

ABSTRAK

Nuke Rachmawathy P, “Pembelajaran Model *Connecting, Extending, Review* (CER) untuk Meningkatkan Kemampuan Komunikasi Matematis Peserta Didik”

Penelitian ini dilatarbelakangi oleh kemampuan komunikasi matematis peserta didik yang masih perlu ditingkatkan dalam pembelajaran matematika. Penelitian ini bertujuan untuk mendeskripsikan keterlaksanaan sintaks pembelajaran *Connecting, Extending, Review* (CER), menganalisis peningkatan kemampuan komunikasi matematis peserta didik yang menggunakan model CER dibandingkan dengan pembelajaran konvensional, serta mendeskripsikan respons peserta didik terhadap pembelajaran menggunakan model CER. Penelitian ini menggunakan metode *quasi experiment* dengan desain *Nonequivalent Control Group Design*. Populasi penelitian adalah seluruh peserta didik kelas VIII SMP FK Bina Muda, dengan sampel yang dipilih menggunakan teknik *cluster random sampling*. Instrumen penelitian meliputi lembar observasi, tes kemampuan komunikasi matematis, dan angket respons peserta didik yang telah memenuhi kriteria valid dan reliabel. Data dianalisis secara deskriptif dan inferensial. Hasil penelitian menunjukkan bahwa keterlaksanaan sintaks CER berada pada kategori sangat baik, peningkatan kemampuan komunikasi matematis peserta didik yang menggunakan model CER lebih baik dibandingkan dengan pembelajaran konvensional, serta peserta didik memberikan respons positif terhadap pembelajaran CER. Berdasarkan pengalaman penelitian, model CER dapat digunakan sebagai alternatif untuk meningkatkan kemampuan komunikasi matematis, namun penerapannya perlu memperhatikan alokasi waktu dan kesiapan peserta didik agar setiap tahapan pembelajaran terlaksana secara optimal.

Kata Kunci: *Connecting, Extending, Review* (CER), Kemampuan Komunikasi Matematis, Pola Bilangan.

ABSTRACT

Nuke Rachmawathy P, “The Connecting, Extending, Review (CER) Learning Model to Improve Students’ Mathematical Communication Skills”

This study was motivated by the need to improve students’ mathematical communication skills in mathematics instruction. The study aims to describe the implementation of the Connecting, Extending, Review (CER) instructional syntax; analyze the improvement in students’ mathematical communication skills using the CER model compared to conventional instruction; and describe students’ responses to learning using the CER model. This study employed a quasi-experimental method with a Nonequivalent Control Group Design. The population consisted of all eighth-grade students at SMP FK Bina Muda, with the sample selected using cluster random sampling. The instruments included observation sheets, a mathematical communication skills test, and a student response questionnaire, which met the criteria for validity and reliability. Data were analyzed using descriptive and inferential methods. The results showed that the implementation of the CER syntax was categorized as very good, students using the CER model showed better improvement in mathematical communication skills than those receiving conventional instruction, and students responded positively to CER-based learning. Based on the research experience, the CER model can be used as an alternative to improve mathematical communication skills; however, its implementation needs to consider time allocation and student readiness to ensure that each stage is carried out optimally.

Keywords: Connecting, Extending, Review (CER), Mathematical Communication Skills, Number Patterns.