

ABSTRAK

SEPANIA SIAHAAN. (2026). **Penerapan Model *Team Games Tournament* (TGT) Berbantuan Desmos Dalam Meningkatkan Literasi Matematis dan *Self-Confidence* Siswa SMA.**

Kemampuan literasi matematis siswa di salah satu SMA di Kota Bandung masih belum mencapai tingkat yang optimal. Temuan ini menjadi dasar perlunya upaya pembelajaran yang lebih berorientasi pada pengembangan literasi matematis siswa. Hasil studi TIMSS (*Trends in International Mathematics and Science Study*) menunjukkan bahwa *self-confidence* siswa di Indonesia masih tergolong rendah, di bawah 30% (Mullis, 2012). Rendahnya keyakinan diri ini menyebabkan minat siswa belajar matematika rendah. Karena itu, matematika dianggap pelajaran yang sulit. Oleh karena itu, solusi yang dapat menyelesaikan masalah tersebut menggabungkan model pembelajaran tipe TGT dengan bantuan Desmos dianggap sebagai cara yang tepat untuk meningkatkan kualitas pembelajaran matematika. Penelitian ini bertujuan (1) melihat kemampuan literasi matematis siswa yang memperoleh model *Team Games Tournament* (TGT) berbantuan Desmos lebih tinggi daripada siswa yang mendapat model konvensional, (2) mengetahui *self-confidence* siswa yang memperoleh model pembelajaran *Team Games Tournament* (TGT) berbantuan Desmos lebih baik daripada siswa yang memperoleh pembelajaran konvensional, (3) mengetahui hubungan korelasi antara kemampuan literasi matematis dan *self-confidence* siswa yang memperoleh model pembelajaran *Team Games Tournament* (TGT) berbantuan Desmos, (4) mengetahui efektivitas model *Team Games Tournament* (TGT) berbantuan Desmos terhadap peningkatan kemampuan literasi matematis siswa. Metode penelitian yang digunakan yaitu kuasi-eksperimen (*quasi-experiment*). Subjek dari penelitian ini yaitu siswa kelas X SMA Negeri 6 Kota Bandung tahun ajaran 2025-2026 dengan sampel penelitian menggunakan 2 kelas, yaitu kelas X-6 sebagai kelas eksperimen dan X-3 sebagai kelas kontrol. Instrumen yang digunakan meliputi soal tes uraian untuk mengukur kemampuan literasi matematis dan *non-tes* angket *self-confidence*. Instrumen divalidasi dan diujicobakan, hasil dinyatakan valid dan memenuhi kualitas kelayakan soal yang baik. Analisis data dilakukan dengan menggunakan uji-t, uji korelasi dan uji efektivitas yang dibantu oleh *IBM SPSS 23 for Windows*. Analisis data hasil penelitian, didapat kesimpulan: (1). Peningkatan kemampuan literasi matematis siswa yang menggunakan model pembelajaran *Team Games Tournament* (TGT) berbantuan Desmos meningkat daripada siswa yang menggunakan model pembelajaran biasa; (2). *Self-confidence* siswa yang memperoleh model pembelajaran *Team Games Tournament* (TGT) berbantuan Desmos tidak lebih baik daripada siswa yang memperoleh model konvensional; (3). Tidak terdapat korelasi antara kemampuan literasi matematis dengan siswa yang memperoleh model pembelajaran *Team Games Tournament* (TGT) berbantuan Desmos; (4). Efektivitas model *Team Games Tournament* (TGT) berbantuan Desmos terhadap kemampuan literasi matematis siswa berkategori sedang.

Kata Kunci: Model *Team Games Tournament* (TGT), Desmos, Kemampuan literasi matematis, *Self-confidence*.

ABSTRACT

SEPANIA SIAHAAN. (2026). ***Implementation of the Team Games Tournament (TGT) Model Assisted by Desmos in Improving Mathematical Literacy and Self-Confidence of Senior High School Students.***

