

ABSTRAK

Nurhidayah :Pengembangan Media Pembelajaran Interaktif Berbasis *Moodle* untuk Meningkatkan Kemampuan Pemahaman Matematis dan *Self Regulated Learning* Siswa

Media pembelajaran interaktif berbasis *Moodle* berpotensi besar meningkatkan aktivitas dan kualitas pembelajaran siswa. Namun, keterbatasan akses infrastruktur digital dan koneksi internet yang tidak merata sering membatasi penggunaannya. Penelitian ini bertujuan mengembangkan media interaktif terintegrasi *Moodle*, sekaligus mengevaluasi efektivitasnya dalam meningkatkan pemahaman matematis dan self-regulated learning siswa. Metodologi yang digunakan adalah *Research and Development (R&D)* dengan model *ADDIE*. Pengumpulan data primer meliputi pretest-posttest untuk pemahaman matematis, angket praktikalitas, dan angket untuk mengukur peningkatan *self-regulated learning*. Hasil analisis menunjukkan rerata skor *N-Gain* pemahaman matematis berada pada kategori sedang, mengindikasikan adanya peningkatan. Lebih krusial, uji-t berpasangan mengonfirmasi peningkatan signifikan pada kemampuan *self-regulated learning* siswa setelah menggunakan media. Respons angket praktikalitas secara konsisten menyatakan media ini sangat praktis. Dengan demikian, media pembelajaran yang dikembangkan ini dapat dikonklusikan sebagai efektif, praktis, dan layak untuk mendukung proses pembelajaran, sekaligus meningkatkan pemahaman matematis dan kemampuan *self-regulated learning* siswa.

Kata Kunci :Media Pembelajaran Interaktif, Moodle, Pemahaman Konsep Matematis, *Self Regulated Learning*.

ABSTRACT

Nurhidayah :Development of Interactive Learning Media Based on Moodle to Enhance Students' Mathematical Understanding and Self Regulated Learning

Interactive learning media based on Moodle holds significant potential for fostering student engagement and improving learning quality. However, unequal access to digital infrastructure and unstable internet connectivity often limit Moodle's full utilization. This research aims to initiate the development of Moodle-integrated interactive learning media and evaluate its effectiveness in enhancing students' mathematical understanding and self-regulated learning. The methodology adopted is Research and Development (R&D), implemented through the ADDIE model. Primary data collection included pretest-posttest for mathematical understanding, a practicality questionnaire, and a paired t-test to measure the improvement in self-regulated learning. Data analysis revealed that the average N-Gain score for mathematical understanding was in the moderate category, indicating an improvement. Crucially, the paired t-test confirmed a significant increase in students' self-regulated learning abilities after using the media. Responses from the practicality questionnaire consistently affirmed that the media was highly practical. In conclusion, the developed learning media is deemed effective, practical, and viable for supporting the learning process, simultaneously enhancing students' mathematical understanding and self-regulated learning skills.

Keyword : *Interactive Learning Media, Moodle, Mathematical Understanding Ability, Self Regulated Learning*