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ASK AND CLARIFY ABOUT STUDENT SHARING OF THE CONCEPT OF REFLECTION

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Abstract

While studying mathematics in tertiary institutions, students must understand basic mathematics concepts. One of the main subjects in the mathematics education study program is transformation geometry. One of the materials in this course is the concept of reflection. In the reflection concept material, students remember mathematical formulas and know how to solve problems. Learning through sensitive questions and clarification is learning through a shared learning strategy that focuses on two characteristics. In this lesson, students ask questions and or answers. Students form small groups, and each group explains when there are questions. Discussions and interviews were carried out on behalf of each group. Students present the results of the survey and clarification in class. Ask students to clarify if there are questions that are ambiguous or wrong. In this study, the lecturer only acts as a facilitator.

Keywords: Learning, Concept, Reflection, Questioning, Clarifying

Abstrak

Proses belajar matematika di perguruan tinggi, mahasiswa harus memahami konsep dasar matematika. Salah satu mata kuliah utama pada program studi pendidikan matematika adalah geometri transformasi. Salah satu materi dalam mata kuliah ini adalah konsep refleksi. Pada materi konsep refleksi siswa mengingat rumus matematika dan mengetahui cara dalam menyelesaikan masalah. Belajar melalui pertanyaan sensitif dan klarifikasi adalah belajar melalui strategi belajar bersama, tetapi berfokus pada dua karakteristik. Pada pembelajaran ini, mahasiswa mengajukan pertanyaan dan atau jawaban. Siswa membentuk kelompok kecil, dan setiap kelompok memberikan penjelasan ketika ada pertanyaan-pertanyaan. Diskusi dan wawancara dilakukan dalam pada perwakilan setiap kelompok. Siswa mempresentasikan hasil survei dan klarifikasi di kelas. Meminta mahasiswa mengklarifikasi jika ada pertanyaan yang ambigu atau salah. Pada penelitian ini, dosen hanya sebagai fasilitator.

Kata kunci: Belajar, Konsep, Refleksi, Menanya, Klarifikasi

INTRODUCTION

In order to meet the demands of changes in local, national, and global life, the national education system must be able to guarantee equal distribution of educational opportunities, improve quality as well as the relevance and efficiency of education management, and address challenges. The learning process for academic units is interactive, inspiring, fun, and challenging, motivating students to participate actively and providing enough space for initiative, creativity, and independence according to talents and interests, as per Government Regulation No. 19 of 2005 concerning National Education Standards.

Meanwhile, according to the Tri Dharma of Higher Education, Lecturers have three main tasks closely related to one another. One of these tasks is to provide Teaching, and the implementation of Teaching should be directed to improve the quality of learning.

State Islamic Institute of Parepare has a mathematics education study program with one of the subjects that students must take is Transformation Geometry. The material of reflection or reflection is the material in the geometry of the transformation (Jimerson, 2013; Krogstie, 2009). In the learning carried out in this course, students tend to memorize formulas about reflection. Still, they need help to understand the concept of reflection, for example, the problem of determining the reflection matrix of a line, for instance, choosing the reflection matrix F , which maps every point (x,y) on the plane to the image. Mirror to line $y = 3x$. In this problem, students tend to look at the final formula in the textbook without knowing the process of determining the matrix. If the problem is developed by finding the equation of the locus of a curve, students tend to need help.

Reciprocal Teaching is a learning strategy that summarizes teaching materials, compiles questions and predicts further clarifying questions and answers and the materials presented. According to (Sirota, Dewberry, Juanchich, Valuš, & Marshall, 2021), reciprocal Teaching can be used in learning because it is a strategy that is carried out collaboratively (discussion) to understand a reading material so that it can improve understanding of the reading material (Bollato, 2016; Uche & Ogugua, 2013).

As one of the characteristics of reciprocal Teaching, questioning is very useful for digging up information, checking students' understanding, and improving students' critical thinking (Herrington, Parker, & Boase-Jelinek, 2014). While clarifying can be done by students by thinking creatively and critically to identify important information in solving the problems at hand.

