

Development of Academic Achievement in Science on the Topic of Light for Grade 5 Students at Schools in the Bua Yai 2 Quality Development Network Center under the Nakhon Ratchasima Primary Educational Service Area Office 6 using the 5E Inquiry-Based Learning Method

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What is the problem?



The problem addressed in this research is the need to improve academic achievement in the science subject "Light" for Grade 5 students. Traditional teaching methods have not effectively engaged students or facilitated deep understanding of scientific concepts, resulting in lower academic performance and dissatisfaction among students.

The aims of the study:

1. Develop academic achievement in the science subject "Light" for Grade 5 students through the 5-step inquiry-based learning method.



2. Compare the academic achievement after using the 5-step inquiry-based learning method to the established criteria of 80%.



3. Assess student satisfaction with the 5-step inquiry-based learning method.

Our Solution

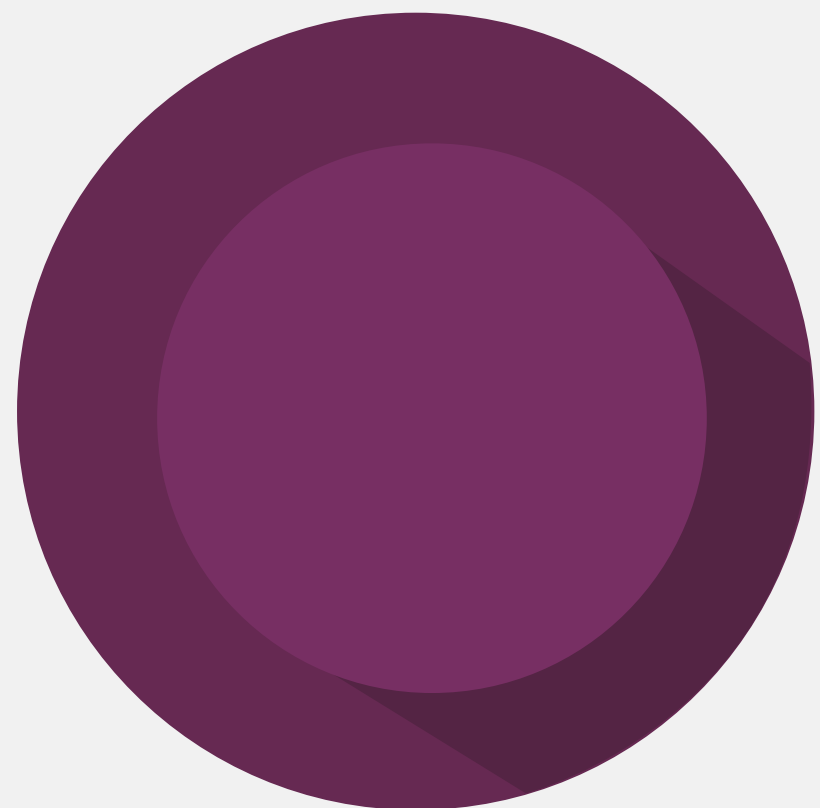


- Engaging students with interesting questions and activities related to the topic of light.
- Encouraging students to explore and investigate the concepts through experiments and hands-on activities.
- Allowing students to explain their findings and understanding of the concept.
- Providing opportunities for students to elaborate on their knowledge by connecting it to other concepts and real-world applications.
- Evaluating students' understanding through assessments and reflections.

Conclusions and Recommendations



The study concluded that the 5-step inquiry-based learning method was effective in improving academic achievement in the science subject "Light" for Grade 5 students, meeting the criteria of 80/80. The method also significantly increased student satisfaction, with overall high ratings in terms of engagement and understanding.






Recommendations include:

- Implementing the 5-step inquiry-based learning method in other subjects and grade levels to enhance academic performance.
- Providing training for teachers to effectively use this method in their classrooms.
- Continuously assessing and refining the learning activities to maintain student interest and engagement.

Further study

Further research could explore:

-  The long-term effects of the 5-step inquiry-based learning method on student achievement and retention of knowledge.
-  Adapting and testing the method in diverse educational settings to evaluate its broader applicability.
-  Investigating the impact of the method on other skills such as critical thinking, problem-solving, and collaboration.

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