ABSTRAK

SALAHUDDIN AL AYUBI PANE. NIM. 8166142011. Pengembangan Bahan Ajar Terintegrasi Lembar Kerja Dengan Model Pembelajaran *Project-Based Learning* Pada Materi Bentuk Molekul. Tesis : Program Pascasarjana, Universitas Negeri Medan, 2020.

Penelitian ini bertujuan untuk mengetahui kelayakan bahan ajar yang digunakan mahasiswa menurut Badan Standar Nasional Pendidikan (BSNP), mengetahui kelayakan bahan ajar terintegrasi lembar kerja dengan model pembelajaran *PjBL* pada materi bentuk molekul, mengetahui hasil belajar, peningkatan hasil belajar dan respon mahasiswa terhadap bahan ajar yang dikembangkan. Penelitian ini mengikuti metode penelitian dan pengembangan *ADDIE* dengan lima tahap: (1) Analisis; (2) Perencaan; (3) Pengembangan; (4) Implementasi; dan (5) Evaluasi. Sampel dipilih menggunakan teknik *purposive sampling*. Sampel dalam penelitian ini adalah dua bahan ajar yang digunakan mahasiswa dan satu kelas percobaan sebanyak 28 mahasiswa yang sedang mempelajari materi bentuk molekul di Universitas Negeri Medan. Instrumen yang digunakan pada penelitian adalah lembar uji kelayakan bahan ajar berdasarkan BSNP, test hasil belajar mahasiswa yang akan dianalis menggunakan uji t-test satu sampel dan lembar angket persepsi mahasiswa. Hasil penelitian menunjukkan bahwa (1) Tingkat kelayakan bahan ajar kimia yang digunakan mahasiswa layak digunakan berdasarkan hasil analisis, namun masih terdapat kekurangan sehingga perlu direvisi dan dikembangkan, (2) Hasil standarisasi bahan ajar yang dikembangkan dari tiga validator diperoleh hasil yang valid dan tidak perlu dilakukan revisi, (3) Hasil belajar mahasiswa lebih tinggi dari nilai standar kompetensi minimal setelah menggunakan bahan ajar yang dikembangkan, (4) peningkatan hasil belajar mahasiswa dikategorikan tinggi, (5) Persepsi mahasiswa terhadap penggunaan bahan ajar yang dikembangkan dikategorikan baik.

Kata kunci: Bahan ajar, Lembar kerja, Bentuk molekul, Ikatan kimia, Project-based learning.

ABSTRACT

SALAHUDDIN AL AYUBI PANE. NIM. 8166142011. The Development of Worksheet Integrated Learning Material With Project-based Learning Model on Molecular Geometry Topic. Thesis : Postgraduate Program, State University of Medan , 2020.

The study aims to know the feasibility of learning material which is used by student based on National Education Standard Agency of Indonesia (BSNP), to know the feasibility of worksheet integrated learning material with project-based learning model on molecule shape topic, to know learning outcome, normalized gain and student's responses to the developed learning material.. The study follows the research and development method of ADDIE with five stages: (1) Analysis; (2) Design; (3) Development; (4) Implementation; and (5) Evaluation. The selection of research sample used purposive sampling technique. The samples in this research are two of learning materials which are used by students and one experimental class of 28 students who were studying molecule shape topic at State University of Medan. The instrument used in the study are the sheet of feasibility test for teaching materials based on BSNP, the student learning outcomes test which would be analyzed using one sample t-test and sheet of student perception questionnaire. The research results shows that (1) The feasibilty of chemistry learning materials that used by student is proper to use based on analysis. But, there is still weakness that need to be revised and developed, (3) The standardization result of the developed learning material from three validators is valid and no need to be revised, (3) Student's learning outcome is higer than standard of minimum competency after used the developed learning material, (4) Normalized gain (n-gain) is high, (5) Student's perceptions to the use of the developed learnig material is good.

Keywords: Learning material, worksheet, Molecular Geometry, Chemistry bonding, Project-based learning.