ABSTRAK

NURJUNIA UMATERNATE. Pengembangan perangkat pembelajaran model *project based learning* untuk meningkatkan hasil belajar pada konsep termodinamika siswa SMA Negeri 1 Kota Ternate. Skripsi, Program Studi Pendidikan Fisika. Jurusan MIPA, Fakultas Keguruan Dan Ilmu Pendidikan. Perguruan tinggi Negeri Universitas Khairun Ternate. Pembimbing: (1) Bapak Dr. Nasrun Balulu, S.Pd., M.Si dan Pembimbing: (II) Ibu Nurlaela Muhammad., S.Pd.,M.Pd.

Penelitian ini tujuannya adalah untuk mengembangkan perangkat pembelajaran model *project based*. Desain penelitian menggunakan *Education Research and development* (R & D) Borg & Gall dengan batasan penelitian pada tahap studi pendahuluan dan tahap pengembangan. Data validitas dan reliabilitas dianalisis menggunakan statistik *percentage of agreement* (R) dengan kriteria reliabilitas di atas 75%. Hasil analisis menunjukkan bahwa rata-rata nilai validitas pada RPP sebesar 4,41 dan nilai persentase reliabilitas sebesar 82,7%, rata-rata nilai validitas LKPD sebesar 4,59 dan nilai persentase sebesar 88,6% dan rata-rata nilai validitas LP tes hasil belajar siswa sebesar 4,7 dan nilai persentase sebesar 89%. Berdasarkan hasil analisis statistik menunjukkan bahwa Perangkat Pembelajaran Model *Project Based Learning* untuk meningkatkan hasil belajar siswa dinyatakan valid dan reliabel, sehingga layak digunakan dalam proses pembelajaran.

Kunci: Perangkat Pembelajaran, Validitas dan Reliabilitas.

ABSTRACT

NURJUNIA UMATERNATE. Development of project-based learning model to improve learning outcomes on the thermodynamic concept of students of SMA Negeri 1 Ternate city. Thesis, Physics Education Study Program. Department of Mathematics and Natural Sciences, Faculty of Teacher Training and Education. Khairun Ternate State University Public College. Advisors: (1) Mr. Dr. Nasrun Balulu, S.Pd., M.Si and Advisors: (II) Ms. Nurlaela Muhammad., S.Pd., M.Pd

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This study aims to develop a project based learning model. The research design uses Borg & Gall's Education Research and development (R & D) with research limitations at the preliminary study stage and the development stage. Validity and reliability data were analyzed using statistical percentage of agreement (R) with reliability criteria above 75%. The results of the analysis show that the average value of the validity of the RPP is 4.41 and the percentage value of reliability is 82.7%, the average value of the LKPD validity is 4.59 and the percentage value is 88.6% and the average value of the validity of the LP student learning outcomes test of 4.7 and a percentage value of 89%. Based on the results of statistical analysis shows that the Project Based Learning Model Learning Tool to improve student learning outcomes is declared valid and reliable, so it is suitable for use in the learning process.

Keywords: Learning Tools, Validity and Reliability.