

**ABSTRAK**

**PENGEMBANGAN MODUL AJAR MATEMATIKA  
BERBASIS *PROBLEM BASED LEARNING* BERBANTUAN  
*CANVA* UNTUK MENINGKATKAN KEMAMPUAN  
BERPIKIR KRITIS SISWA DI SMA UISU MEDAN**

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Model pembelajaran *Problem Based Learning* (PBL) adalah model pembelajaran yang memberikan kesempatan kepada guru untuk mengola pembelajaran dikelas dengan melibatkan masalah kontekstual. Penelitian yang dilakukan berdasarkan hasil observasi dan wawancara dilakukan dalam proses belajar mengajar bahan ajar yang digunakan guru hanya buku paket dari penerbit erlangga serta metode yang digunakan hanya metode ceramah. Akibatnya siswa mengalami kejenuhan dalam belajar dan kurang aktif. Buku paket tersebut belum memberikan kesempatan siswa untuk lebih mengembangkan dan memfasilitasi kemampuan berpikir kritis siswa dalam memecahkan masalah kontekstual. Sehingga penelitian ini bertujuan untuk mengembangkan modul ajar matematika berbasis *Problem Based Learning* (PBL) berbantuan Canva untuk meningkatkan kemampuan berpikir kritis siswa di SMA UISU Medan. Model pengembangan perangkat pembelajaran yang digunakan adalah pengembangan Thiagarajan 4-D yaitu: *Define* (pendefinisian), *Design* (desain), *Development* (pengembangan) dan *Dessiminate* (penyebarluaskan). Populasi pada penelitian ini berada kelas X 2 dengan jumlah 31 Siswa. Berdasarkan hasil validasi oleh 6 orang validator dengan cara mengisi angket penilaian dengan skor rata-rata 4,39 berada pada kategori *sangat* baik. Hasil uji kepraktisan diperoleh melalui angket respon siswa dengan skor rata-rata 84,48 berada kategori baik. Hasil uji keefektifan diperoleh melalui tes hasil belajar siswa dengan skor rata-rata 80,6% berada kriteria baik, serta kemampuan berpikir kritis siswa berdasarkan rata-rata N-Gain 0,70 berada pada kriteria tinggi.

**Kata Kunci:** *Problem Based Learning*, Modul, Kemampuan Berpikir Kritis, 4-D

**ABSTRACT**  
**DEVELOPMENT OF A MATHEMATICS TEACHING MODULE BASED ON  
PROBLEM BASED LEARNING WITH THE HELP OF CANVA TO IMPROVE  
STUDENTS' CRITICAL THINKING ABILITIES AT UISU MEDAN HIGH  
SCHOOL**

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*Problem Based Learning* (PBL) learning model is a learning model that provides teachers with the opportunity to manage classroom learning by involving contextual problems. The research was conducted based on the results of observations and interviews carried out in the teaching and learning process. The teaching materials used by the teacher were only textbooks from the Erlangga publisher and the method used was only the lecture method. As a result, students experience boredom in learning and are less active. The textbook does not provide students with the opportunity to further develop and facilitate students' critical thinking skills in solving contextual problems. So this research aims to develop a mathematics teaching module based on Problem Based Learning (PBL) assisted by Canva to improve students' critical thinking skills at UISU Medan High School. The learning device development model used is Thiagarajan 4-D development, namely: Define, Design, Development and Disseminate. The population in this study was class X 2 with a total of 31 students. Based on the results of validation by 6 validators by filling out an assessment questionnaire with an average score of 4.39 in the very good category. The practicality test results were obtained through a student response questionnaire with an average score of 84.48 in the good category. The results of the effectiveness test were obtained through student learning outcomes tests with an average score of 80.6% which was in good criteria, and students' critical thinking abilities based on an average N-Gain of 0.70 were in high criteria.

Keywords: Problem Based Learning, Module, Critical Thinking Ability, 4-D