

ABSTRAK

Wiwin, Tea Tasia. Pengembangan Masalah Kontekstual yang Berorientasi pada *Higher Order Thinking Skills (HOTS)* Untuk Topik Kaidah Pencacahan di Kelas XI SMA Kolese De Britto. Tesis. Program Studi Magister Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.

Penelitian ini bertujuan untuk (1) mengembangkan masalah kontekstual yang berorientasi pada *HOTS* untuk topik kaidah pencacahan di kelas XI SMA Kolese De Britto (2) mengetahui efektivitas masalah kontekstual yang telah dikembangkan dalam menstimulus penggunaan *HOTS* untuk topik kaidah pencacahan di kelas XI SMA Kolese De Britto. Penelitian ini dilaksanakan di SMA Kolese De Britto pada bulan Oktober s.d. November 2017. Subjek yang terlibat dalam penelitian ini adalah siswa kelas XI Sosial 2 (S2) sebagai kelas penelitian dan XI Sosial 3 (S3) sebagai kelas uji coba, SMA Kolese De Britto Yogyakarta. Jenis penelitian yang digunakan adalah penelitian desain, dimana peneliti mendesain masalah kontekstual yang berorientasi pada *HOTS* berkaitan dengan materi kaidah pencacahan yang meliputi aturan pengisian tempat (*filling slot*), permutasi, dan kombinasi. Metode pengumpulan data yang digunakan adalah data tertulis, catatan lapangan dan observasi, wawancara, dan rekaman video. Teknik analisis data yang digunakan meliputi reduksi data, penyajian data, dan verifikasi atau penarikan kesimpulan. Hasil penelitian menunjukkan bahwa, (1) pengembangan masalah kontekstual yang berorientasi pada *HOTS* untuk topik kaidah pencacahan di kelas XI SMA Kolese De Britto dilaksanakan dalam beberapa langkah, yaitu: (a) melakukan studi literatur, mendesain soal beserta kisi-kisinya, (b) melakukan telaah soal *HOTS* oleh ahli atau pakar terkait aspek materi, konstruksi dan bahasa, (c) merevisi soal berdasarkan hasil telaah soal *HOTS*, (d) melakukan uji coba, (e) melakukan revisi (jika perlu) berdasarkan hasil pada kelas uji coba, (f) menerapkan soal-soal yang telah direvisi dalam pembelajaran di kelas penelitian, (g) menganalisis data yang diperoleh dari kelas penelitian. Selain itu, terdapat hal-hal yang perlu diperhatikan dalam pengembangan soal *HOTS*, diantaranya: (a) soal yang dikembangkan harus benar-benar mampu menstimulus kemampuan berpikir tingkat tinggi siswa. (b) contoh dan latihan soal yang diberikan harus mewakili setiap kemampuan berpikir tingkat tinggi sehingga siswa tidak hanya menonjol disalah satu kemampuan berpikir tingkat tinggi saja, (c) siswa perlu diberikan lembar respon untuk memberi penilaian terhadap soal sebagai bahan pertimbangan bagi peneliti dalam merevisi soal yang dikembangkan. (2) Masalah kontekstual yang telah dikembangkan mampu menstimulus penggunaan *Higher Order Thinking Skills (HOTS)* peserta didik pada level menganalisis (C4) dan mengevaluasi (C5) dengan kategori sedang.

Kata kunci: Pengembangan, Masalah Kontekstual, *Higher Order Thinking Skills (HOTS)*, Penelitian Desain, Kaidah Pencacahan

ABSTRACT

Wiwin, Tea Tasia. The Development of Contextual Problems Oriented to Higher Order Thinking Skills (HOTS) For Enumeration Rules in Grade XI Kolese De Britto Senior High School. Thesis. Master Program in Mathematics Education, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University, Yogyakarta.

This study aimed was to (1) the developing contextual problems oriented to HOTS for enumeration rules in grade XI Kolese De Britto senior high school (2) knowing the effectiveness of contextual problems that have been developed in stimulating the use of HOTS for enumeration rules grade XI of Kolese De Britto senior high school. The research was conducted at Kolese De Britto Senior High School in October to November 2017. Subjects involved in this research were students of grade XI Social 2 (S2) as research class and students of grade XI Social 3 (S3) as a trial class. The type of research used in this research was design research, where researchers design contextual problems oriented to *HOTS* related to enumeration rules that include filling slot, permutation, and combination. The methods of the data collection in this research were written data, field notes and observations, interviews, and video recordings. The data analysis technique used in this research were data reduction, data display, and verification or conclusions. The result of research showed that, (1) The development of contextual problem oriented to HOTS for enumeration rules in grade XI Kolese De Britto Senior High School carried out in several steps, namely: conducting literature studies, designing problems and lattice, (b) reviewing HOTS items by experts related to material, construction and language aspects, (c) revising the problem based on HOTS item analysis, (d) conducting trials, (e) conducting analysis (if necessary) based on class results testing, (f) apply questions that have been revised in learning in the research class, (g) analyze the data obtained from the research class. In addition there were things that need to be considered in the development of HOTS problems, including: (a) the problem developed should really be able to stimulate students' higher order thinking skills. (b) the examples and exercises of the given questions should represent every higher order thinking skills so that the students are not only prominent in any higher order thinking skills; (c) the students should be given a response sheet to assess the problem as a consideration of the researcher in revising the question developed. (2) Contextual problems that have been developed were able to stimulate the use of Higher Order Thinking Skills (HOTS) learners at the level of analyzing (C4) and evaluating (C5) with the medium category.

Keywords: Development, Contextual Problems, Higher Order Thinking Skills (HOTS), Design Research, Enumeration Rules