If two characteristics of the reciprocal teaching strategy are sharpened, namely questioning (composing questions and answers) and clarifying (compiling clarification of question answers) in a lesson, learning is obtained by pointing out the characteristics of questioning & clarifying (Herrington et al., 2014; Krogstie, 2009). Learning by sharpening the aspects of questioning & clarifying allows students to understand the material by asking questions about these concepts and explaining concepts and questions posed between

students so that students have the experience to construct the knowledge they have acquired.

This research was carried out to produce a reflection concept learning procedure by sharpening the characteristics of questioning & clarifying and its impact on students (Bollato, 2016; Uche & Ogugua, 2013). ²⁷ This research is expected to provide benefits for teachers/lecturers in adding insight into learning strategies for the concept of reflection and providing an overview for developing research with the same process for other materials and developing the same material with different methods.

In education, for almost 20 years, learning has been based on the behaviorist paradigm. This behavioristic learning only examines behavior based on visible facts (Anggraeni & Komalasari, 2021; Jimerson, 2013). Behaviorists assume that cultural transmission of knowledge is faster than individual knowledge construction (Samo, Darhim, & Kartasasmita, 2017). The constructivist view is very different from the behaviorist view. This view involves active students. According to the constructivist view, students are engaged in building knowledge and not just passively receiving it from the teacher. Mathematics learning is often carried out so that students are directly given material without paying attention to student readiness.

Another constructivist theory is the social constructivist theory, often called Vygotsky's. Vygotsky's learning theory emphasizes socio-cultural, namely social interaction through dialogue and verbal communication with adults, in developing children's understanding (Chernikova et al., 2020; Warren & Dinnie, 2017). According to Vygotsky's theory, learning takes place when students work and acquire the skills necessary to manage tasks that have not yet been studied but are nonetheless in ² the zone of proximal development, or the gap between the actual level of activity, which is the capacity to solve problems on one's own, and the level of potential growth, through collaboration with more competent peers. In this ZPD, children can be given scaffolding, namely providing assistance to students in the learning process and reducing it, and letting them take responsibility for themselves when they can.

A typical teaching strategy was ² developed by Palincsar and Brown in 1984. Palancar and Brown stated, "A dialogue between teachers and students to jointly construct the meaning of the text." It is designed to improve student's reading comprehension by teaching four key

reading strategies: Summarizing the main content, Formulating questions, Clarifying ambiguities, and Predicting what may come next (Margolis, 2020; Wang & Zheng, 2016).

So reciprocal Teaching can be described as a teaching strategy that is a dialogue between teachers and students to construct the meaning of a text. This strategy design aims to build understanding in reading texts (Cord & Clements, 2010; Wang & Zheng, 2016). The four keys or characteristics of the teaching strategy used are summarizing (summarizing teaching materials), questions (composing questions), clarifying (clarifying ambiguity), and predicting (predicting the following material).

The reciprocal teaching strategy briefly introduces group discussion techniques to understand and remember a material (Taurusia Kesuma, Putranta, & Cahyo Adi Kistoro, 2020; Warren & Dinnie, 2017). This reciprocal teaching strategy is a learning step with a concrete process. Namely, the teacher and students take turns leading the discussion. In the debate, questions are asked about the main problem or other issues and end by summarizing the core problems and their solutions (Radwan, 2014). If there is no agreement in this discussion, the questions are asked again, and a summary is made to reach an agreement.

This strategy aims to build a shared sense of meaning by prioritizing the involvement of students and teachers. This teacher becomes a performance model after enough teacher roles are withdrawn. This reciprocal teaching strategy can be modified for learning mathematics and problems understanding terms and meanings in mathematics.

According to (William E. Lovekamp, Soboroff, & Gillespie, 2017; Switzer & Barclay, 2012), in understanding terms of mathematics, learning actions can be used, namely; Identifying the goals of learning with reciprocal teaching strategies and revealing the reasons why each method is essential; Find the steps in each feature that can be applied; The teacher models the process used in learning.

