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SOCIALIZATION OF PROBLEM-BASED LEARNING MODEL WITH READING, QUESTIONING, AND ANSWERING (PBLRQA) IN EMPOWERING STUDENT RETENTION

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Abstract:
Student retention is an important aspect that needs to be considered in the learning process, because it ensures that the knowledge gained can be stored for a long time and reused when required. Therefore, current learning must prioritize empowering student retention as part of a strategy to improve the quality of education. This community service aims to socialize the PBLRQA learning model to empower student retention. The method of implementing the activity consists of two main stages: (1) workshop and (2) mentoring the implementation of the learning model. The workshop focuses on understanding the role of retention in learning and how to improve it.
Meanwhile, mentoring the implementation of the PBLRQA model is carried out through classroom learning practices, where teachers are directly assisted in implementing this model. The workshop results showed that teachers who were actively involved in the discussion better understood the importance of retention in learning. Furthermore, the results of mentoring the implementation of the PBLRQA learning model indicated that teachers had understood how to apply this model in the classroom. Moreover, they stated that the PBLRQA model has great potential in improving student retention. Teachers have also understood the concept of retention, including its meaning, its role in learning, and how to measure and improve student retention. In addition, teachers have become familiar with one of the learning models that can support increasing student retention, namely the PBLRQA learning model, along with its application in the learning process.

Keyword: *Biology, Problem-Based Learning (PBL), Reading, Questioning, and Answering (RQA), Retention, Socialization*

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PENDAHULUAN

One of the main challenges in 21st century learning is low student retention (Bruen et al., 2025; Rafiq et al., 2020; Stephenson et al., 2020; Yamo et al., 2024). As the number of students increases yearly, this challenge becomes more urgent to overcome. Retention is the ability to store information for a long time and retrieve it when needed (Hall et al., 2015; Mehyar et al., 2024; Pipa & Peixoto, 2022; Saeed et al., 2025). The level of student retention is closely related to learning success, because students who can remember and understand the material well will find it easier to construct arguments, solve problems, and develop deeper understanding. Therefore, students with good retention rates tend to be independent learners who can manage their learning process effectively. However, various reports show that student retention is still relatively low. Ginting et al. (2024) reported that 56 students needed improvement in their ability to retain their acquired knowledge. In addition, Kuang et al. (2021) also identified that 144 students had a retention rate that still needed improvement. The interviews with 17 students also revealed that they did not understand the concept of retention well.

Low student retention can cause various problems in the thinking process Ginting et al. (2024); Muhdhar et al. (2024); Redjeki (Redjeki, 2024); and Sulistyanto et al. (2024) stated that students with low retention tend to have difficulty focusing, are less able to reason, and have difficulty understanding situations. In addition, Suprapto et al. (2024) and Tohiroh & Ariyanti, (2024) emphasized that students with low retention cannot synthesize information effectively and experience obstacles in solving complex problems.

Low retention also causes students to tend to be passive in learning, have low motivation, and have difficulty adapting to the learning process. In addition, their conceptual understanding is often unfocused or doubtful, the answers given do not support the arguments, and their thought process is unstructured. The concepts they put forward are not related to each other, coupled with poor use of grammar, so the ideas they convey are unclear. As a result, they have difficulty developing as independent learners.

Socialization of the PBLRQA learning model in empowering student retention. The movement to encourage student retention by implementing the PBLRQA learning model is a strategic step (Bahri et al., 2019; Leasa et al., 2024). Implementing the PBLRQA learning model creates a collaborative and interactive learning environment where students can share ideas and discuss them in depth.

METODE KEGIATAN

The implementation method consists of two stages, namely;
1) Workshop
Activity: Workshop on roles and how to increase retention. Proposing Team: Acting as facilitators and speakers. The proposing team is responsible for delivering materials, guiding discussions, and providing guidance and materials. Partners (Teachers): Acting as active participants involved in discussions, and giving input or questions related to learning practices implemented in their classes.

2) Mentoring the Implementation of Learning Models
Activity: Mentoring in implementing the PBLRQA model in class. This activity is carried out through learning practice activities. Proposing Team: Acting as companions and consultants. The team will accompany the implementation process, provide advice, monitor, and assist teachers in reflecting on the results. Partners (Teachers): Acting as implementers who implement the PBLRQA model in class, conducting observations, and reflections to continue to increase student retention

HASIL DAN PEMBAHASAN

Hasil

The socialization and workshop activities on the role and strategies in improving student retention went well. Teachers actively involved in the discussion showed a better understanding of the importance of retention in learning. The evaluation results of the debate showed that teachers began to realize the factors influencing student retention and the strategies that can be applied to improve it. In addition, they also gained new insights into more effective methods in building student memory through more interactive and meaningful learning practices.

