

## ABSTRAK

**Cevi Miftah Fauzan, 1222050030, "Peningkatan Kemampuan Literasi Matematis Siswa melalui Pembelajaran *Socrates* Didukung *DeepSeek* berdasarkan *Self-Regulated Learning*"**

Literasi matematis sebagai kompetensi esensial yang menuntut kemampuan siswa dalam memahami, menganalisis, dan menyelesaikan permasalahan matematika secara mandiri, didukung integrasi *Socrates* dengan kecerdasan buatan (*DeepSeek*) menciptakan pembelajaran yang dialogis, reflektif, adaptif. Namun pembelajaran saat ini untuk mengembangkan literasi matematis melalui proses bertanya secara mendalam dan meregulasi belajarnya sendiri masih terbatas. Tujuan studi untuk menganalisis peningkatan literasi matematis siswa melalui pembelajaran *Socrates* berbasis *DeepSeek* ditinjau berdasarkan *Self-Regulated Learning*. Metode yang digunakan adalah kuasi-eksperimen dengan desain *nonequivalent control group* yang melibatkan tiga kelas. Instrumen penelitian berupa tes literasi matematis dan angket *Self-Regulated Learning*. Hasil penelitian menunjukkan bahwa terdapat peningkatan kemampuan literasi matematis siswa melalui pembelajaran *Socrates* didukung *DeepSeek* ditinjau berdasarkan *Self-Regulated Learning* menduduki posisi pertama dari pada pembelajaran *Socrates* dan konvensional. Tidak terdapat interaksi antara tipe pembelajaran dan *Self-Regulated Learning* terhadap kemampuan literasi matematis siswa. Mengintegrasikan *Socrates*, kecerdasan buatan generatif, dan kemampuan regulasi diri dalam satu kerangka pembelajaran matematika, sehingga menghasilkan model pembelajaran yang lebih adaptif, personal, dan sesuai dengan tuntutan pendidikan di era AI.

**Kata Kunci:** *DeepSeek*, Kecerdasan Buatan Generatif, *Literasi Matematis*, Pembelajaran *Socrates*, *Self-Regulated Learning*.

## ABSTRAK

**Cevi Miftah Fauzan, 1222050030, "Enhancement of Students' Mathematical Literacy Ability through Socratic Learning Supported by DeepSeek Based on Self-Regulated Learning"**

*Mathematical literacy is an essential competency that demands students' ability to understand, analyze, and solve mathematical problems independently. The integration of the Socratic method with artificial intelligence (DeepSeek) creates dialogical, reflective, and adaptive learning. However, current learning practices to develop mathematical literacy through in-depth questioning and self-regulated learning are still limited. This study aims to analyze the improvement of students' mathematical literacy through Socratic learning based on DeepSeek, reviewed based on Self-Regulated Learning. The method used was a quasi-experiment with a nonequivalent control group design involving three classes. The research instruments were mathematical literacy tests and Self-Regulated Learning questionnaires. The results showed that there was an improvement in students' mathematical literacy ability through Socratic learning supported by DeepSeek, reviewed based on Self-Regulated Learning, occupying the first position compared to Socratic learning and conventional learning. There was no interaction between learning types and Self-Regulated Learning on students' mathematical literacy ability. Integrating Socrates, generative artificial intelligence, and self-regulation ability in a single mathematics learning framework produces a more adaptive, personalized learning model that aligns with the demands of education in the AI era.*

**Keywords:** DeepSeek, Generative Artificial Intelligence, Mathematical Literacy, Socratic Learning, Self-Regulated Learning.