

## ABSTRAK

**Nia Irmaya. Pengembangan Media E-Komik Berbasis *Problem Based Learning* (PBL) Untuk Meningkatkan Kemampuan Pemecahan Masalah dan Minat Belajar Siswa SMP Swasta Muhammadiyah 16 Lubuk Pakam.**  
Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2024.

Berdasarkan hasil observasi awal di SMP Muhammadiyah 16 Lubuk Pakam, bahwa terdapat guru yang belum memaksimalkan perancangan, pengembangan, dan pemanfaatan media khususnya media e-komik yang belum pernah diterapkan. Serta kemampuan pemecahan masalah dan minat belajar siswa yang masih rendah. Penelitian ini bertujuan untuk (1) menghasilkan media E-Komik berbasis *Problem Based Learning* (PBL) yang valid, praktis dan efektif, (2) menganalisis peningkatan kemampuan pemecahan masalah serta (3) menganalisis peningkatan minat belajar siswa menggunakan media E-Komik berbasis *Problem Based Learning* (PBL). Penelitian ini menggunakan model ADDIE. Penelitian ini melibatkan siswa kelas VII SMP Muhammadiyah 16 Lubuk Pakam. Intrument yang digunakan dalam pengembangan media E-komik berupa RPP, LKPD, Tes Kemampuan Pemecahan Masalah dan Angket Minat Belajar Siswa. Adapun hasil penelitian ialah bahwa media e-komik memenuhi kriteria valid dengan skor 4,69, kemudian media e-komik dilakukan uji coba untuk mendapatkan media yang praktis dan efektif sehingga memenuhi kriteria praktis dengan skor 88,95, dan media e-komik memenuhi kriteria efektif dengan skor 87,79.

Peningkatan kemampuan pemecahan masalah yang diukur dari *N-gain* terhadap uji coba pengembangan yang dilakukan mengukur sebanyak dua kali terhadap pretest dengan posstest I dengan rata-rata *N-gain* sebesar 0,33 dalam kategori sedang, kemudian terhadap posstest I dan posstest II dengan rata-rata *N-gain* sebesar 0,73 dengan kategori tinggi. Selanjutnya peningkatan terhadap minat belajar siswa dengan mengukur terhadap pretest dan posttest dengan rata-rata *N-gain* sebesar 0,6 dalam kategori sedang. Berdasarkan hasil *N-gain* tersebut dinyatakan bahwasanya media e-komik berbasis *Problem Based Learning* (PBL) mampu meningkatkan kemampuan pemecahan masalah dan minat belajar siswa SMP Muhammadiyah 16 Lubuk Pakam.

Kata Kunci : Media E-Komik; Problem Based Learning; Kemampuan Pemecahan Masalah; Minat Belajar

## ABSTRACT

**Nia Irmaya. Development of E-Comics Media Based on *Problem Based Learning* (PBL) to Improve Problem Solving Skills and Learning Interests Of Students of SMP Swasta Muhammadiyah 16 Lubuk Pakam.** Mathematics Education Postgraduate Program. State University of Medan. 2024

Based on the initial observation in SMP Muhammadiyah 16 Lubuk Pakam, that there are teachers who have not maximized the design, development, and utilization of media, especially e-comics media that have never been applied. As well as problem-solving skills and student interest is still low. This study aims to (1) produce e-comics media based on Problem Based Learning (PBL) that is valid, practical and effective, (2) analyze the improvement of problem solving skills and (3) analyze the increase in student learning interest using e-comics media based on Problem Based Learning (PBL). This study used the ADDIE model. This study involved seventh grade students of SMP Muhammadiyah 16 Lubuk Pakam. Instrument used in the development of e-comic media in the form of lesson plans, LKPD, problem-solving ability tests and questionnaires interest in Student Learning. The results of the study is that the media e-comics meet the criteria valid with a score of 4.69, then the media e-comics conducted trials to obtain a practical and effective media that meets the practical criteria with a score of 88.95, and media e-comics meet the criteria effective with a score of 87.79.

The improvement of problem solving ability measured from N-gain to the development trials were measured twice against pretest with posstest I with an average N-gain of 0.33 in the medium category, then against posstest I and posstest II with an average N-gain of 0.73 in the high category. Furthermore, the increase in student learning interest by measuring the pretest and posttest with an average N-gain of 0.6 in the medium category. Based on the N-gain result, it is stated that e-comic media based on Problem Based Learning (PBL) is able to improve problem solving ability and learning interest of students of SMP Muhammadiyah 16 Lubuk Pakam.

## ABSTRACT

**Nia Irmaya.** Development of E-Comics Media Based on *Problem Based Learning* (PBL) to Improve Problem Solving Skills and Learning Interests Of Students of SMP Swasta Muhammadiyah 16 Lubuk Pakam. Mathematics Education Postgraduate Program. State University of Medan. 2024



*Character* <sup>THE</sup> *Building*  
UNIVERSITY