ABSTRAK

Rupina Malem Sari, NIM 4172111043 (2023). Pengembangan Media Pembelajaran Matematika Interaktif Berbasis RME Berbantuan *Software i-Spring* Dalam Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa.

Penelitian ini bertujuan untuk mengetahui proses pengembangan, kevalidan, kepraktisan, dan keefektifan media pembelajaran matematika interaktif berbasis RME berbantuan *software i-Spring* dalam meningkatkan kemampuan pemecahan masalah matematis pada siswa. Jenis penelitian ini adalah jenis penelitian dan pengembangan (*research and development)* dengan menggunakan model pengembangan Luther di modifikasi oleh Sutopo yang memiliki enam tahapan dalam proses pengembangan. Subjek penelitian ini adalah sekelompok siswa kelas VIII SMP Swasta ST Thomas 3 Medan semester genap tahun ajaran 2022/2023 berjumlah 27 siswa. Hasil penelitian memenuhi tujuan dari penelitian ini yaitu menjabarkan proses pengembangan media pembelajaran yang dikembangkan serta memenuhi kriteria kevalidan, kepraktisan, dan keefektifan media pembelajaran yang dikembangkan. Media pembelajaran dinyatakan valid berdasarkan persentase rata-rata hasil uji validitas ahli materi sebesar 81,6% dan ahli media sebesar 88% masuk kedalam kategori sangat baik dan sangat valid. Media pembelajaran dinyatakan praktis berdasarkan penilaian ahli atau praktisi (guru) yaitu masuk dalam kategori baik dan berdasarkan hasil pengamatan keterlaksanaan pembelajaran dalam aspek keterlaksanaan sintaks pembelajaran, sistem sosial dan prinsip reaksi masuk kedalam kategori sangat baik yaitu dengan nilai KM= 3,25 artinya media pembelajaran terlaksana sangat baik. Media pembelajaran dinyatakan efektif berdasarkan respon siswa sebesar 80,4% masuk kategori sangat kuat, penggunaan waktu pembelajaran yang memiliki skor rerata 4,3 masuk kategori tinggi, serta berdasarkan ketercapaian tujuan pembelajaran ditinjau dari hasil kemampuan pemecahan masalah matematis siswa menghasilkan skor N-Gain sebesar 0,71 masuk kedalam kategori tinggi.

Kata Kunci : Pengembangan Media Pembelajaran , Model Luther Dimodifikasi Sutopo, RME, *Software I-Spring,* Kemampuan Pemecahan Masalah Matematis.

ABSTRACT

Rupina Malem Sari, NIM 4172111043 (2023). Development of RME-Based Interactive Mathematics Learning Media Assisted by i-Spring Software in Improving Students' Mathematical Problem Solving Ability.

This study aims to determine the development process, validity, practicality, and effectiveness of RME-based interactive mathematics learning media assisted by i-Spring software in improving students' mathematical problem solving abilities. This type of research is a type of research and development (research and development) using the Luther development model modified by Sutopo which has six stages in the development process. The subjects of this study were a group of 27 students in grade VIII of Private Middle School ST Thomas 3 Medan, even semester of the 2022/2023 academic year. The results of the research fulfill the objectives of this study, namely to describe the process of developing learning media that is developed and fulfill the criteria of validity, practicality, and effectiveness of the learning media that are developed. Learning media is declared valid based on the average percentage of the results of the validity test of material experts of 81.6% and media experts of 88% fall into the category of very good and very valid. The learning media is declared practical based on expert or practitioner assessment, namely it is in the good category and based on the results of observations of the implementation of learning in the aspects of implementation of learning syntax, social systems and reaction principles it is included in the very good category, namely with a KM value = 3.25, meaning the learning media is implemented very well. . Learning media was declared effective based on student responses of 80.4% in the very strong category, the use of learning time which had an average score of 4.3 in the high category, and based on the achievement of learning objectives in terms of the results of students' mathematical problem solving abilities resulting in an N-Gain score of 0.71 is in the high category.

Keywords: Learning Media Development, Luther Model Modified by Sutopo, RME, I-Spring Software, Mathematical Problem Solving Ability.