

ABSTRAK

Kania Fadya Ilmi, 122205007, 2026, “Peningkatan Kemampuan Berpikir Kritis Matematis melalui Model Pembelajaran *Preview, Question, Read, Reflect, Recite, and Review* (PQ4R) Berbantuan Wizer.me Berdasarkan *Self-Regulated Learning*”

Penelitian ini dilatarbelakangi oleh kemampuan berpikir kritis matematis dan *self-regulated learning* siswa yang masih perlu ditingkatkan berdasarkan studi pendahuluan. Model *Preview, Question, Read, Reflect, Recite, and Review* (PQ4R) berbantuan Wizer.me diterapkan sebagai alternatif pembelajaran untuk mendorong siswa berpikir aktif, merefleksikan pemahaman, dan mengelola belajarnya secara mandiri. Penelitian ini bertujuan mendeskripsikan desain dan keterlaksanaan pembelajaran PQ4R berbantuan Wizer.me, menganalisis perbedaan peningkatan kemampuan berpikir kritis matematis siswa SMP kelas VIII berdasarkan model pembelajaran dan kategori *self-regulated learning*, serta menguji interaksi keduanya terhadap peningkatan kemampuan tersebut. Penelitian menggunakan metode kuasi eksperimen dengan rancangan *Nonequivalent Control Group Design*. Instrumen yang digunakan berupa tes uraian kemampuan berpikir kritis matematis, angket *self-regulated learning*, angket validasi ahli, dan lembar observasi. Hasil penelitian menunjukkan bahwa desain pembelajaran PQ4R berbantuan Wizer.me berada pada kategori sangat valid dan proses pembelajaran terlaksana sangat baik. Terdapat perbedaan peningkatan kemampuan berpikir kritis matematis yang signifikan antar model pembelajaran, dengan kelas PQ4R berbantuan Wizer.me memperoleh peningkatan tertinggi. Selain itu, terdapat perbedaan peningkatan berdasarkan kategori *self-regulated learning*, yaitu kategori yang lebih tinggi menghasilkan peningkatan lebih besar. Model pembelajaran dan *self-regulated learning* juga berinteraksi secara signifikan terhadap peningkatan kemampuan berpikir kritis matematis siswa.

Kata Kunci: PQ4R; Wizer.me; Berpikir Kritis Matematis; *Self-Regulated Learning*.

ABSTRACT

Kania Fadya Ilmi, 122205007, 2026, "Improving Mathematical Critical Thinking Skills Through the Preview, Question, Read, Reflect, Recite, and Review (PQ4R) Learning Model Assisted by Wizer.me Based on Self-Regulated Learning"

This study was motivated by students' mathematical critical thinking skills and self-regulated learning, which require improvement based on preliminary findings. The Preview, Question, Read, Reflect, Recite, and Review (PQ4R) model assisted by Wizer.me was implemented to promote active thinking, reflection, and independent learning. This study aimed to describe the design and implementation of PQ4R learning assisted by Wizer.me, analyze differences in the improvement of eighth-grade junior high school students' mathematical critical thinking skills based on learning models and self-regulated learning categories, and examine the interaction between these variables. A quasi-experimental method with a Nonequivalent Control Group Design was employed. The instruments included an essay test of mathematical critical thinking skills, a self-regulated learning questionnaire, an expert validation questionnaire, and observation sheets. The findings showed that the PQ4R learning design assisted by Wizer.me was highly valid and implemented very well. Mathematical critical thinking improvement differed significantly between learning models, with the PQ4R class assisted by Wizer.me showing the highest improvement. Improvement also differed across self-regulated learning categories, as students with higher self-regulated learning demonstrated greater improvement. Moreover, learning models and self-regulated learning significantly interacted in improving students' mathematical critical thinking skills.

Keywords: PQ4R; Wizer.me; Mathematical Critical Thinking Skills; Self-Regulated Learning.