In the reciprocal teaching strategy, in the initial phase, the teacher begins by introducing each feature of the mutual teaching strategy to students. The teacher also tells them the purpose of this teaching strategy and explains each element that will be used. In the first feature, the teacher conducts a series of dialogues between the teacher and students, with a discussion centered on the text. The step taken is that students are asked to read silently (without speaking), but if students do not have reading skills like that, they are expected to read aloud only to be heard by the teacher.

The second feature of this strategy is to structure questions. The implementation of this double feature is carried out by discussing questions about the main content of the text. In this discussion, the teacher acts as a facilitator in differences of opinion or students' misunderstandings about the content of the text. At this stage, the teacher confirms the contents of the text prepared by the students. This aims to identify the essence of the results of reading and student discussions.

The use of the third strategy is clarification. In this strategy, students provide clarification of words or concepts from the material that has been discussed that they do not understand. In this strategy, the teacher can help students find the meaning of words. Besides that, the teacher can also tell students to use definitions in identifying a concept.

The last strategy is to predict. In this strategy, the teacher asks students to make predictions about other possible materials related to the text. Things can be used as a basis for students to predict our knowledge of the topics they read, the instructions given in the texts they read, and their ideas that are not the same as the author's.

Questioning, as one of the characteristics of reciprocal Teaching, is very useful for digging up information, checking students' understanding, and can improve students' critical thinking. While clarifying can be done by students by thinking creatively and critically to identify important information in solving problems. Suppose a lesson is carried out with a reciprocal teaching strategy by sharpening two strategic characteristics, namely questioning & clarifying. In that case, this can be interpreted that the attributes of other joint teaching strategies are still being implemented. In-depth observations of these characteristics still need to be carried out.

The sharpening of the characteristics of the reciprocal teaching strategy was carried out in questioning and clarifying. The sharpening of investigation is carried out because with students compiling questions and compiling clarifications on the material, these students can think critically to increase the learning outcomes obtained. Learning that sharpens the characteristics of questioning & clarifying in reciprocal teaching strategies to determine student understanding of the concept of reflection by preparing questions and clarifying questions and materials.

According to (J Maynes 2013; Jeffrey Maynes, 2013), a person's knowledge always starts by asking. Asking can reflect individual curiosity while answering questions reflects one's

thinking ability (J Maynes, 2013). Clarifying in Indonesian can be translated as describing or explaining activities. Clarification activities are essential activities for students who need help understanding. Students may need to learn the truth of their reading and know what the terms in their reading mean. When students are asked to make clarifications, they will know the answers to the difficulties they are experiencing.

Clarifying is a student's creative and critical thinking activity in identifying vital information to solve problems (Namdar, 2017). If the idea cannot answer the problem, students need to understand the material again, either from other relevant sources or rely on other group members and the teacher. Hence, students find evidence to solve the problem.

In learning by sharpening the characteristics of questioning & clarifying the role of the lecturer as a facilitator and initial model in learning (Cord & Clements, 2010; William E. Lovekamp et al., 2017). After students can carry out their knowledge, the role of the lecturer is reduced. Students mainly carry out other learning activities by interacting with lecturers, students, and teaching materials.

The lesson begins with the teacher providing an understanding of the learning process by sharpening the characteristics of questioning & clarifying. This learning starts by forming groups consisting of 3-4 students. The lecturer and the researcher direct each group to read and conclude the teaching materials on reflection. After reading and completing the teaching materials, the lecturer gives students that from the material they have read. Students should ask questions related to the concept of reflection. Asking questions can be done in groups. After asking questions, each group can also clarify the questions and answers asked by each group and present them in class.

METHODS

While the type of study is classroom action research, this research method is qualitative research. The study's tools included learning outcomes tests, observation papers for lecturer and student activities, and validation sheets for research and learning tools.

Meanwhile, the impact of implementing reflection concept learning by sharpening questioning & clarifying characteristics for State Islamic Institute of Parepare class 1B class 2021/2022 students can improve learning outcomes for reflection concepts, namely student learning outcomes of 86.7% who get a score greater than 65.

