PENERAPAN *RETENTION-BASED LEARNING* TERHADAP PENGUASAAN KONSEP DAN *SELF-REGULATION* SISWA SMA DALAM PEMBELAJARAN PENCEMARAN AIR

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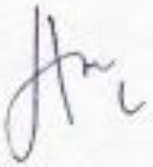

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ABSTRAK

Pendekatan *Retention-Based Learning* (RBL) merupakan pendekatan pembelajaran yang menekankan penguatan retensi informasi jangka panjang melalui pengulangan terstruktur dan elaborasi konseptual. Pendekatan ini diyakini dapat meningkatkan kualitas penguasaan konsep dan kemampuan dalam proses pembelajaran. Penelitian ini bertujuan untuk menganalisis pengaruh penerapan pendekatan *Retention-Based Learning* terhadap penguasaan konsep dan kemampuan *Self-Regulation* siswa SMA dalam pembelajaran materi pencemaran air. Penelitian ini menggunakan metode kuasi eksperimen dengan desain *posttest only control group design* yang melibatkan 50 siswa kelas X-MIPA di salah satu SMA swasta di Kota Bandung. Siswa dibagi ke dalam dua kelompok, yaitu kelas eksperimen yang menerapkan pendekatan RBL dan kelas kontrol dengan pendekatan pembelajaran konvensional. Data dikumpulkan melalui tes penguasaan konsep berbasis The New Taxonomy (Marzano & Kendall, 2007) dan kuesioner *self-regulation*, mencakup aspek *goal-setting, effort, self-efficacy*, dan *persistence*. Hasil penelitian menunjukkan terdapat perbedaan signifikan pada penguasaan konsep dan kemampuan *self-regulation* antara siswa yang mengikuti pembelajaran dengan pendekatan RBL dan siswa yang mengikuti pembelajaran konvensional. Temuan ini mengindikasikan bahwa pendekatan RBL dapat menjadi pendekatan efektif untuk memperkuat pdan meningkatkan *self-regulation*, terutama dalam pembelajaran aplikatif seperti pencemaran air. Selain itu, persepsi positif siswa terhadap pendekatan RBL berperan sebagai data pendukung yang berhubungan dengan tingkat penguasaan konsep dan kemampuan *self-regulation* mereka.

Kata kunci: *retention-based learning, penguasaan konsep, self-regulation,* persepsi siswa, pencemaran air.

ABSTRACT

The Retention-Based Learning (RBL) approach is an instructional strategy that emphasizes the enhancement of long-term information retention through structured repetition and conceptual elaboration. This strategy is believed to improve students' conceptual understanding and self-regulation abilities throughout the learning process. This study aims to examine the effect of implementing the Retention-Based Learning approach on students' conceptual mastery and self-regulation skills in the context of learning about water pollution. Additionally, it investigates the correlation between students' perceptions of the RBL approach and their self-regulation abilities. This quasi-experimental study employed a posttest only control group design involving 51 tenth-grade science students (X-MIPA) from a private senior high school in Bandung, Indonesia. The students were divided into two groups: the experimental group, which received the RBL approach, and the control group, which experienced conventional instruction. Data were collected through a conceptual mastery test based on The New Taxonomy (Marzano & Kendall, 2007), a self-regulation questionnaire consisting of goal-setting, effort, self-efficacy, and persistence dimensions, and a student perception questionnaire regarding the RBL strategy. The findings reveal significant differences in conceptual mastery and self-regulation between the RBL and conventional classes. Furthermore, there is a significant correlation between students' perceptions of the RBL approach and their self-regulation skills. These results suggest that the RBL approach can be an effective strategy for enhancing students' conceptual understanding and fostering independent learning, especially in contextual science topics such as water pollution.

Keywords: retention-based learning, conceptual mastery, self-regulation, student perception, water pollution.

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