

## ABSTRAK

### Pengembangan Perangkat Pembelajaran Matematika Menggunakan Paradigma Pedagogi Reflektif dan Jigsaw Tipe II pada Topik Prisma di Kelas VIII E SMP Negeri 1 Yogyakarta Tahun Ajaran 2015/2016

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Penelitian ini merupakan penelitian dan pengembangan perangkat pembelajaran matematika untuk topik prisma menggunakan Paradigma Pedagogi Reflektif (PPR) dan model pembelajaran Jigsaw tipe II. Latar belakang penelitian ini adalah pembelajaran matematika yang kurang inovatif dan masih berpusat pada guru dengan menggunakan metode ceramah. Penggunaan alat peraga yang terbatas juga menjadi salah satu kendala beberapa siswa tidak berperan aktif dan kurang menghargai guru dalam pembelajaran. Tujuan penelitian ini untuk mendeskripsikan proses pengembangan perangkat pembelajaran matematika materi prisma, mengetahui kualitas perangkat yang dihasilkan, dan mengetahui respon siswa terhadap proses pembelajaran matematika prisma dengan menggunakan PPR serta mengakomodasi teori Van Hiele dan Jigsaw tipe II.

Peneliti menggunakan prosedur penelitian dan pengembangan dari Borg and Gall, yang meliputi: (1) Analisis Masalah dan Pengumpulan Data; (2) Perencanaan; (3) Pengembangan Produk Awal; (4) Ujicoba Lapangan Terbatas; (5) Revisi Ujicoba Lapangan Terbatas. Perangkat pembelajaran yang dikembangkan adalah silabus, RPP, bahan ajar, LKS, THB dan penilaian sikap menggunakan PPR yang mengakomodasi teori Van Hiele dan Jigsaw tipe II. Subjek penelitian adalah siswa kelas VIII E SMP Negeri 1 Yogyakarta yang berjumlah 35 siswa, dengan obyek semua perangkat pembelajaran matematika yang telah dikembangkan. Teknik pengumpulan data yang digunakan adalah observasi, kuesioner, wawancara, pengambilan foto, video dan tes.

Deskripsi proses pengembangan perangkat pembelajaran matematika adalah (1) menganalisis masalah dan pengumpulan data dengan observasi dan wawancara pada guru matematika yang belum pernah menggunakan PPR dalam pembelajaran, (2) merencanakan penelitian, (3) pengembangan produk yang divalidasi oleh para ahli yaitu dosen dan guru matematika, (4) ujicoba terbatas yang dilakukan oleh guru yang pertama kali menggunakan PPR dan Jigsaw tipe II pada pembelajaran, dan (5) revisi hasil ujicoba terbatas. Hasil penelitian ini meliputi 1) hasil validasi perangkat pembelajaran adalah 3,85 termasuk dalam kategori "Baik" yang divalidasi oleh para ahli yaitu dosen dan guru mata pelajaran. 2) respon siswa terhadap proses pembelajaran menggunakan PPR mencapai 122,06 atau 76,29% termasuk dalam kategori "Bagus" hasil dari perhitungan kuesioner siswa, selain itu juga dilihat dari hasil refleksi siswa yang merasa senang dan menarik dengan pembelajaran ini.

Kata Kunci: Perangkat pembelajaran, PPR, Jigsaw tipe II, Prisma

## ABSTRACT

***The Development of Mathematic Learning Media Using  
Reflective Pedagogical Paradigm and Jigsaw Type II on Prism Topic  
in Class VIII E of SMP Negeri 1 Yogyakarta on 2015/2016 Academic Year***

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This study was a research and development of mathematic learning media for prism topic using Reflective Pedagogical Paradigm and learning media of Jigsaw type II. The background of this study was mathematic learning which was not innovative and still focused on the teacher in explaining the material. The limited use of learning model tools also became one of the reasons why the students were passive and could not pay attention to the teacher in teaching and learning activity. The aims of this study were to describe the process of the development of mathematic learning media for prism topic, to know the quality of the produced learning media, and to know students' responses on the mathematic learning process on prism topic by using Reflective Pedagogical Paradigm and by accommodating Van Hiele's theory with learning media of Jigsaw type II.

The researcher used the procedure of research and development from Borg and Gall which included: (1) Problem Identification and Information Collecting; (2) Planning; (3) Early Product Development; (4) Preliminary Field Testing; (5) Revision of Preliminary Field Testing. Learning media which were developed were syllabus, lesson plan, learning material, students' worksheet, THB and attitude assessment by using Reflective Pedagogical Paradigm which accommodated Van Hiele's theory with learning media of Jigsaw type II. The research subjects were 35 students of Class VIII E of SMP Negeri 1 Yogyakarta and the research objects were all mathematic learning media which had been developed. The data gathering techniques which were used in this study were observation, questionnaire, interview, photo and video taking, and test.

The descriptions about the process of the development of mathematic learning media were (1) identifying the problems and information collecting by observing and interviewing mathematics teacher who have not experienced using Reflective Pedagogical Paradigm in the teaching and learning activity, (2) planning the research, (3) product development which were validated by the experts, namely the lecturer and mathematics teacher, (4) preliminary field testing which was done by the teacher who experienced the use of Reflective Pedagogical Paradigm and learning media of Jigsaw type II for the first time, and (5) the revision of preliminary field testing's result. The research result were (1) the validation result of the learning media was 3.85 and it belonged to "Good" category which was validated by the experts, namely the lecturer and subject teacher; (2) students' responses on the learning process using Reflective Pedagogical Paradigm was 122.06 or 76,29% which belonged to "Good" category and it based on the calculation of students' questionnaire and also the result of

students' reflection which showed that they felt excited and interested in this learning.

***Keywords: Learning Media, Reflective Pedagogical Paradigm, Jigsaw Type II, Prism.***