Mentoring the implementation of the PBLRQA learning model, namely teachers understand how to apply this model in the classroom. Furthermore, observations during the implementation process showed increased student participation in learning. Teachers also reflected and adjusted learning strategies based on the results of their observations. Several teachers reported that students became more active in discussions, were better able to connect concepts, and showed an increase in retaining information that had been learned. These results indicate that the PBLRQA model can significantly increase student retention if implemented consistently and sustainably.

Figure 1. Socialization Activity Process

Figure 2. Closing of Socialization Activity

Pembahasan

The PBLRQA learning model integrates Problem-Based Learning (PBL) strategies with Reading, Questioning, and Answering (RQA). This model was developed to optimize the learning process by combining a problem-based approach that requires students to think critically with reading and questioning skills that deepen conceptual understanding. The syntactic characteristics of PBL and RQA allow the two to interact into a more comprehensive learning strategy, increasing student retention and encouraging them to become independent learners.

This integration combines reading activities, composing questions, and answering questions within the framework of a problem-based learning strategy. The second syntax strategy is integrated by inserting or completing the stages in PBL into RQA, or vice versa, thus creating a more systematic, structured, and complementary learning flow. With this approach, students are not only required to understand the material through reading and asking questions, but also to be active in solving problems independently or collaboratively.

The PBLRQA learning model consists of six main stages (Bahri & Idris, 2018) designed to optimize the combination of important elements of PBL and RQA. Each stage plays a crucial role in improving students' conceptual understanding, critical thinking skills, and ability to retain information in the long term. The table below provides a more detailed explanation of the six stages, illustrating how each step in this model can be applied effectively in the learning process.

Table 1. Syntax of PBLRQA Learning Model

Syntax	Teacher Activities	Student Activities
Stage 1: Orient students to the problem and direct them to read literature.	➢ Explain the learning objectives. ➢ Explain the logistics needed. ➢ Explain the learning topic. ➢ Direct students to read literature. ➢ Motivate students to be involved in solving the selected problems.	➢ Pay attention to the lecturer's explanation. ➢ Read literature related to the material to be discussed.
Stage 2: Students create questions about the reading material and related problems, and then answer the questions	Assign students to submit problems related to the reading material in the form of questions, then answer the questions created.	Finding problems from the reading results, creating questions, and answering them as temporary solutions.
Stage 3: Organizing students to learn	Organizing students to learn according to the groups that have been formed.	Organizing yourself in groups.
Stage 4: Guiding group investigations and discussions	Guiding group investigations and discussing the questions and answers that have been created.	Discussing solutions to group members' problems.
Stage 5: Developing and submitting work results through group presentations	Helping students plan and prepare work such as reports, videos, and models, and dividing tasks among them.	Presenting group discussion results in front of the class.
Stage 6: Analyze and evaluate the problem-solving process	Help students reflect or evaluate the investigation and the process used.	Create a resume.

Source: Bahri dan Idris (2018)

Retention is a factor that plays a role in maintaining the knowledge that students have learned. This knowledge is stored in memory and can be revealed after a certain period. Good retention ability allows students to remember and understand the material learned without experiencing a decrease in the quality of understanding. Retention can also be interpreted as the ability of students to remember lesson material for a certain period while maintaining the same knowledge as when the material was taught. A high level of retention plays an important role in learning success, because students can connect concepts learned with new material, making learning more meaningful and sustainable

Table 2. Retention Rubric

Answer	Score
Correct answer, complete explanation	4
Correct answer, incomplete explanation	3
Correct answer, incomplete explanation	2
Correct answer, very incomplete explanation	1
Wrong/incorrect answer	0

KESIMPULAN

Teachers have understood the concept of retention, including its meaning, its role in learning, and how to measure and improve student retention in the learning process. This understanding is the basis for teachers in designing more effective learning strategies to help students retain and recall the material they have learned. In addition, teachers have become familiar with the PBLRQA learning model, which is one strategy that can improve student retention. They not only understand the basic concept of this model, but also its application in learning. With a deeper understanding, it is hoped that teachers can implement the PBLRQA model effectively to improve student understanding and retention in the long term.

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