ABSTRAK

"Pembelajaran *Science Technology Engineering, Art, Mathematics* (STEAM) berbantu aplikasi *Cymath* dalam meningkatkan Kemampuan Pemecahan Masalah Matematis dan *Self Persistence* Siswa"

Penelitian ini dilatarbelakangi oleh belum maksimalnya inovasi guru dalam menerapkan media interaktif, kurangnya ketersediaan fasilitas di sekolah untuk mendukung proses pembelajaran, dan kemampuan pemecahan masalah matematis serta *Self-Presistence* masih tergolong rendah. Penerapan pembelajaran *Science Technology Engineering, Art, Mathematics* (STEAM) berbantu aplikasi *Cymath* diharapkan mampu menjadi solusi untuk meningkatkan kemampuan kemampuan pemecahan masalah matematis serta *Self-Presistence*. Metode penelitian yang digunakan adalah kuasi eksperimen yang menggunakan *Nonequivalent Control Group Design*. Populasi penelitian ini adalah kelas X IPA SMA Negeri 1 Cibatu Tahun Ajaran 2024/2025. Pengambilan sampel menggunakan *random sampling*, sehingga diperoleh sampel kelas X IPA 2 kelas eksperimen dan kelas X IPA 3 kelas kontrol. Instrumen yang digunakan adalah tes kemampuan pemecahan masalah, PAM, dan skala sikap. Hasil riset pada penelitian ini adalah Gambaran lintasan proses pembelajaran STEAM berbantu aplikasi cymath di kelas X IPA 2 pokok bahasan SPLTV berada pada kategori sangat baik. Terdapat peningkatan kemampuan pemecahan masalah matematis. Terdapat perbedaan Pencapaian kemampuan pemecahan masalah matemtais siswa. Terdapat peningkatan *self persistence* siswa.

Kata Kunci: *Science Technology Engineering, Art, Mathematics* (STEAM), *Cymath*, Kemampuan Pemecahan Masalah Matematis dan *Self-Presistence*.

ABSTRAK

"Learning Science Technology Engineering, Art, Mathematics (STEAM) helps the Cymath application in improving students' mathematical problem solving abilities and self-persistence".

This research is motivated by the lack of maximum teacher innovation in implementing interactive media, the lack of facilities in schools to support the learning process, and mathematical problem solving abilities and Self-Presistence which are still relatively low. The application of Science Technology Engineering, Art, Mathematics (STEAM) learning with the help of the Cymath application is expected to be a solution to improve mathematical problem solving abilities and Self-Presistence. The research method used was quasi-experimental using Nonequivalent Control Group Design. The population of this study was class X Science at SMA Negeri 1 Cibatu for the 2024/2025 academic year. Sampling used random sampling, so that samples were obtained from class X Science 2 experimental classes and class X Science 3 control classes. The instruments used were problem solving ability tests, PAM, and attitude scales. The research results in this study are an overview of the trajectory of the STEAM learning process assisted by the cymath application in class X Science 2, the subject of SPLTV is in the very good category. There is an increase in mathematical problem solving abilities. There are differences in the achievement of students' mathematical problem solving abilities. There is an increase in student self-persistence..

***Keywords*:** *Learning Science Technology Engineering, Art, Mathematics (STEAM), mathematical problem solving abilities, and self-persistence*