ABSTRAK

Penelitian ini bertujuan untuk mengembangkan rencana pembelajaran matematika bergaya Paradigma Pedagogi Reflektif (PPR), mengetahui kualitas produk yang dikembangkan, serta mengetahui kesadaran siswa terhadap penggunaan energi listrik setelah mengikuti pembelajaran menggunakan produk yang dikembangkan. Pada pembelajaran bergaya PPR menekankan empat aspek utama, yaitu *competence, conscience, compassion,* dan *commitment*. Penelitian ini menggunakan jenis penelitian pengembangan *(R&D)* dengan model ADDIE yang terdiri dari lima tahapan, yaitu *Analysis, Design, Development, Implementation,* dan *Evaluation.*

Proses penelitian dilakukan di SMPN 1 Sleman, yang diawali dengan wawancara dan observasi. Peneliti mendapatkan permasalahan bahwa siswa kurang diberi kesempatan untuk melakukan refleksi pembelajaran. Kemudian dilakukan penyusunan pembelajaran dengan pendekatan PPR menggunakan jenis penelitian pengembangan dengan model ADDIE. Produk yang telah dibuat kemudian dilakukan penilaian validasi dan perbaikan produk sesuai dengan komentar dan saran dari validator. Produk tersebut selanjutnya dilakukan ujicoba dengan melibatkan siswa. Langkah terakhir yaitu memperbaiki produk berdasarkan hasil ujicoba agar produk dapat lebih baik.

Hasil validasi menunjukkan bahwa nilai rata-rata modul ajar 4,79; LKPD sebesar 4,91; tes penilaian sebesar 5; serta angket siswa sebesar 4,93. Keseluruhan rencana pembelajaran mendapatkan kriteria “Sangat Baik”. Hasil *implementasi* produk menunjukkan 81,25% siswa tuntas dari sisi *competence.* Selain itu, PPR ini berhasil menumbuhkan kesadaran siswa terhadap penghematan energi listrik. Penelitian ini diharapkan menjadi referensi bagi guru untuk memberikan ruang bagi siswa dalam melakukan refleksi pembelajaran, agar siswa dapat memahami nilai kemanusiaan pada suatu materi pembelajaran sehingga pembelajaran lebih bermakna.

Kata kunci: perbandingan senilai, perbandingan berbalik nilai, paradigma pedagogi reflektif.

ABSTRACT

This research aims to develop a mathematics learning plan based on the Reflective Pedagogical Paradigm (RPP), to assess the quality of the developed product, and to determine students' awareness of electricity usage after participating in learning using the developed product. The RPP-based learning emphasizes four main aspects: competence, conscience, compassion, and commitment. This study employs a research and development (R&D) approach using the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation.

The research process was conducted at SMPN 1 Sleman, starting with interviews and observations. The researcher identified the issue that students were not given enough opportunities to reflect on their learning. Subsequently, a learning plan was developed using the RPP approach through the R&D method with the ADDIE model. The created product was then validated and improved based on feedback and suggestions from validators. The product was subsequently tested with student involvement. The final step was to refine the product based on the trial results to enhance its quality.

The validation results showed that the average score for the teaching module was 4.79; the student worksheets (LKPD) scored 4.91; the assessment test scored 5; and the student questionnaire scored 4.93. Overall, the learning plan received a "Very Good" rating. The implementation results indicated that 81.25% of students achieved competence. Additionally, this RPP successfully fostered students' awareness of electricity conservation. This research is expected to serve as a reference for teachers to provide students with opportunities for reflective learning, enabling them to understand the values of humanity within the learning material, thus making the learning experience more meaningful.

Keywords: *direct proportion, inverse proportion, reflective pedagogical paradig*