The information used in this study comes from validators of learning resources and research tools, witnesses of lecturer and student activities, and students who took the tests at the conclusion of the study. After that, the data were examined using Mills and Huberman's three steps for analysis: data reduction, data presentation, and conclusion making.

Since it will ensure the confidentiality of the results in resolving the issue under study, the validity of the data is crucial to research. Triangulation is one method for ensuring the accuracy of the material. To guarantee the accuracy of the data used in this research, triangulation was used. A method of validating data called triangulation uses something different from the data for matching or comparing with the data.

The data in this study are data from validation results, data from observations of student and lecturer activities, and student test results which are then reduced and presented. Conclusions are drawn based on the success criteria for each of these data. Based on the results of this conclusion, the three data are compared, namely comparing the data from the validation results from the validator, the data from the observations from the observer, and the data from the student test results from the students.

RESULTS AND DISCUSSION

This research was conducted in 3 meetings. At the first meeting, the observation results of student activities were 88% and 82%, so they fit the criteria well. Meanwhile, the observation results of lecturer activities are 86%, matching the requirements well. Meanwhile, 90% of lecturers' activity observations were obtained at the second meeting to fit the criteria well. At the same time, the results of observing student activities for the two observers are 88%, so they meet the requirements well. From the observations on learning at the third meeting, the results of the words of lecturer activities were 90%, so they fit the criteria very well. While the results of the statement of student activities are 86% and 84%, so they match the requirements well. Based on the results of these observations, the actions of lecturers and students are in a suitable category.

The observation of student activities is carried out by two observers so that more representative results can be obtained. The difference between the first and second observers is that your students are still adjusting to implementing learning and lecture materials. T at the first meeting, his results in ineffective use of time.

Meanwhile, the final cycle test found that the percentage of students who scored more than 65 was 26, so $TB = 26/30 \times 100\% = 86.7\%$. This shows that the learning in cycle I meet the criteria for mastery learning, namely, at least 85% of the students who take the test.

The learning outcomes obtained from learning the concept of reflection by sharpening questioning & clarifying meet the established criteria, namely 86% of 30 students scored more than equal to 65. These results can be obtained because students already know the learning process in class that uses questioning & clarifying that can improve students' thinking skills. Following what was expressed, namely, questioning & clarifying, can develop critical thinking skills to improve learning outcomes (W.E. Lovekamp, Soboroff, & Gillespie, 2017; Jeffrey Maynes, 2013).

Based on the results of observations in learning activities I and II that meet the criteria and the end-of-cycle test also meets the requirements, this learning activity has achieved success (Namdar, 2017). Thus, the first cycle has met the success criteria in this classroom action research.

Research findings on implementing actions include student activities in compiling questions running quite effectively according to the student worksheet (SW). SW, the questions are 2-4, almost all of which refer to the teaching materials provided. Students' attention should have been more focused on the lecturer. They have interacted in groups. And they clarify the answers given by their friends in one group.

At the first meeting, the timing could have been more effective because, in this meeting, the lecturer introduced a reciprocal teaching strategy by sharpening the characteristics of questioning & and clarifying the role of students in learning. In learning with joint teaching strategies, teachers/lecturers introduce learning processes, objectives, benefits, and learning procedures for students (Jarvis & Baloyi, 2020; Pathoni et al., 2020). At the second and third meetings, the timing followed the lesson plans because ¹⁷ students were already familiar with the learning carried out by sharpening the characteristics of questioning & clarifying.

Learning the concept of reflection by sharpening the characteristics of questioning & clarifying in preparing questions and clarifications is carried out in groups with friends sitting close together. These small groups consist of 3 students. Teachers can optimize the reciprocal teaching-learning model, especially in large classes, by grouping students into small groups (W.E. Lovekamp et al., 2017; Switzer & Barclay, 2012).

Meanwhile, according to (Cicchino, 2015, 2015), the advantages of learning in groups are (1) processing subject matter in more depth and applying the learning outcomes that have been obtained by working or studying individually on new problems or questions, (2) meeting the needs of students to feel happy in learning and motivated in learning, (3) acquire the ability to cooperate (social skills).

