

ABSTRAK

Desi Esterina Br Tarigan. Pengembangan Modul Berbasis *Technological Pedagogical Content Knowledge* (TPACK).

Tujuan dari penelitian adalah mengetahui hasil kevalidan, kepraktisan, keefektifan dan pengaruh pengembangan modul berbasis *Technological Pedagogical Content Knowledge* (TPACK). Pengembangan modul menggunakan model ADDIE, yaitu analisis, desain, pengembangan, implementasi, dan evaluasi. Lembar validasi yang diisi oleh validator dapat digunakan untuk menilai tingkat kevalidan modul yang dikembangkan, lembar respon guru dan lembar respon siswa digunakan untuk menilai kepraktisan modul fisika yang dikembangkan, sedangkan tes hasil belajar siswa digunakan untuk menilai keefektifan modul. Hasil penelitian pengembangan modul fisika berbasis TPACK menunjukkan bahwa, pada tahap validasi hasil penilaian ahli materi dan ahli media, mendapat persentase 83,88% dan 74,53% dengan kategori valid. Hasil uji kepraktisan pada lembar respon guru menghasilkan persentase 88% dengan kategori sangat praktis dan hasil uji kepraktisan pada lembar respon siswa menghasilkan persentase 86,61% dengan kategori sangat praktis. Persentase tes hasil belajar siswa diperoleh sebesar 88,46% dan telah memenuhi kriteria efektif pada pencapaian ketuntasan secara klasikal. Hasil pengujian menyimpulkan modul berbasis TPACK telah teruji kevalidaan, kepraktisan, efektif dan berpengaruh pada peningkatan hasil belajar siswa sebagai sumber belajar fisika.

Kata Kunci : Modul, TPACK

ABSTRACT

Desi Esterina Br Tarigan. Development of Modules Based on Technological Pedagogical Content Knowledge (TPACK)

The aim of the research is to determine the results of the validity, practicality, effectiveness and influence of development of Technological Pedagogical Content Knowledge (TPACK) - based module. Module development uses the ADDIE model, namely analysis, design, development, implementation and evaluation. The validation sheet filled in by the validator can be used to assess the level of validity of the module being developed, the teacher response sheet and student response sheet are used to assess the practicality of the physics module being developed, while student learning outcome tests are used to assess the effectiveness of the module. The results of research on the development of TPACK-based physics modules show that, at the validation stage, the results of the assessment by material experts and media experts received percentages of 83.88% and 74.53% in the valid category. The practicality test results on the teacher response sheet produced a percentage of 88% in the very practical category and the practicality test results on the student response sheet produced a percentage of 86.61% in the very practical category. The percentage of student learning outcomes obtained was 88.46% and had met the effective criteria for achieving classical completeness. The test results concluded that the TPACK-based module had been tested for validity, practicality, effectiveness and had an effect on improving student learning outcomes as a physics learning resource.

Keywords: Module, TPACK