

**PENGEMBANGAN SOAL MATEMATIKA HOTS UNTUK MENGUKUR
KEMAMPUAN BERPIKIR KREATIF MATEMATIKA SISWA SMA
NEGERI 1 BLAHBATUH**

Oleh

I Putu Aditya Widharma Satya

Program Studi S1 Pendidikan Matematika

ABSTRAK

Penelitian ini bertujuan untuk menghasilkan instrumen pengukur kemampuan berpikir kreatif matematika siswa, dan untuk mengetahui kategori kemampuan berpikir kreatif matematika siswa kelas XI dalam menyelesaikan soal uraian dan pilihan ganda tipe *HOTS*. Penelitian ini merupakan penelitian pengembangan dengan langkah-langkah meliputi: penelitian dan pengumpulan informasi, perencanaan, pengembangan rancangan produk, uji coba terbatas (kelompok kecil dan kelompok besar). Uji coba instrumen dilakukan di SMAN 1 Blahbatuh. Jumlah keseluruhan subjek uji coba adalah 36 siswa. Data kemampuan berpikir kreatif siswa diperoleh melalui tes dalam bentuk uraian dan pilihan ganda. Instrumen tes terdiri dari 5 butir soal uraian dan 10 butir soal pilihan ganda. Hasil penelitian menunjukkan bahwa instrumen soal uraian dan pilihan ganda dinyatakan valid, instrumen soal uraian dan pilihan ganda dinyatakan reliabel dengan kategori sedang dengan nilai 0,56 dan 0,52 dan untuk daya beda diketahui soal tipe uraian sebagian besar terkategori cukup dengan indeks daya beda antara 0,33 – 0,39, untuk soal tipe pilihan ganda terkategori sangat baik dengan indeks daya beda antara 0,4 – 0,7, dalam taraf kesukaran butir soal diketahui soal tipe uraian terkategori soal sukar dan sedang, untuk soal tipe pilihan ganda terkategori soal sedang. Hasil uji coba instrumen menunjukkan bahwa soal yang dikembangkan dapat mengukur kemampuan berpikir kreatif matematika siswa dilihat dari hasil yang diperoleh dapat mengkategorikan kemampuan berpikir kreatif matematika siswa. Untuk soal tipe uraian, kategori kemampuan berpikir kreatif siswa tergolong sedang dengan persentase jumlah siswa sebesar 63,90% dan untuk soal pilihan ganda, kategori kemampuan berpikir kreatif siswa tergolong rendah dengan persentase jumlah siswa sebesar 47,22%. Ketercapaian siswa dalam tes kemampuan berpikir kreatif dilihat dari masing-masing indikator berpikir kreatif yaitu : *Originality* terkategori cukup dengan persentase kemampuan siswa sebesar 46,10%, *Fluency* terkategori cukup dengan persentase kemampuan siswa sebesar 44,36%, *Flexibility* terkategori kurang dengan persentase kemampuan siswa sebesar 23,47%, dan *Elaboration* terkategori cukup dengan persentase kemampuan siswa sebesar 45,28%.

Kata Kunci: pengembangan instrumen, *HOTS*, kemampuan berpikir kreatif matematika.

ABSTRACT

This study aims to produce an instrument to measure students' creative thinking abilities in mathematics and to determine the category of students' mathematical creative thinking abilities in class XI in solving essay questions and multiple-choice HOTS type. This research is development research with the steps: research and information gathering, planning, product design development, limited trials (small groups, and large groups). Instrument testing was carried out at SMAN 1 Blahbatuh. The total number of test subjects was 36 students. Data on students' creative thinking abilities were obtained through tests in the form of descriptions and multiple choice. The test instrument consists of 5 items in the description and 10 multiple-choice questions. The results showed that the instruments of essay and multiple-choice questions were declared valid, the instruments of essay questions and multiple-choice were declared reliable in the moderate category with a value of 0.56 and 0.52 and for the difference in power, it was known that most of the types of descriptions were categorized sufficiently with an index of power difference between 0.33 - 0.39, for multiple choice type questions are categorized very well with a different power index between 0.4 - 0.7, in the difficulty level of the items, it is known that the type of description is categorized as difficult and medium, for multiple choice type questions are categorized medium question. The results of the instrument trial show that the questions developed can measure students' mathematical creative thinking abilities seen from the results obtained, it can categorize students' mathematical creative thinking abilities. For the description type questions, the category of students' creative thinking ability was classified as moderate with a percentage of the number of students of 63.90% and for multiple-choice questions, the category of students' creative thinking abilities was low with a percentage of the number of students of 47.22%. Student achievement in the creative thinking ability test is seen from each indicator of creative thinking, namely: Originality is categorized as sufficient with a percentage of student ability of 46.10%, Fluency is categorized as sufficient with a percentage of student ability of 44.36%, Flexibility is categorized as less than the percentage of student ability amounted to 23.47%, and Elaboration was categorized as sufficient with a percentage of student ability of 45.28%.

Keywords: *instrument development, HOTS, mathematical creative thinking skills.*