Sinergi : Jurnal Ilmiah Multidisiplin
E-ISSN : 3109-0559
Volume 2 Nomor 4 Tahun 2026

https://publikasi.ahlalkamal.com/index.php/sinergi

The Effect Of Deep Learning Management And Classroom Management Skills On The Mathematics Learning Outcomes Of Junior High School Students In North Langowan District

Mertika Mumu[1], Jeffry SJ Lengkong[2], Zoya F. Sumampouw[3]
[123]Manado State University, Indonesia
Email : mertikamumu6@gmail.com ; jeffrylengkong@unima.ac.id ;
zoyasumampouw@unima.ac.id

Abstract

Mertika Mumu. 25804030. The Effect of Deep Learning Instructional Management and Classroom Management Skills on the Mathematics Learning Outcomes of Junior High School Students in North Langowan District. Supervised by Prof. Dr. Jeffry SJ Lengkong, M.Pd and Dr. Zoya F. Sumampouw, M.Pd. Master's Program in Educational Management, Graduate School, Manado State University.

This study aims to determine and analyze (1) the effect of deep learning instructional management on the mathematics learning outcomes of junior high school students in North Langowan District, (2) the effect of classroom management skills on the mathematics learning outcomes of junior high school students in North Langowan District, and (3) the effect of deep learning instructional management and classroom management skills simultaneously on the mathematics learning outcomes of junior high school students in North Langowan District. The population of this study consisted of all students of SMP Negeri 3 Langowan and SMP Negeri 9 Langowan, totaling 160 students. The sample consisted of 61 students selected using proportionate stratified random sampling technique. The data collection method used in this study was a questionnaire. The data were analyzed using simple regression analysis and multiple regression analysis. The results of the study show that (1) deep learning instructional management has an effect on students' mathematics learning outcomes by 50.22%, (2) classroom management skills have an effect on students' mathematics learning outcomes by 56.44%, and (3) deep learning instructional management and classroom management skills simultaneously have an effect on students' mathematics learning outcomes by 64.2%.

Keywords: Deep Learning Instructional Management, Classroom Management Skills, Mathematics Learning Outcomes.

Introduction

Education plays a crucial role in improving the quality of human resources. One indicator of educational success in schools is student learning outcomes. Learning outcomes

are influenced not only by student abilities but also by teacher factors, particularly in learning management and classroom management skills.

Students often find mathematics difficult to learn in school due to its abstract nature. This leads to many students struggling to grasp mathematical concepts in depth. Therefore, a learning approach is needed that can help students understand concepts meaningfully, one of which is through deep learning.

Deep learning is an approach that emphasizes in-depth conceptual understanding, critical thinking, and the ability to connect knowledge to real-life situations. Furthermore, the success of learning is greatly influenced by the teacher's classroom management skills. Good classroom management creates a conducive learning environment, enabling students to learn with greater focus and engagement.

Based on this background, this study aims to determine the effect of deep learning management and classroom management skills on the mathematics learning outcomes of junior high school students in North Langowan District.

Research methods

This study used a quantitative approach with a survey method. The study was conducted at a junior high school in North Langowan District. The population was all junior high school students in North Langowan District, while the sample size was 61 students.

The variables in this study consist of two independent variables and one dependent variable, namely:

1. Deep learning management (X1)
2. Classroom management skills (X2)
3. Students' mathematics learning outcomes (Y)

Data collection techniques used questionnaires and documentation. The questionnaires were used to measure deep learning management and classroom management skills, while documentation was used to obtain data on students' mathematics learning outcomes.

Data analysis was carried out through several stages, namely validity testing, reliability testing, normality testing, linearity testing, multicollinearity testing, heteroscedasticity testing, simple regression, and multiple regression.

Research result

Validity test results indicate that all statement items in the deep learning management and classroom management skills variables are valid. Reliability test results indicate that both variables have Cronbach's Alpha values above 0.90, making them highly reliable.

Hypothesis testing results indicate that deep learning instructional management has a positive and significant impact on students' mathematics learning outcomes. This suggests that the better the teacher's instructional management, the better the student's learning outcomes.

Furthermore, classroom management skills also have a positive and significant impact on students' mathematics learning outcomes. Teachers who are able to manage their classrooms effectively can create a conducive learning environment, making it easier for students to understand the material being taught.

Simultaneously, deep learning instructional management and classroom management skills significantly impacted students' mathematics learning outcomes. This indicates that both variables play a crucial role in improving student learning outcomes.

Discussion

The research results show that deep learning instructional management impacts students' mathematics learning outcomes. This suggests that learning that emphasizes in-depth

conceptual understanding can help students better grasp mathematics material. Learning no longer focuses on memorization, but rather on conceptual understanding and its application in real life.

Furthermore, classroom management skills also influence students' mathematics learning outcomes. Good classroom management can create a comfortable, orderly, and enjoyable learning environment. A conducive learning environment will help students focus better, thus improving learning outcomes.

The results of this study indicate that learning success is determined not only by the teaching method but also by the teacher's ability to manage the classroom effectively. Therefore, deep learning instructional management and classroom management skills play a crucial role in improving students' mathematics learning outcomes.

Conclusion

Based on the research results, it can be concluded that deep learning management and classroom management skills have a positive and significant influence on the mathematics learning outcomes of junior high school students in North Langowan District. The better the deep learning management and classroom management skills, the higher the students' mathematics learning outcomes.

Bibliography

Arikunto, S. (2006). Research procedures: A practical approach. Jakarta: Rineka Cipta.

Aunurrahman. (2012). Learning and teaching. Bandung: Alfabeta.

Dimyati, & Mudjiono. (2013). Learning and teaching. Jakarta: Rineka Cipta.

Lolombulan, J. (2017). Statistics for educational researchers. Manado: ANDI.

Riduwan. (2012). Easy learning of research. Bandung: Alfabeta.

Slameto. (2010). Learning and the factors that influence it. Jakarta: Rineka Cipta.

Sugiyono. (2014). Educational research methods. Bandung: Alfabeta.

Sudjana, N. (2009). Assessment of the results of the teaching and learning process. Bandung: PT Remaja Rosdakarya.

Suyanto, et al. (2025). Academic paper on in-depth learning towards quality education for all.

Mahrinasari, M. S., et al. "THE IMPACT OF DECISION-MAKING MODELS AND KNOWLEDGE MANAGEMENT PRACTICES ON PERFORMANCE."

Sundram, S., Venkateswaran, P. S., Jain, V., Yu, S. Y., Yapanto, L. M., Raisal, I., ... & Regin, R. The Impact of Knowledge Management on The Performance of Employees: The Case of Small Medium Enterprises.