

ABSTRAK

Afira, Sri Wahyuni. 2026. *Implementasi Model Discovery Learning Berbantuan E-LKPD Berbasis Kemaritiman untuk Meningkatkan Kemampuan Komunikasi Matematis Peserta Didik SMP*. Skripsi. Tanjungpinang: Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Dr. Alona Dwinata, S.Si., M.Si. Pembimbing II: Dr. Desi Rahmatina, S.Pd., M.Sc.

Kata Kunci : Discovery Learning, E-LKPD berbasis kemaritiman, kemampuan komunikasi matematis.

Kemampuan komunikasi matematis merupakan salah satu kompetensi penting dalam pembelajaran matematika, namun kemampuan tersebut masih tergolong rendah. Penelitian ini bertujuan untuk menguji apakah peningkatan kemampuan komunikasi matematis peserta didik yang belajar menggunakan model Discovery Learning berbantuan E-LKPD berbasis kemaritiman lebih tinggi dibandingkan peserta didik yang belajar menggunakan model Discovery Learning tanpa bantuan E-LKPD berbasis kemaritiman. Penelitian ini merupakan eksperimen semu (quasi experiment) dengan desain non-equivalent control group design. Sampel penelitian terdiri atas 35 peserta didik kelas eksperimen dan 36 peserta didik kelas kontrol yang dipilih menggunakan teknik cluster sampling. Data dikumpulkan melalui tes uraian berupa pretest dan posttest, kemudian dianalisis menggunakan indeks N-Gain, uji normalitas, uji homogenitas, dan uji Mann–Whitney U. Hasil penelitian menunjukkan bahwa rata-rata N-Gain kelas eksperimen sebesar 0,5665 lebih tinggi dibandingkan kelas kontrol sebesar 0,4322. Hasil uji Mann–Whitney U memperoleh nilai signifikansi sebesar 0,001 ($p < 0,05$), sehingga terdapat perbedaan peningkatan kemampuan komunikasi matematis yang signifikan antara kedua kelas. Dengan demikian, model Discovery Learning berbantuan E-LKPD berbasis kemaritiman lebih efektif dalam meningkatkan kemampuan komunikasi matematis peserta didik.

ABSTRACT

Afira, Sri Wahyuni. 2026. Implementation of the Discovery Learning Model Assisted by a Maritime-Based Electronic Student Worksheet (E-LKPD) to Improve Junior High School Students' Mathematical Communication Skills. Undergraduate Thesis. Tanjungpinang: Mathematics Education Study Program, Faculty of Teacher Training and Education, Raja Ali Haji Maritime University. Supervisor I: Dr. Alona Dwinata, S.Si., M.Si. Supervisor II: Dr. Desi Rahmatina, S.Pd., M.Sc.

Keywords: *Discovery Learning, maritime-based E-LKPD, mathematical communication skills.*

Mathematical communication skills are essential competencies in mathematics learning; however, students' skills remain relatively low. This study aimed to examine whether the improvement in students' mathematical communication skills taught using the Discovery Learning model assisted by maritime-based Electronic Student Worksheets (E-LKPD) was higher than that of students taught using the Discovery Learning model without maritime-based E-LKPD. This study employed a quasi-experimental method with a non-equivalent control group design. The sample consisted of 35 students in the experimental class and 36 students in the control class, selected using cluster sampling. Data were collected through essay-based pretest and posttest and analyzed using the N-Gain index, normality test, homogeneity test, and Mann–Whitney U test. The results showed that the mean N-Gain score of the experimental class was 0.5665, which was higher than that of the control class (0.4322). The Mann–Whitney U test yielded a significance value of 0.001 ($p < 0.05$), indicating a significant difference in the improvement of mathematical communication skills between the two classes. Therefore, the Discovery Learning model assisted by maritime-based E-LKPD was more effective in improving students' mathematical communication skills.