

Preliminary Research Pengembangan Modul Berbasis *Discovery Learning* pada Materi Dinamika Rotasi untuk Meningkatkan Keterampilan Berpikir Kritis

Preliminary Research Development of Discovery Learning Based Module on Rotational Dynamics Material to Improve Critical Thinking Skills

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Abstract: The module is an independent learning package that includes a series of systematically designed learning experiences to help learners achieve learning goals. Therefore, the module must be organized in a creative, innovative manner, in accordance with the basic competencies and applicable curriculum, and the use of language is easy to understand by students understanding and can influence the mindset of students on learning materials. Rotational Dynamics is one of the sub-chapters on the subject of Curriculum Physics 2013 at SMA / MA level. In this Dynamics Rotation Material requires students to work hard in mastering the concept given. Therefore it is necessary a teaching materials in the form of modules that are effective in improving students critical thinking skills. The modules were developed using the Discovery Learning base. Students are given the opportunity to develop their creative ideas in solving the problem of rotational dynamics so that their critical thinking ability can develop. In this study, the preliminary research was conducted. The subjects of this study are the students of class XI MIA 2 and XI MIA 3 in MAN 2 Kediri, amounting to 78 students and 2 teachers. Preliminary research data obtained through questionnaire needs analysis for students and questionnaire needs analysis filled by teachers, as well as interviews conducted to confirm the questionnaire data needs analysis obtained. Based on preliminary research conducted on class XI students and teachers agreed to develop the learning module of Physics based on Discovery Learning as teaching material in learning.

Keywords: Preliminary research, discovery learning, rotational dynamics

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DISKUSI

Lilik Mawartingsih

Pertanyaan:

Basisnya apa dan bagaimana dalam mengukur tingkat kekritisan siswa?

Jawaban:

Basisnya adalah *Discovery Learning*(DL) dan pendekatannya adalah *Contextual Learning* (CTL). Pengukuran tingkat kritis siswa ditinjau dari keterpenuhan media yang mendukung siswa untuk

berpikir kritis serta terdapat rubrik keterpenuhan indikator berpikir kritis.

Siti Surnariyati

Pertanyaan:

Apakah hanya guru saja yang diobservasi atau ada yang lain? Bagaimana kesimpulannya?

Jawaban:

Observasi dilakukan pada guru, siswa dan juga bahan ajar. Kesimpulannya adalah disetujui untuk dilakukan penelitian pengembangan modul.