In learning the concept of reflection by sharpening the questioning feature, this is written in the SW in preparing questions and clarifications. SW, in this study, is a medium for students to formulate questions and arrange answers. Students are in groups with friends in this SW with adjacent seating positions. In this SW, students are given the freedom with friends in their groups to formulate questions and arrange clarifications on the inquiries made. The results of clarifying these questions are the answers to these questions. By compiling questions, students actively form their knowledge. Dipple's opinion (2021) states that this questioning has a dual purpose. When students ask questions about the material, they use the information and then arrange questions from the existing material. This means that students can conclude from what they ask and use their knowledge to construct new knowledge.

Meanwhile, according to (Cicchino, 2015, 2015), questions asked by students based on the source of their reading, these students will consciously understand that the material in the reading source is essential so that indirectly they will better understand the contents of their homework by the process of compiling the ideas contained in the reading.

While clarifying in this learning is to define and explain the answers to questions in groups by compiling clarifications, it is hoped that students will exchange opinions and refine what their friends convey to each other. In addition to explaining in groups, students also explain the results of preparing questions and answers from different groups presented in class. This follows what was stated by (J Maynes, 2013; Rohman, Susanto, Hobri, Saiful, & Sahnawi, 2019) that the teacher would appoint group representatives who can lead discussions to explain the results of preparing the following question in turn for other students. The lecturer is only a facilitator and moderator to implement the discussions at this stage.

Lecturers, in learning the concept of reflection by sharpening the characteristics of questioning & clarifying, only act as facilitators and explain if there is a misunderstanding

between students during presentations in class. This is in line with what was expressed by Brown (Jose M Ocampo, 2018; Jeffrey Maynes, 2013) that the lecturer initially became the leader of the discussion. After the student discussion went well, the role of the lecturer was only as a facilitator. At the end of the lesson, the lecturer directs students to make conclusions about the material that has been understood. This is done to reinforce the material that has been studied. The implementation of learning by sharpening the characteristics of questioning & clarifying is following what was planned.

In learning the concept of reflection, five students were silent. They tended to be passive in compiling questions in groups. This happens because they need to get used to working together in groups to formulate and answer questions. In addition, they are afraid that they are not used to answering questions in their group. After the lecturer knows the cause of the passive student, the lecturer tries to approach giving direction that with this learning, students can clarify each other's answers in groups to help each other. The steps taken by this lecturer followed what (Samo et al., 2017) stated. If students have started the dialogue process, the lecturer is only a facilitator who directs students to carry out their role in learning.

Students are conditioned in groups in learning so that they can clarify the answers given by their friends in one group. The conditioning of students in groups in small groups follows the opinion of (Springborg & Ladkin, 2018), namely the procedure for implementing the reciprocal teaching strategy by assigning students to small groups and teaching more responsibility to students in groups. Group activities in formulating questions and clarifying are more likely to allow students to understand the mathematical ideas they are studying.

In learning the concept of reflection by sharpening the characteristics of questioning & clarifying, there are obstacles. These constraints are from the lecturer's aspect. Namely, in the early stages, the lecturers need to be able to use the time according to the plan in the lesson plan. This obstacle can be solved by the lecturer trying to manage time effectively by reducing the role of the lecturer after the students have understood the learning to be carried out. Another obstacle came from the student aspect. Namely, at the beginning of learning at the first meeting, the students still needed to understand the purpose of compiling questions. This is given a solution. The lecturer explains so that each group understands. The lecturer

facilitates student questions regarding the learning procedure and clarifies the answers to the prepared questions.

Meanwhile, the constraint in implementing the presentation is that not all groups in one meeting can present the results of the preparation of questions and their clarifications. This can be given a group solution that delivers the results of their work in one group meeting. If time is still available, another group can be added. Meanwhile, the SW has an elementary problem, and at first, students found it challenging to understand the use of the SW. The lecturer provides guidance and explanation of the steps in preparing questions and clarifying them to overcome this.