Students' mathematical literacy in one senior high school in Bandung City has not yet reached an optimal level. This finding underlies the need for a learning approach that is more oriented toward the development of students' mathematical literacy. The results of the TIMSS (Trends in International Mathematics and Science Study) study indicate that the self-confidence of Indonesian students remains relatively low, at below 30% (Mullis, 2012). This low level of self-confidence contributes to students' low interest in learning mathematics, leading mathematics to be perceived as a difficult subject. Therefore, a solution that combines the Team Games Tournament (TGT) learning model with the assistance of Desmos is considered an appropriate approach to improve the quality of mathematics learning. This study aims to (1) examine whether the mathematical literacy ability of students who receive the Team Games Tournament (TGT) learning model assisted by Desmos is higher than that of students who receive conventional learning, (2) determine whether the self-confidence of students who receive the Team Games Tournament (TGT) learning model assisted by Desmos is better than that of students who receive conventional learning, (3) determine the correlation between mathematical literacy ability and self-confidence among students who receive the Team Games Tournament (TGT) learning model assisted by Desmos, and (4) determine the effectiveness of the Team Games Tournament (TGT) learning model assisted by Desmos in improving students' mathematical literacy ability. The research method used is a quasi-experiment. The subjects of this study are tenth-grade students of SMA Negeri 6 Bandung City in the 2025–2026 academic year, with the research sample consisting of two classes, namely class X-6 as the experimental class and class X-3 as the control class. The instruments used include a descriptive test to measure mathematical literacy ability and a non-test self-confidence questionnaire. The instruments were validated and trialed, and the results were declared valid and met good feasibility quality standards. Data analysis was conducted using the t-test, correlation test, and effectiveness test, assisted by IBM SPSS 23 for Windows. Based on the data analysis, the following conclusions were obtained: (1) the improvement in mathematical literacy ability of students who used the Team Games Tournament (TGT) learning model assisted by Desmos was higher than that of students who used the conventional learning model; (2) the self-confidence of students who received the Team Games Tournament (TGT) learning model assisted by Desmos was not better than that of students who received the conventional learning model; (3) there was no correlation between mathematical literacy ability and self-confidence among students who received the Team Games Tournament (TGT) learning model assisted by Desmos; and (4) the effectiveness of the Team Games Tournament (TGT) learning model assisted by Desmos on students' mathematical literacy ability was categorized as moderate.

Keywords: *Team Games Tournament (TGT) Model, Desmos, Mathematical Literacy Ability, Self-Confidence.*

.RINGKESAN

SEPANIA SIAHAAN. (2026). Palaksanaan Modél *Team Games Tournamnet* (TGT) Dipikabantu ku Desmos dina Ningkatkeun Literasi Matematis sareng *Self-Confidence* Murid SMA

Kamampuh literasi matematis siswa di salah sahiji SMA di Kota Bandung acan ngahontal tingkat anu optimal. Tinemuan ieu jadi dadasar perluna upaya pangajaran anu leuwih museur kana ngamekarkeun literasi matematis siswa. Hasil studi TIMSS (*Trends in International Mathematics and Science Study*) nuduhkeun yen *self-confidence* siswa di Indonesia masih kaitung handap, nyaeta kurang ti 30% (Mullis, 2012). Handapna kayakinan diri ieu nyababkeun minat siswa diajar matematika jadi handap, nu antukna matematika dianggap pangajaran anu hese. Ku kituna, solusi anu ngagabungkeun model pangajaran tipe *Team Games Tournament* (TGT) jeung bantuan Desmos dianggap jadi cara anu pas pikeun ningkatkeun kualitas pangajaran matematika. Panalungtikan ieu boga tujuan pikeun (1) ningali kamampuh literasi matematis siswa anu narima model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos leuwih luhur batan siswa anu narima model konvensional, (2) nyaho *self-confidence* siswa anu narima model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos leuwih hade batan siswa anu narima pangajaran konvensional, (3) nyaho hubungan korelasi antara kamampuh literasi matematis jeung *self-confidence* siswa anu narima model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos, sarta (4) nyaho efektivitas model *Team Games Tournament* (TGT) berbantuan Desmos kana ningkatkeun kamampuh literasi matematis siswa. Metode panalungtikan anu dipake nyaeta kuasi-ékspérimén (quasi-experiment). Subjek tina panalungtikan ieu nyaeta siswa kelas X SMA Negeri 6 Kota Bandung taun ajaran 2025–2026, kalawan sampel panalungtikan ngagunakeun 2 kelas, nyaeta kelas X-6 minangka kelas ékspérimén jeung X-3 minangka kelas kontrol. Instrumen anu dipake ngawengku soal tés uraian pikeun ngukur kamampuh literasi matematis jeung non-tés angké *self-confidence*. Instrumen ieu geus divalidasi sarta diujicobakeun, hasilna dinyatakeun valid sarta nyumponan kualitas kalayakan soal anu hade. Analisis data dilaksanakeun ku ngagunakeun uji-t, uji korélasi, jeung uji efektivitas anu dibantu ku *IBM SPSS 23 for Windows*. Dumasar kana analisis data hasil panalungtikan, dicangreud kacindekan saperti kieu: (1) paningkatan kamampuh literasi matematis siswa anu ngagunakeun model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos leuwih luhur batan siswa anu ngagunakeun model pangajaran biasa; (2) *self-confidence* siswa anu narima model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos teu leuwih hade batan siswa anu narima model konvensional; (3) teu aya korelasi antara kamampuh literasi matematis jeung *self-confidence* siswa anu narima model pangajaran *Team Games Tournament* (TGT) berbantuan Desmos; sarta (4) efektivitas model *Team Games Tournament* (TGT) berbantuan Desmos kana kamampuh literasi matematis siswa kaasup kana kategori sedeng.

Kecap Konci: Modél *Team Games Tournament* (TGT), Desmos, Kamampuan Literasi Matematis, *Self-Confidence*.