Abstrak

Agim Abdullah Gimnastiar, 1222050005 (2026). "Penerapan *Peer Led Guided Inquiry* (PLGI) Berbantuan Aplikasi *Wayground* Untuk Meningkatkan Kemampuan Pemahaman Matematis Siswa"

Penelitian ini bertujuan untuk meningkatkan kemampuan pemahaman matematis siswa melalui penerapan model pembelajaran *Peer Led Guided Inquiry* (PLGI). Metode yang digunakan dalam penelitian ini adalah metode *quasi-experimental* dengan desain *nonequivalent control group design.* Sampel penelitian dipilih menggunakan teknik *cluster random sampling*, yang terdiri dari masing-masing 39 siswa kelas eksperimen dan kelas kontrol. Data dikumpulkan melalui instrumen lembar observasi keterlaksanaan pembelajaran, tes kemampuan pemahaman matematis (*pretes* dan *postes*), serta angket respon siswa. Teknik analisis data yang digunakan meliputi uji N_{gain}, uji-t sampel independen untuk membandingkan peningkatan dua kelas, dan analisis deskriptif untuk data observasi serta angket. Hasil penelitian menunjukkan bahwa keterlaksanaan model PLGI terlaksana sangat baik. Peningkatan kemampuan pemahaman matematis siswa yang menggunakan model PLGI berbantuan *Wayground* lebih baik daripada kelas konvensional dan Siswa memberikan respons positif terhadap model PLGI dengan persentase 76%. Dengan demikian, model PLGI berbantuan *Wayground* terbukti lebih baik dalam meningkatkan kemampuan pemahaman matematis siswa.

Kata kunci: *Peer Led Guided Inquiry* (PLGI), Aplikasi *Wayground*, Kemampuan Pemahaman Matematis

Abstrak

Agim Abdullah Gimnastiar, 1222050005 (2026). *"The Implementation of Peer-Led Guided Inquiry (PLGI) Supported by the Wayground App to Enhance Students' Mathematical Understanding"*

This study aims to improve student' mathematical understanding through the application of the Peer-Led Guided Inquiry (PLGI) learning model. The method used in this study was a quasi-experimental method with a non-equivalent control group design. The research sample was selected using a cluster random sampling technique, comprising 39 students in both the experimental and control groups. Data were collected using an observation sheet to assess the implementation of the learning process, tests of mathematical comprehension (pre-tests and post-tests), and a student response questionnaire. The data analysis techniques employed included the N-gain test, an independent samples t-test to compare the improvement between the two classes, and descriptive analysis for the observational data and questionnaire responses. The results of the study indicate that the implementation of the PLGI model was highly successful. The improvement in mathematical comprehension skills among pupils using the Wayground-assisted PLGI model was greater than that of the conventional class, and 76 per cent of pupils responded positively to the PLGI model. Consequently, the Wayground-assisted PLGI model has been proven to be more effective in enhancing students' mathematical comprehension skills.

Keywords: *Peer-Led Guided Inquiry (PLGI), Wayground application, mathematical comprehension skills*