

# The Development of Impulse and Momentum E-Module with Authentic Learning Content in Cooperative Learning Model Syntax

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**Abstract: The Development of Impulse and Momentum E-Module with Authentic Learning in Cooperative Learning Model Syntax.** Research on the development E-Module impulse and momentum contained authentic learning has been carried out through cooperative learning model in class X MIPA 1 SMAN 10 Banjarmasin. The general aims of this research is to produce E-Module impulse and momentum contained authentic learning through cooperative learning model, as well as describing its feasibility. The specific aims of this research are to describe validity, practicality, and effectiveness of E-Modul contained authentic learning. The type of research is research and development used the ADDIE model within 17 students. Data obtained through instrument used is E-Module validation, student response questionnaire, and learning outcomes test. The results showed that: (1) validity of E-Module scored by 3.25 categorized as valid, (2) practicality of E-Module scored by 2.94 categorized as practical, (3) effectiveness of E-Module scored by 0.57 categorized as medium. It can be concluded that E-Module impulse and momentum contained authentic learning through cooperative learning model is eligible to be used in learning process.

**Keywords:** E-Module; Impulse and Momentum; Authentic Learning.

**Abstrak: Pengembangan E-Modul Impuls dan Momentum Bermuatan Pembelajaran Autentik dalam Sintaks Model Pembelajaran Kooperatif.** Telah dilakukan penelitian pengembangan E-Modul impuls dan momentum bermuatan pembelajaran autentik melalui model pembelajaran kooperatif di kelas X MIPA 1 SMAN 10 Banjarmasin. Tujuan umum penelitian ini adalah menghasilkan produk E-Modul impuls dan momentum bermuatan pembelajaran autentik melalui model pembelajaran kooperatif, sekaligus mendeskripsikan kelayakannya. Tujuan khusus penelitian adalah mendeskripsikan validitas, kepraktisan dan efektivitas E-Modul bermuatan pembelajaran autentik. Jenis penelitian ini adalah penelitian dan pengembangan dengan menggunakan model ADDIE. Subjek uji coba dalam penelitian ini adalah 17 orang peserta didik. Data diperoleh melalui instrumen lembar validitas E-Modul, angket respon, peserta didik, dan tes hasil belajar peserta didik. Hasilnya menunjukkan bahwa: (1) Validitas E-Modul diperoleh skor 3,25 berkategori valid; (2) Kepraktisan E-Modul diperoleh skor 2,94 berkategori praktis; (3) Efektivitas E-Modul diperoleh skor 0,57 berkategori sedang. Diperoleh simpulan bahwa E-Modul impuls dan momentum bermuatan pembelajaran autentik melalui model pembelajaran kooperatif dinyatakan layak digunakan dalam proses pembelajaran.

**Kata kunci:** E-Modul; Impuls dan Momentum; Pembelajaran Autentik.