ABSTRAK

Shana Audryetta Situmorang, NIM 4213111016 (2025). Pengembangan Media Interaktif Pada Pembelajaran Matematika Berbantuan *iSpring Suite* Untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa.

Pengembangan media interaktif pada pembelajaran matematika berbantuan *iSpring Suite* ini dibutuhkan membantu aktivitas pembelajaran di sekolah. Penelitian ini bertujuan untuk menghasilkan Media Interaktif berbantuan *iSpring Suite* yang valid, praktis, dan efektif dalam meningkatkan kemampuan pemecahan masalah matematis murid pada materi rasio dan perbandingan. Metode yang dipakai yakni metode penelitian dan pengembangan (R&D) dengan model ADDIE yang meliputi tahapan Analisis, Desain, Pengembangan, Implementasi, dan Evaluasi. Subjek penelitian yakni 28 murid kelas VII-B SMP Swasta Assisi Siantar. Instrument yang digunakan mencakup angket validasi oleh ahli materi, angket validasi oleh ahli media, angket kepraktisan dari pengajar, angket kepraktisan dari murid, soal *pretest* dan *postest*, dan angket respon keefektifan murid. Hasil penelitian menunjukkan bahwasanya: (1) Media pembelajaran yang dikembangkan dinyatakan valid oleh ahli materi dengan persentase rata-rata sebesar 83,51% dan oleh ahli media dengan persentase rata-rata sebesar 85%; (2) Media pembelajaran yang dikembangkan dinyatakan praktis, dengan persentase respon dari guru sebesar 88,8% dan dari murid sebesar 84,4%; (3) Media pembelajaran yang dikembangkan efektif dalam meningkatkan kemampuan pemecahan masalah murid, dengan peningkatan dari 53,25% menjadi 83,15%; (4) Peningkatan kemampuan pemecahan masalah matematis murid sebelum dan sesudah pemakaian media pembelajaran, yang dihitung dengan memakai rumus N_{Gain}, memperlihatkan peningkatan sebesar 0,688 dan termasuk dalam kategori sedang; (5) Angket respon murid mendapat persentase sebesar 82,5% yang menunjukkna bahwa murid punya respon positif terhadap media interaktif berbantuan *iSpring Suite*. Dari hasil penelitian maka dapat disimpulkan bahwasanya media interaktif pada pembelajaran matematika berbantuan *iSpring Suite* yang dikembangkan layak, praktis, dan efektif dipakai untuk meningkatkan kemampuan pemecahan masalah matematis murid.

Kata Kunci: Penelitian dan pengembangan, media pembelajaran interaktif, *iSpring suite*, kemampuan pemecahan masalah matematis.

ABSTRACT

Shana Audryetta Situmorang, NIM 4213111016 (2025). Development of Interactive Media in Mathematics Learning Assisted by iSpring Suite to Improve Students' Mathematical Problem-Solving Skills.

The development of interactive media in mathematics learning assisted by iSpring Suite is needed as a tool in the learning process at school. This study aims to produce Interactive Media assisted by iSpring Suite that is valid, practical, and effective in improving students mathematical problem-solving abilities in ratio and comparison materials. The method used is the research and development (R&D) method with the ADDIE model which includes the stages of Analysis, Design, Development, Implementation, and Evaluation. The research subjects were 28 students of class VII-B of Assisi Siantar Private Middle School. The instruments used included a validation questionnaire by material experts, a validation questionnaire by media experts, a practicality questionnaire from teachers, a practicality questionnaire from students, pretest and posttest questions, and a questionnaire on student's effectiveness responses. The results of the study showed that: (1) The developed learning media was declared valid by material experts with an average percentage of 83,51% and by media experts with an average percentage of 85%; (2) The developed learning media was stated to be practical, with a response percentage of 88.8% from teachers and 84,4% from students; (3) The developed learning media was effective in improving students problem-solving abilities, with an increase from 53,25% to 83,15%; (4) The increase in students mathematical problem-solving abilities before and after using the learning media, calculated using the N_{Gain} formula, showed an increase of 0,688 and was included in the moderate category; (5) The student response questionnaire obtained a percentage of 82,5%, which showed that students had a positive response to the interactive media assisted by iSpring Suite. From the results of the study, it can be concluded that the interactive media in mathematics learning assisted by iSpring Suite that was developed is feasible, practical, and effective for use in improving students mathematical problem-solving abilities.

Keywords: Research and development, interactive media, iSpring Suite, mathematical problem-solving ability.