11 CONCLUSION

The conclusion of this study is the procedure for learning the concept of reflection by sharpening the characteristics of questioning & clarifying for State Islamic Institute of Parepare students, namely (1) Students in groups do questioning. Namely, students prepare questions and answers based on teaching materials about the concept of reflection in SW, (2) Students in groups do clarify, namely clarifying questions or answers to questions both in groups and in-class presentations.

5 Based on the results of research and research findings, it is recommended that teachers use learning strategies by sharpening the characteristics of questioning & clarifying in classroom learning, taking into account several things, namely: teachers should be more active in designing teaching materials and SW used in education and streamlining time in learning and other researchers, should be able to conduct further research on learning by sharpening the characteristics of questioning & clarifying as a component of reciprocal teaching-learning strategies so that improving the quality of learning mathematics can be carried out continuously and can also conduct further research on learning by sharpening other characteristics of common Teaching.

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REFERENCES

- Anggraeni, N. A., & Komalasari, R. (2021). Inculcation of the values of character education in the process of learning mathematics in grade VII SMP 10 Bengkulu City. *Journal of Physics: Conference Series*, 1731(1). <https://doi.org/10.1088/1742-6596/1731/1/012059>
- Bollato, J. C. (2016). An Effort Toward Collaborative Problem Solving in Teacher Candidates' Practicum: Reflection in Action. Retrieved from https://search.proquest.com/docview/1836056007?accountid=13042%0Ahttp://oxfordsfx.hosted.exlibrisgroup.com/oxford?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:Education+Database&atitle=&title=An
- Chernikova, O., Heitzmann, N., Stadler, M., Holzberger, D., Seidel, T., & Fischer, F. (2020). Simulation-Based Learning in Higher Education: A Meta-Analysis. *Review of Educational Research*, 90(4). <https://doi.org/10.3102/0034654320933544>
- Cicchino, M. I. (2015). Using Game-Based Learning to Foster Critical Thinking in Student Discourse. *Interdisciplinary Journal of Problem-Based Learning*, 9(2). <https://doi.org/10.7771/1541-5015.1481>
- Cord, B., & Clements, M. D. (2010). Early organizational involvement (EOI): Creating successful transitions from higher education to the workplace. *Development and Learning in Organizations: An International Journal*, 24(3), 5–7. <https://doi.org/10.1108/14777281011037218>
- Herrington, J., Parker, J., & Boase-Jelinek, D. (2014). Connected authentic learning: Reflection and intentional learning. *Australian Journal of Education*, 58(1), 23–35. <https://doi.org/10.1177/0004944113517830>
- Jarvis, M. A., & Baloyi, O. B. (2020). Scaffolding in reflective journaling: A means to develop higher order thinking skills in undergraduate learners. *International Journal of Africa*

- Nursing Sciences*, 12. <https://doi.org/10.1016/j.ijans.2020.100195>
- Jimerson, L. D. (2013). Professional learning communities in secondary schools: Purposeful reflection, leadership, and collaborative practice. Retrieved from https://search.proquest.com/docview/1461459183?accountid=10673%0Ahttp://openurl.ac.uk/redirect/athens:edu/?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:Education+Database&atitle=&title=Professio
- Jose M Ocampo, J. (2018). Effecting Change on Students?? Critical Thinking in Problem-Solving. *Educare*, 10(2), 109–118.
- Krogstie, B. R. (2009). A model of retrospective reflection in project-based learning utilizing historical data in collaborative tools. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Bioinformatics)*, 5794 LNCS, 418–432. https://doi.org/10.1007/978-3-642-04636-0_40
- Lovekamp, W.E., Soboroff, S. D., & Gillespie, M. D. (2017). Engaging Students in Survey Research Projects across Research Methods and Statistics Courses. *Teaching Sociology*, 45(1). <https://doi.org/10.1177/0092055X16673136>
- Lovekamp, William E., Soboroff, S. D., & Gillespie, M. D. (2017). Engaging Students in Survey Research Projects across Research Methods and Statistics Courses. *Teaching Sociology*, 45(1), 65–72. <https://doi.org/10.1177/0092055X16673136>
- Margolis, A. A. (2020). Zone of Proximal Development, Scaffolding, and Teaching Practice. *Cultural-Historical Psychology*, 16(3). <https://doi.org/10.17759/chp.2020160303>
- Maynes, J. (2013). Thinking about Critical Thinking. *Teaching Philosophy*, 36(4), 337–351. [https://doi.org/DOI 10.5840/teachphil2013931](https://doi.org/DOI%2010.5840/teachphil2013931)
- Maynes, Jeffrey. (2013). Thinking about Critical Thinking. *Teaching Philosophy*, 36(4), 337–351. <https://doi.org/10.5840/teachphil2013931>
- Namdar, B. (2017). Preservice Science Teachers' Collaborative Knowledge Building through Argumentation on Healthy Eating in a Computer Supported Collaborative Learning Environment. *Turkish Online Journal of Educational Technology - TOJET*, 16(3), 132–146. Retrieved from <http://search.ebscohost.com.proxy-ub.rug.nl/login.aspx?direct=true&db=eric&AN=EJ1152573&site=ehost-live&scope=site>
- Pathoni, H., Kurniawan, W., Muliawati, L., Kurniawan, D. A., Dari, R. W., Ningsi, A. P., &

