

ABSTRAK

Shinta Narwastuti. 171414078. 2021. Pengembangan Lembar Kerja Siswa (LKS) Berbasis *Problem Solving* pada Materi Kaidah Pencacahan Kelas XI SMK Negeri 5 Yogyakarta. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.

Pembelajaran daring di kelas XI Tekstil B SMK Negeri 5 Yogyakarta menunjukkan kurangnya ketersediaan sumber belajar dan tidak adanya penggunaan LKS. Hal ini menjadi alasan peneliti ingin mengembangkan LKS dan mengetahui kualitas LKS ditinjau dari segi kevalidan, kepraktisan, dan keefektifannya. Penelitian ini dilaksanakan di SMK Negeri 5 Yogyakarta dengan subjek penelitian adalah 31 siswa kelas XI Tekstil B SMK Negeri 5 Yogyakarta tahun ajaran 2020/2021.

Jenis penelitian yang dilakukan adalah penelitian dan pengembangan dengan model pengembangan ADDIE yang terdiri dari 5 tahapan, yaitu tahap analisis, perancangan, pengembangan, implementasi dan evaluasi. Instrumen penelitian yang digunakan yaitu pedoman wawancara, lembar validasi LKS, LKS, lembar kuesioner respon siswa dan guru, serta tes kemampuan pemecahan masalah. LKS yang telah dikembangkan diujicoba di kelas XI Tekstil B SMK Negeri 5 Yogyakarta.

Berdasarkan hasil penelitian, diperoleh: (1) Proses pengembangan LKS meliputi 5 tahapan yaitu: (a) analisis: kompetensi, dengan melakukan studi literatur tentang kompetensi yang perlu dicapai siswa; karakteristik siswa, dengan melakukan wawancara terhadap guru untuk mengetahui bahwa siswa tergolong kurang aktif dan memiliki tingkat pemahaman yang rendah; serta analisis materi kaidah pencacahan sesuai kompetensi dasar; (b) perancangan: melakukan perancangan LKS berbasis *problem solving*; (c) pengembangan: membuat produk LKS kaidah pencacahan berbasis *problem solving*, instrumen, dan validasi LKS menggunakan uji validasi ahli; (d) implementasi: melakukan uji coba LKS terhadap siswa kelas XI Tekstil B SMK Negeri 5 Yogyakarta, dan (e) evaluasi: melakukan evaluasi formatif dan sumatif; (2) Kelayakan LKS yang ditinjau dari segi kevalidan yang meliputi aspek didaktik, konstruksi, teknis, kelayakan isi dan *problem solving* menunjukkan rata-rata hasil penilaiannya adalah 3,4 dari 5 dengan kategori baik. Selanjutnya, kelayakan LKS dari segi kepraktisan yang meliputi aspek ketertarikan, kemudahan, keterbantuan dan *problem solving* menunjukkan rata-rata persentase hasil penilaiannya adalah 77% dengan kategori sangat baik. Kemudian, LKS termasuk dalam kategori kurang efektif yang disebabkan oleh beberapa faktor, antara lain tidak semua siswa mengikuti pembelajaran daring, siswa bingung menggunakan LKS, dan siswa belum mencapai 2 indikator kemampuan pemecahan masalah yaitu menyusun strategi dan menerapkan strategi yang telah disusun.

Kata kunci: Lembar Kerja Siswa, *Problem solving*, dan Kaidah Pencacahan

ABSTRACT

Shinta Narwastuti. 171414078. 2021. Development of Student Worksheets Based on Problem Solving on Enumeration Rules for Class XI State Vocational High School 5 Yogyakarta. Thesis. Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University, Yogyakarta.

Online learning in class XI Textile B at State Vocational High School 5 Yogyakarta shows the lack of availability of learning resources and the absence of use of student worksheets. This is the reason researchers want to develop student worksheets and find out the quality of student worksheets in terms of validity, practicality, and effectiveness. This research was carried out at State Vocational High School 5 Yogyakarta in the 2020/2021 school year.

The type of research carried out is research and development with the ADDIE development model which consists of 5 stages, namely the analysis, design, development, implementation, and evaluation stages. The research instruments used were interview guidelines, student worksheets validation sheets, student worksheets, student and teacher response questionnaire sheets, and problem-solving ability tests. The student worksheets that have been developed were tested in class XI Textile B at State Vocational High School 5 Yogyakarta.

Based on the research results, obtained: (1) The process of developing student worksheets includes 5 stages, namely: (a) analysis: competence, by conducting a literature study on the competencies that students need to achieve; characteristics of students, by conducting interviews with teachers to find out that students are classified as less active and have a low level of understanding; as well as material analysis of the rules of enumeration according to basic competencies; (b) design: designing student worksheets based on problem solving; (c) development: making student worksheets based on rules problem solving, instruments, and validating student worksheets using expert validation tests; (d) implementation: testing student worksheets for class XI Textile B at State Vocational High School 5 Yogyakarta, and (e) evaluation: conducting formative and summative evaluations; (2) The feasibility of student worksheets in terms of validity which includes didactic, construction, technical, content feasibility and aspects problem solving shows that the average assessment result is 3.4 out of 5 with good categories. Furthermore, the feasibility of the worksheet in terms of practicality which includes aspects of interest, convenience, assistance, and problem-solving shows the average percentage of the assessment results is 77% with a very good category. Then, the student worksheets are included in the less effective category due to several factors, including not all students participating in online learning, students are confused about using student worksheets, and students have not achieved 2 indicators of problem-solving ability, namely formulating strategies and implementing strategies that have been prepared.

Keywords: Student Worksheet, Problem-solving, and Enumeration Rules