

ABSTRAK

Mendrofa, Versily. 2025. Pengembangan Modul Pembelajaran Berbasis *Project Based Learning* untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa SMP Negeri 1 Hiliduho. Skripsi. Pembimbing Netti Kariani Mendrofa, S.Pd., M.Pd.

Kemampuan pemecahan masalah matematis merupakan salah satu kompetensi penting yang harus dimiliki oleh siswa. Namun, hasil observasi awal di SMP Negeri 1 Hiliduho menunjukkan bahwa kemampuan tersebut masih tergolong rendah, dan bahan ajar berbasis *Project Based Learning* belum diterapkan di sekolah tersebut. Penelitian ini bertujuan untuk mengembangkan modul pembelajaran berbasis *Project Based Learning* yang valid, praktis, dan efektif dalam meningkatkan kemampuan pemecahan masalah matematis siswa. Penelitian ini merupakan penelitian pengembangan yang menggunakan model ADDIE, yang meliputi tahap analisis, desain, pengembangan, implementasi, dan evaluasi. Instrumen penelitian terdiri atas angket validasi ahli, angket kepraktisan guru dan siswa, serta tes kemampuan pemecahan masalah matematis. Data yang dikumpulkan berupa data kualitatif dan kuantitatif. Data kualitatif diperoleh dari saran, tanggapan, dan masukan para validator terhadap modul yang dikembangkan. Sementara itu, data kuantitatif berasal dari hasil penilaian validator, respons siswa dan guru, serta hasil tes kemampuan pemecahan masalah. Berdasarkan hasil penelitian, modul pembelajaran yang dikembangkan terbukti sangat valid, dengan hasil validasi ahli materi 1 sebesar 98%, ahli materi 2 sebesar 99%, ahli bahasa sebesar 96%, dan ahli desain sebesar 98%. Modul juga dinilai sangat praktis digunakan, dengan persentase kepraktisan oleh siswa sebesar 90,63% dan oleh guru sebesar 93%. Dari segi efektivitas, modul mampu meningkatkan kemampuan pemecahan masalah matematis siswa, yang ditunjukkan dengan rata-rata nilai sebesar 80,25 (kategori tinggi) dan ketuntasan klasikal sebesar 83,33% (kategori tinggi). Dengan demikian, modul pembelajaran berbasis *Project Based Learning* yang dikembangkan telah memenuhi kriteria valid, praktis, dan efektif, serta dapat menunjang pencapaian tujuan pembelajaran.

Kata kunci: *Project Based Learning*, modul pembelajaran, ADDIE, kemampuan pemecahan masalah matematis

ABSTRACT

Mendrofa, Versily. 2025. *Development of a Project Based Learning Module to Improve Students' Mathematical Problem-Solving Skills at SMP Negeri 1 Hiliduho*. Undergraduate Thesis. Advisor: Netti Kariani Mendrofa, S.Pd., M.Pd.

Mathematical problem-solving ability is one of the essential competencies that students must possess. However, initial observations at SMP Negeri 1 Hiliduho indicate that this ability is still relatively low, and Project Based Learning-based teaching materials have not yet been implemented at the school. This study aims to develop a Project Based Learning-based instructional module that is valid, practical, and effective in improving students' mathematical problem-solving skills. This research is a development study that employs the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation. The research instruments include expert validation questionnaires, practicality questionnaires for teachers and students, and a mathematical problem-solving test. The data collected consist of both qualitative and quantitative data. Qualitative data were obtained from suggestions, comments, and feedback provided by the validators regarding the developed module. Meanwhile, quantitative data were collected from the results of the validators' assessments, teacher and student responses, as well as the mathematical problem-solving test results. Based on the research findings, the developed learning module was proven to be highly valid, as indicated by validation scores of 98% from Expert 1 in content, 99% from Expert 2 in content, 96% from the language expert, and 98% from the design expert. The module was also considered highly practical, with a practicality score of 90.63% from students and 93% from the teacher. In terms of effectiveness, the module was able to improve students' mathematical problem-solving skills, as indicated by an average score of 80.25 (categorized as high) and a classical completeness percentage of 83.33% (also categorized as high). Thus, the Project Based Learning-based module developed in this study meets the criteria of being valid, practical, and effective, and supports the achievement of learning objectives.

Keywords: *Project Based Learning, learning module, ADDIE, mathematical problem-solving skills.*