1), 37–43. <https://doi.org/10.5430/ijhe.v8n1p37>