- Romadona, D. D. (2020). The effect of science process skills on study critical thinking ability in scientific learning. *Universal Journal of Educational Research*, 8(11).
<https://doi.org/10.13189/ujer.2020.081169>
- Radwan, A. (2014). Evaluation of Student Performance in a Collaborative Problem-Solving Environment Using Social Network Media. *Recent Advances in Telecommunications, Informatics and Educational Technologies*, 223–228.
- Rohman, S., Susanto, Hobri, Saiful, & Sahnawi. (2019). An analysis of students' literacy ability in mathematics teaching with realistic mathematics education based on lesson study for learning community. *Journal of Physics: Conference Series*, 1265(1).
<https://doi.org/10.1088/1742-6596/1265/1/012004>
- Samo, D. D., Darhim, D., & Kartasasmita, B. (2017). Developing Contextual Mathematical Thinking Learning Model to Enhance Higher-Order Thinking Ability for Middle School Students. *International Education Studies*. <https://doi.org/10.5539/ies.v10n12p17>
- Sirota, M., Dewberry, C., Juanchich, M., Valuš, L., & Marshall, A. C. (2021). Measuring cognitive reflection without maths: Development and validation of the verbal cognitive reflection test. *Journal of Behavioral Decision Making*, 34(3).
<https://doi.org/10.1002/bdm.2213>
- Springborg, C., & Ladkin, D. (2018). Realizing the Potential of Art-Based Interventions in Managerial Learning: Embodied Cognition as an Explanatory Theory. *Journal of Business Research*, 85(April), 532–539. <https://doi.org/10.1016/j.jbusres.2017.10.032>
- Switzer, A. T., & Barclay, L. A. (2012). Book Clubs: Best Practices in Promoting Critical Thinking in Business Classes. *Journal of Business and Finance Librarianship*, 17(4), 328–345. <https://doi.org/10.1080/08963568.2012.712635>
- Tauresia Kesuma, A., Putranta, H., & Cahyo Adi Kistoro, H. (2020). Evaluation of the Self-regulated Learning Model in High Schools: A Systematic Literature Review. *Universal Journal of Educational Research*, 8(10), 4792–4806.
<https://doi.org/10.13189/ujer.2020.081051>
- Uche, C. O. O., & Ogugua, P. I. (2013). Religion and African Identity: A Reflection on Nigerian Situation. *Open Journal of Philosophy*, 03(01), 248–254.
<https://doi.org/10.4236/ojpp.2013.31A040>
- Wang, X., & Zheng, H. (2016). Reasoning Critical Thinking: Is It Born or Made? *Theory and*

Practice in Language Studies, 6(6), 1323. <https://doi.org/10.17507/tpls.0606.25>

Warren, G., & Dinnie, K. (2017). Exploring the dimensions of place branding: an application of the ICON model to the branding of Toronto. *International Journal of Tourism Cities*, 3(1), 56–68. <https://doi.org/10.1108/IJTC-10-2016-0035>

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