

Developing learning about exponents using the STAD technique. Mathematics learning group of secondary school students nts

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What is the problem?



The primary problem addressed in this research is the low learning achievement in mathematics, particularly in the topic of exponents, among Mathayom I (Grade 7) students. This issue stems from traditional teaching methods that do not engage students effectively, resulting in a lack of understanding and interest in the subject. The research identifies that the existing methods do not foster critical thinking, problem-solving skills, or active participation, which are essential for mastering mathematical concepts.

The aims of the study:

The study aims to:

1. Create and develop an effective learning management plan for teaching exponents using the STAD (Student Teams Achievement Divisions) technique.

2. Evaluate the effectiveness of the STAD-based learning plan according to the 75/75 criteria.

3. Compare the learning achievements of students before and after the implementation of the STAD technique.

4. Assess the students' satisfaction with the new learning method.



Our Solution

The proposed solution is the implementation of the STAD technique in teaching exponents to Mathayom I students. This cooperative learning method involves:



1. Dividing students into diverse teams to work together and support each other's learning.

2. Conducting individual assessments to ensure accountability.



3. Using team scores to motivate students to improve their performance.

The STAD technique is expected to enhance student engagement, understanding, and retention of mathematical concepts by promoting teamwork and active participation.

Conclusions and Recommendations



The study concluded that:

- The STAD-based learning management plan for exponents was more effective than traditional methods, as evidenced by higher post-intervention test scores.
- Students showed significant improvement in their understanding of exponents, with a 52.35% increase in progress.
- The students expressed high levels of satisfaction with the STAD technique, indicating its positive impact on their learning experience.

Recommendations include:

- Adopting the STAD technique in other mathematical topics and subjects to enhance overall student achievement.
- Providing training for teachers to effectively implement cooperative learning strategies.
- Continuously evaluating and refining the learning plans to ensure they meet educational standards and student needs.

Further study

Future research could focus on:

- ❖ Long-term effects of the STAD technique on student performance in mathematics.
- ❖ Comparative studies between STAD and other cooperative learning methods.
- ❖ Exploring the application of the STAD technique in different educational contexts and age groups to assess its broader applicability and effectiveness.

Contact



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