

ABSTRAK

MIZTA DWI HAFIZAH FURQONI. Pengembangan Media Pembelajaran *Articulate Storyline* Berbasis *Quantum Learning* Untuk Meningkatkan Kemampuan Komunikasi dan Disposisi Matematis Siswa. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2023

Penelitian ini bertujuan untuk mendeskripsikan kevalidan, kepraktisan, dan keefektifan media pembelajaran *articulate storyline* berbasis *quantum learning* yang dikembangkan untuk meningkatkan kemampuan komunikasi dan disposisi matematis siswa. Penelitian ini merupakan penelitian pengembangan. Model pengembangan yang digunakan dalam penelitian ini adalah model ADDIE dengan subjek penelitian 25 orang siswa/i kelas VIII-1 dan 25 orang siswa/i kelas VIII-2 di SMP Tunas Karya. Objek dalam penelitian ini adalah media pembelajaran *articulate storyline* berbasis *quantum learning* pada materi Kubus dan Balok. Kevalidan media pembelajaran yang dikembangkan ditinjau dari analisis hasil validitas media pembelajaran oleh para validator dengan nilai rata-rata total sebesar 3,67 (kriteria “valid”). Sementara itu, kepraktisan media pembelajaran dilihat dari skor observasi keterlaksanaan pembelajaran pada uji coba II yaitu sebesar 3,67 (kriteria “terlaksana dengan baik”). Keefektifan media pembelajaran ditinjau dari empat aspek yaitu ketuntasan klasikal, skor angket disposisi matematis, respon siswa, dan peningkatan kemampuan komunikasi dan disposisi matematis siswa. Adapun ketuntasan klasikal kemampuan komunikasi matematis siswa pada uji coba II sebesar 88% (22 siswa). Rata-rata skor angket disposisi matematis siswa yaitu sebesar 68,45 (kategori “sedang”). Rata-rata respon siswa pada uji coba II adalah 3,72 (kriteria “tertarik”). Berdasarkan indeks gain ternormalisasi, diperoleh bahwa pada uji coba II terjadi peningkatan kemampuan komunikasi siswa sebesar 0,54 (kategori “sedang”) dan peningkatan disposisi matematis siswa sebesar 0,41 (kategori “sedang”).

Kata Kunci: Media Pembelajaran, *Articulate Storyline*, *Quantum Learning*, Kemampuan Komunikasi Matematis, Disposisi Matematis.

ABSTRACT

MIZTA DWI HAFIZAH FURQONI. Development of Quantum Learning-Based Articulate Storyline Learning Media to Improve Students' Communication Ability and Mathematical Disposition. Thesis. Medan: Mathematics Education Program Postgraduate School State University of Medan, 2023

This study aims to describe the validity, practicality, and effectiveness of Quantum Learning-based articulate storyline instructional media developed to improve students' communication skills and mathematical dispositions. This research is a development research. The development model used in this study was the ADDIE model with 25 students in class VIII-1 and 25 students in class VIII-2 at SMP Tunas Karya as subjects. The object of this research is the articulate storyline learning media based on quantum learning in the material of cubes and blocks. The validity of the learning media developed was viewed from the analysis of the results of the validity of the learning media by the validators with a total average value of 3.67 ("valid" category). Meanwhile, the practicality of learning media was seen from the observation score of learning implementation in trial II, which was 3.67 ("well implemented" category). The effectiveness of learning media is viewed from four aspects, namely classical completeness, scores of mathematical disposition questionnaires, student responses, and improvement of students' communication skills and mathematical dispositions. Meanwhile, the classical mastery of students' mathematical communication skills in trial II was 88% (22 students). The average score of the students' mathematical disposition questionnaire was 68.45 ("medium" category). The average student response in trial II was 3.72 ("interested" category). Based on the normalized gain index, it was found that in trial II there was an increase in students' communication abilities of 0.54 ("medium" category) and an increase in students' mathematical disposition of 0.41 ("medium" category).

Keywords: Learning Media, Articulate Storyline, Quantum Learning, Mathematical Communication Ability, Mathematical Disposition.