ABSTRAK

Herbert C.B. Manalu, Pengembangan Bahan Ajar Materi Stoikiometri Terintegrasi Multimedia *Easy Sketch* untuk Meningkatkan Motivasi dan Hasil Belajar Siswa, Tesis, Medan: Program Studi Pendidikan Kimia, Pascasarjana Universitas Negeri Medan, 2021.

Penelitian ini bertujuan untuk mengetahui apakah bahan ajar materi stoikiometri yang digunakan di sekolah telah memenuhi standar BSNP; bahan ajar stoikiometri terintegrasi multimedia *easy sketch* hasil pengembangan telah memenuhi standar BSNP; motivasi belajar siswa dengan pengembangan bahan ajar terintegrasi multimedia *easy sketch* lebih tinggi daripada motivasi belajar siswa dengan bahan ajar yang digunakan di sekolah pada pokok bahasan stoikiometri; hasil belajar siswa dengan pengembangan bahan ajar terintegrasi multimedia *easy sketch* lebih tinggi daripada hasil belajar siswa dengan bahan ajar yang digunakan di sekolah pada pokok bahasan stoikiometri; serta hubungan antara motivasi belajar terhadap hasil belajar siswa yang diajarkan dengan bahan ajar terintegrasi multimedia *easy sketch* pada pokok bahasan stoikiometri. Jenis penelitian ini menggunakan metode *Development Research* yang menggunakan pengembangan model *ADDIE (Analysis, Design, Development, Implementation and Evaluations)*. Sampel dalam penelitian ini adalah siswa kelas X SMA Negeri 1 Pangkatan sebanyak 2 kelas yang berjumlah 60 orang. Hasil penelitian menunjukkan bahwa: 1) bahan ajar materi stoikiometri yang digunakan di sekolah telah memenuhi standar BSNP dengan persentase kelayakan bahan ajar materi stoikiometri yang digunakan di sekolah sebesar 86,5% dinyatakan kriteria layak dan tidak perlu revisi; 2) Bahan ajar stoikiometri terintegrasi multimedia *easy sketch* hasil pengembangan telah memenuhi standar BSNP. Hasil standarisasi pengembangan bahan ajar stoikiometri terintegrasi multimedia *easy sketch* berdasarkan BSNP yang dilakukan oleh validator ahli diperoleh rata-rata kelayakan sebesar 3,70 dengan kriteria layak dan tidak perlu revisi. Sedangkan, untuk nilai kelayakan media pembelajaran oleh ahli IT diperoleh rata-rata kelayakan sebesar 4,48 dengan kriteria sangat layak; 3) Motivasi belajar siswa dengan pengembangan bahan ajar terintegrasi multimedia *easy sketch* lebih tinggi daripada motivasi belajar siswa dengan bahan ajar yang digunakan di sekolah pada pokok bahasan stoikiometri. Hasil uji t, diperoleh $t_{tabel} < t_{hitung}$ (2,000 < 10,722) dengan nilai *Sig.(2-tailed)* = 0,000, sehingga disimpulkan Ha diterima; 4) hasil belajar siswa dengan menggunakan pengembangan bahan ajar terintegrasi multimedia *easy sketch* lebih tinggi daripada hasil belajar siswa dengan bahan ajar yang digunakan di sekolah (t_{tabel} = 2,000 < t_{hitung} = 4,467); 5) terdapat hubungan yang signifikan (r_{hitung} = 0,589 ≥ r_{tabel} = 0,361) antara motivasi terhadap hasil belajar peserta didik yang diajarkan dengan bahan ajar stoikiometri menggunakan media pembelajaran *easy sketch.*

Kata Kunci: bahan ajar, stoikiometri, *easy sketch*, hasil belajar, motivasi belajar.

ABSTRACT

Herbert C.B. Manalu, **Development of Easy Sketch Multimedia Integrated Stoichiometric Teaching Materials to Increase Student Motivation and Learning Outcomes**. Thesis. Medan: Chemical Education Study Program, Postgraduate Program, State University of Medan, 2021.

This study aims to determine whether the stoichiometric teaching materials used in schools have met BSNP standards; the integrated multimedia easy sketch stoichiometry teaching materials developed have met BSNP standards; student learning motivation with the development of integrated multimedia easy sketch teaching materials is higher than student learning motivation with teaching materials used in schools on the subject of stoichiometry; Student learning outcomes with the development of integrated multimedia easy sketch teaching materials are higher than student learning outcomes with teaching materials used in schools on the subject of stoichiometry; and the relationship between learning motivation and student learning outcomes taught with integrated multimedia easy sketch teaching materials on the subject of stoichiometry. This type of research uses the Development Research method that uses the ADDIE model development (Analysis, Design, Development, Implementation and Evaluations). The sample in this study were students of class X SMA Negeri 1 Pangkat as many as 2 classes totaling 60 people. The results showed that: 1) the stoichiometric teaching materials used in schools had met the BSNP standards with a percentage of the feasibility of stoichiometric teaching materials used in schools of 86.5%, the criteria were feasible and did not need revision; 2) The developed stoichiometric integrated multimedia easy sketch teaching materials have met the BSNP standards. The results of standardization of the development of integrated multimedia easy sketch stoichiometry teaching materials based on BSNP carried out by expert validators obtained an average feasibility of 3.70 with appropriate criteria and no need for revision. Meanwhile, for the feasibility value of learning media by IT experts, it was obtained an average feasibility of 4.48 with very feasible criteria; 3) Student learning motivation with the development of integrated multimedia easy sketch teaching materials is higher than student learning motivation with teaching materials used in schools on the subject of stoichiometry. The results of the t test, obtained t table <tcount (2,000 <10,722) with the value of Sig. (2-tailed) = 0,000, so it is concluded that Ha is accepted; 4) student learning outcomes using the development of integrated multimedia easy sketch teaching materials are higher than student learning outcomes with teaching materials used in schools (t table = 2,000 <tcount = 4,467); 5) there is a significant relationship (rcount = 0.589 ≥ rtabel = 0.361) between motivation on the learning outcomes of students taught with stoichiometric teaching materials using easy sketch learning media.

Keywords: teaching materials, stoichiometry, easy sketch, learning outcomes, learning motivation.