ABSTRAK

DEVI ROYANA GINTING. Pengaruh Model Pembelajaran Kooperatif Tipe STAD Berbantuan *Macromedia Flash* terhadap Keterampilan 4C *(Critical Thinking, Creative Thinking, Communication, and Collaboration)* Siswa. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Januari 2023.

Fisika merupakan bidang sains yang memberikan pengaruh yang luar biasa dalam perkembangan ilmu pengetahuan dan teknologi abad ke-21. *US-based Partnership for 21st Century Skill* (P21) mengemukakan bahwa kompetensi yang harus dimiliki oleh sumber daya manusia di abad 21 adalah: keterampilan berpikir kritis *(Critical Thinking Skills)*, keterampilan berpikir kreatif *(Creative Thinking Skills)*, keterampilan komunikasi *(Communication Skills)*, dan keterampilan kolaborasi *(Collaboration Skills)*. Penelitian ini bertujuan untuk mengevaluasi pengaruh model pembelajaran kooperatif tipe STAD berbantuan *Macromedia Flash* terhadap keterampilan berpikir kritis siswa, keterampilan berpikir kreatif siswa, keterampilan komunikasi siswa, keterampilan kolaborasi siswa dan terhadap keterampilan 4C siswa. Jenis penelitian ini termasuk kuasi eksperimen dengan desain *two group pretest-posttest design*. Populasi penelitian adalah seluruh siswa kelas VIII di SMPS Batari Medan, sebanyak 40 siswa. Sampel dalam penelitian ini terdiri dari dua kelas yang dipilih dengan tehnik *sampling total*. Satu kelas dijadikan sebagai kelas eksperimen (kelas yang diajar dengan model pembelajaran kooperatif tipe STAD berbantuan *Macromedia Flash*) dan satu kelas lagi dijadikan sebagai kelas kontrol (kelas yang diajar dengan menerapkan pembelajaran konvensional). Pengumpulan data variabel keterampilan berpikir kritis dan kreatif menggunakan instrumen tes soal uraian, varibel keterampilan komunikasi dan kolaborasi menggunakan lembar observasi. Hasil penelitian menunjukkan bahwa terdapat pengaruh model pembelajaran kooperatif tipe STAD berbantuan *Macromedia Flash* terhadap keterampilan berpikir kritis, berpikir kreatif, keterampilan komunikasi, kolaborasi dan keterampilan 4C siswa.

Keyword: Media, Model, 4C

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ABSTRACT

DEVI ROYANA GINTING. The Effect of STAD Type of Cooperative Learning Model Assisted by Macromedia Flash on Students' 4C (Critical Thinking, Creative Thinking, Communication, and Collaboration) Skills. Postgraduate School of the State University of Medan, 2023.

Physics is a field of science that has a tremendous impact on the development of science and technology in the 21st century. The US-based Partnership for 21st Century Skills (P21) suggests that the competencies that must be possessed by human resources are: critical thinking, creative thinking, communication, and collaboration skills. This study aims to evaluate the effect of STAD type of cooperative learning model assited by Macromedia Flash on students' critical thinking, creative thinking, communication, collaboration and on students' 4C skills. This type of research includes a quasi-experimental design with a two group pretest-posttest design. The research population was all students of eighth grade of SMPS Batari Medan, 40 students in total. The sample in this study consisted of two classes selected by total sampling technique. One class was used as the experimental class (taught by using the STAD type of cooperative learning model assisted by Macromedia Flash) and the other class was used as the control class (taught by using conventional learning). Collecting data on critical and creative thinking skills variables used essay test while communication and collaboration skills variables used observation sheets. The results showed that there was an effect of STAD type of cooperative learning model assisted by Macromedia Flash on students' critical thinking, creative thinking, communication, collaboration and 4C skills.

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