

REVIEW FORM

Title : The Practicality of Junior High Schools' Natural Science Learning Devices on the Concept of Environmental Pollution using the Problem Solving Learning Model

Kode : ABS 319

No	Aspect	Evaluation Score		
		Poor (1)	Fair (2)	Good (3)
1	The title fits the seminar theme		√	
2	The maximum number of words in the title is 14 words		√	
3	Complete abstract (consisting of aims, research methods, research techniques / instruments, results, conclusions)			√
4	The maximum number of words in the abstract is 200 words			√
5	The article has complete article structure (introduction, method, result and discussion, conclusion, and reference)			√
6	The introduction section shows the novelty of the research		√	
7	The introduction section contains the research objectives			√
8	Clear method			√
9	Tables / figures support the research results			√
10	The discussion is referenced to relevant sources			√
11	Conclusions meets the research objectives			√
12	Use the correct reference template			√
13	80% of references are from academic journal			√
14	Reference are up-to-date (max last 10 years)			√
15	The article has at least 15 references			√

Suggestions

Revision the title and shows the novelty of the research.

Citation and reference please use mandeley

Publication recommendation

- Journal of Physics Conference Series: IOP Publishing**
- Berkala Ilmiah Pendidikan Fisika (Sinta 3)
<https://ppjp.ulm.ac.id/journal/index.php/bipf/index>
- Jurnal Ilmiah Pendidikan Fisika (Sinta 3)
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various sources.

On indicators of the clarity of students in stating the results of reasoning, justifying reasoning must be based on evidence from various sources and present reasoning in the form of convincing arguments. According to Layn & Ruslan (2017), students' critical thinking skills are well stated if able to state reasoning following relevant information and facts [28]. Based on the test of critical thinking skills, students can already present arguments or reasoning based on evidence on why detergents can remove fat and the event of smoothing kitchen spices before being mixed with food and its relationship with colloidal materials. Strong reasoning can be determined after students find assumptions that have good reason to trust the source.

Critical thinking skills are trained to review or evaluate when analyzing data and determining the most reasonable opinion as a result of data analysis. Based on the critical thinking skills test, students have been able to review or examine examples of events so that they can conclude in their entirety based on facts and evidence about the role of protective colloids.

The t-test was conducted on pre-test data and post-tested critical thinking skills of students in experimental classes tested for homogeneity and normality. Pre-test and post-test data should be normal and homogeneous. The pre-test data and post-test results of the learner's critical thinking skills can be seen in Table 1.

Table 1 Test results-t pre-test data and post test CTS Students

Result	dk	x	Md	tcalculated	ttable5%	Conclusion
Pre-test	29	35	26.26	11.01	2.03	There are differences in critical thinking skills
Post-test	29	61.26				

Based on Table 1, the price t-calculated and t-table where t-calculated > t-table (11.01 > 2.03) which means H0 rejected and H1 accepted, so it can be said that there is a significant difference between the average pre-test value and post-test critical thinking skills of students in the moments before and after learning that applies the Probing Prompting model assisted by Virtual Reality media.

3.1 Learning outcomes

Learning outcomes in the field of knowledge of students are measured by learning using the Probing Prompting model assisted by Virtual Reality media. Test results are done before being given treatment (pre-test) and after given treatment (post-test). The Probing Prompting learning model assisted by Virtual Reality media shows the learning atmosphere becomes more directed and uplifting for students in the following learning.

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27 September 2021, 15:35

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student learning outcomes before learning and after learning using the Probing Prompting model assisted by Virtual Reality media. Furthermore, students' positive response to using the Probing Prompting model assisted by Virtual Reality media on the colloid system material of students makes learning more enjoyable. In addition, it makes it easier for teachers to convey material or information in learning. Therefore, the Probing Prompting model assisted by Virtual Reality media tested can be considered for chemistry subject teachers to practice critical thinking skills and learning outcomes through online learning.

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[1] Yusnaeni, H. Susilo, A. Corebima and S. Zubaidah, "Relationship Between Creative Thinking Ability and Cognitive Learning Outcomes in Learning Research," in *Prosiding Seminar Biologi*, 2016.

[2] D. Heryadi and Sunardi, "Expository Learning Model," *International Journal Of Education and Research*, vol. 8, no. 1, pp. 207-216, 2020.

[3] A. Fermanda, S. Haryani, A. T. Prasetya and M. Hilmi, "Analysis of Class XI Student Critical Thinking Ability On Coloid Materiail," *Journal Chemistry Education*, vol. 13, no. 1, p. 2326 - 2336, 2019.

[4] A. Kasih and A. Winarti, "Improving Critical Thinking Skill and Student Learning Outcomes Using the HOTS (High Order Thinking Skill) Oriented Problem Posing Approach on Salt," *Journal of Chemistry And Education*, pp. 34-45, 2020.

[5] J. Agustiana and Miteriannifa, "Analysis of Students Critical Thinking Skills on Colloid Material," *Jurnal Kajian Pendidikan Sains*, vol. 5, no. 1, pp. 91-98, 2019.

[6] A. Muttaqin and W. Sopandi, "Relationship Between Critical Reading and Student Critical Thinking Skill," *Journal Of Education and Teaching Science*, pp. 116-125, 2016.

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References

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