

ABSTRAK

Amelia Chairani, 1222050012, 2026, “Penerapan Model Pembelajaran *Cool Critical Creative Meaningful* (3CM) Berbantuan Aplikasi *Wayground* Untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Peserta Didik”

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan pemecahan masalah matematis peserta didik yang didukung dari hasil studi pendahuluan di SMAN 26 Bandung. Selanjutnya penelitian ini bertujuan untuk mengetahui keterlaksanaan pembelajaran, perbedaan peningkatan kemampuan pemecahan masalah matematis, perbedaan pencapaian kemampuan pemecahan masalah matematis, dan respons peserta didik terhadap model 3CM berbantuan *Wayground* pada materi Trigonometri. Penelitian ini menggunakan metode quasi eksperimen dengan desain *Nonequivalent Control Group Design*. Penelitian ini dilakukan di SMAN 26 Bandung, teknik pengambilan sampel penelitian menggunakan *simple random sampling*, dengan populasi kelas X-1 sampai X-10 dan sampel kelas X-9 sebagai kelas eksperimen dan X-10 sebagai kelas kontrol yang masing-masing berjumlah 45 peserta didik. Instrumen penelitian berupa tes kemampuan pemecahan masalah matematis, lembar observasi, dan angket respon peserta didik. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran berada pada kategori sangat baik, dengan rata-rata persentase aktivitas guru sebesar 86,23% dan aktivitas peserta didik sebesar 86,35%. Rata-rata skor N_{gain} kelas eksperimen sebesar 0,65 lebih tinggi dibandingkan kelas kontrol sebesar 0,25. Hasil uji *t-independent* menunjukkan bahwa terdapat perbedaan peningkatan kemampuan pemecahan masalah matematis antara kedua kelas ($t_{hitung} (10,0054) > t_{tabel} (2,01)$). Selain itu, rata-rata skor posttest kelas eksperimen sebesar 72,71 lebih tinggi dibandingkan kelas kontrol sebesar 37,15, yang didukung oleh hasil uji *t-independent* ($t_{hitung} (10,371) > t_{tabel} (2,01)$). Respon peserta didik terhadap penerapan model model 3CM berbantuan *Wayground* berada pada kategori positif dengan persentase skor respons positif sebesar 82,11%. Berdasarkan hasil tersebut, model 3CM berbantuan *Wayground* dapat digunakan sebagai alternatif pembelajaran untuk meningkatkan kemampuan pemecahan masalah matematis peserta didik.

Kata Kunci: kemampuan pemecahan masalah matematis, *Cool Critical Creative Meaningful* (3CM), *Wayground*

ABSTRACT

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This study was motivated by the low level of students' mathematical problem-solving ability, as indicated by the results of a preliminary study conducted at SMAN 26 Bandung. The study aimed to determine the implementation of the learning process, the differences in the improvement of students' mathematical problem-solving ability, the differences in the achievement of students' mathematical problem-solving ability, and students' responses toward the implementation of the Wayground-assisted 3CM learning model on the Trigonometry topic. This research employed a quasi-experimental method using a Nonequivalent Control Group Design. The study was conducted at SMAN 26 Bandung. The sampling technique used was simple random sampling, with the population consisting of Grade X-1 to X-10 classes. The samples were Class X-9 as the experimental group and Class X-10 as the control group, each consisting of 45 students. The research instruments included a mathematical problem-solving ability test, observation sheets, and a student response questionnaire. The results showed that the implementation of the learning process was categorized as very good, with an average teacher activity score of 86.23% and student activity score of 86.35%. The average N-gain score of the experimental class was 0.65, which was higher than that of the control class (0.25). The independent samples *t*-test indicated a significant difference in the improvement of mathematical problem-solving ability between the two groups ($t_{\text{calculated}} = 10.0054 > t_{\text{table}} = 2.01$). Furthermore, the average posttest score of the experimental class was 72.71, which was higher than that of the control class (37.15), supported by the results of the independent samples *t*-test ($t_{\text{calculated}} = 10.371 > t_{\text{table}} = 2.01$). Students' responses toward the implementation of the Wayground-assisted 3CM learning model were categorized as positive, with a positive response percentage of 82.11%. Based on these findings, the Wayground-assisted 3CM learning model can be used as an alternative learning approach to improve students' mathematical problem-solving ability.

Keywords: mathematical problem-solving ability, Cool Critical Creative Meaningful (3CM), Wayground.