

ABSTRAK

Revania Risang Ayu. 2024. **PENGARUH MODEL PEMBELAJARAN MISSOURI MATHEMATICS PROJECT BERBANTUAN PROPROFS QUIZ MAKER TERHADAP KEMAMPUAN KOMUNIKASI MATEMATIS PESERTA DIDIK PADA MATERI MOMENTUM DAN IMPULS**

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan komunikasi matematis peserta didik kelas X SMA Negeri 1 Ciamis tahun ajaran 2023-2024 pada materi momentum dan impuls sebesar 52,78. Upaya yang dilakukan peneliti untuk mengatasi masalah tersebut yaitu dengan menerapkan model pembelajaran *Missouri mathematics Project* berbantuan *Proprofs Quiz Maker* pada materi momentum dan impuls. Tujuan penelitian ini adalah untuk mengetahui pengaruh model pembelajaran *Missouri Mathematics Project* berbantuan *Proprofs Quiz Maker* terhadap kemampuan komunikasi matematis peserta didik pada materi momentum dan impuls. Penelitian ini menggunakan pendekatan kuantitatif dengan metode *Quasi Experiment* dan desain penelitian *Posttest-Only Control Group Design*. Sampel penelitian diambil dengan menggunakan teknik *cluster random sampling* sebanyak 2 kelas, yaitu kelas X MIPA-6 dan X MIPA-7 dengan jumlah setiap kelas 36 peserta didik. Instrumen penelitian berupa tes kemampuan komunikasi matematis berbentuk uraian. Uji coba instrumen berupa uji validitas dan uji reliabilitas. Uji prasyarat yaitu uji normalitas dan uji homogenitas. Lalu dilakukan uji hipotesis dengan signifikansi $\alpha = 0,05$. Hasil pengujian hipotesis dengan uji t menunjukkan nilai $t_{hitung} > t_{tabel}$ yaitu $5,73 > 1,67$ sehingga H_0 ditolak. Hal ini menunjukkan adanya pengaruh model pembelajaran *Missouri Mathematics Project* berbantuan *Proprofs Quiz Maker* terhadap kemampuan komunikasi matematis peserta didik di SMA Negeri 1 Ciamis. Hal ini karena model pembelajaran ini menekankan pada pemberian banyaknya latihan-latihan sehingga siswa menjadi lebih terampil dalam menyelesaikan berbagai macam bentuk soal termasuk soal yang melatihkan kemampuan komunikasi matematis.

Kata Kunci : Kemampuan Komunikasi Matematis, Model Pembelajaran Missouri Mathematics Project, Momentum dan Impuls, Proprofs Quiz Maker.

ABSTRACT

Revania Risang Ayu. 2014. **THE EFFECT OF MISSOURI MATHEMATICS PROJECT LEARNING MODEL ASSISTED BY PROPROFS QUIZ MAKER ON MATHEMATICAL COMMUNICATION SKILLS OF STUDENTS ON THE TOPIC OF MOMENTUM AND IMPULSE**

The research was motivated by the low mathematical communication skills of tenth-grade students at SMA Negeri 1 Ciamis in the 2023-2024 academic year on the topic of momentum and impulse, with a score of 52,78. The researcher was implementing the Missouri Mathematics Project learning model assisted by Proprofs Quiz Maker on the topic of momentum and impulse as a solution to the problem. This research aims to determine the effect of the Missouri Mathematics Project learning model assisted by Proprofs Quiz Maker on students' mathematical communication skills on momentum and impulse material. This research is a quantitative approach with a quasi-experimental research method. The design of this research is Posttest-Only Control Group Design. The research sample was taken using a cluster random sampling technique with 2 classes, X MIPA-2 and X MIPA- with 36 students in each class. The research instrument that has been used is a mathematical communication ability test in the form of a description. The research instrument was tested using validity and reliability tests. The data analysis techniques used are the normality test (Chi-Square test), Homogeneity test (Fisher test), and hypothesis test (t-test) with significance $\alpha=0,05$. The results of hypothesis testing with the t-test show that the value is $5,73 > 1,67$, so that H_a is accepted. This shows the influence of the Missouri Mathematics Project learning model assisted by Proprofs Quiz Maker on the mathematical communication skills of students at SMA Negeri 1 Ciamis. This is because this learning model emphasizes providing lots of exercises so that students become more skilled in solving various types of problems, including questions that practice mathematical communication skills.

Keywords: *Mathematical Communication Skills, Missouri Mathematics Project Learning Model, Momentum and Impulse, Proprofs Quiz Maker.*