# ABSTRAK

**FRENSI HASANAH. NIM. 8176142011. Pengembangan bahan ajar kimia materi struktur atom terintegrasi model pembelajaran discovery untuk siswa SMK**. Tesis. Medan: Program Studi Pendidikan Kimia, Pascasarjana Universitas Negeri Medan, 2021.

Penelitian ini bertujuan untuk memperoleh bahan ajar untuk mata pelajaran kimia Sekolah Menenngah Kejuruan dan penilaian hasil belajar pada materi struktur atom sesuai Badan Standar Nasional Pendidikan (BSNP) di Sekolah Menenngah Kejuruan, mengetahui perbedaan hasil belajar siswa yang dibelajarkan dengan bahan ajar terintegrasi model pembelajaran discovery dengan peningkatan hasil belajar siswa yang dibelajarkan menggunakan buku pegangan siswa yang disediakan sekolah pada materi sturktur atom. Penelitian ini termasuk penelitian pengembangan (research and development). Sampel dipilih menggunakan teknik purposive sampling. Sampel penelitian ini adalah siswa kejuruan Teknik Bisnis Sepeda Motor yang terdiri dari dua kelas yaitu kelas eksperimen dan kelas kontrol masing-masing sebanyak 34 siswa. Instrumen dalam penelitian ini adalah lembar uji kelayakan bahan ajar berdasarkan Badan Standar Nasional Pendidikan (BSNP), tes hasil belajar mahasiswa yang dianalisis menggunakan uji pihak kanan dan angket motivasi siswa. Hasil penelitian menunjukkan bahwa Berdasarkan data yang diperoleh, terdapat peningkatan yang signifikan pada hasil belajar siswa yang dibelajarkan menggunakan bahan ajar kimia materi struktur atom terintegrasi model pembelajaran discovery untuk siswa SMK dengan yang dibelajarkan menggunakan buku yang dipergunakan siswa. Pada kelas eksperimen diperoleh peningkatan hasil belajar sebesar 83%. Sedangkan peningkatan hasil belajar siswa di kelas kontrol diperoleh sebesar 66%. Jadi, perbedaan peningkatan hasil belajar siswa pada kelas eksperimen dengan kelas kontrol adalah 17%. Dengan menggunakan *SPSS Windows 22* diperoleh hasil korelasi terhadap penelitian dengan nilai signifikansi sebesar $0,00 < 0,05$ maka hubungan antara motivasi dengan hasil belajar berkolerasi. Jadi dapat disimpulkan bahwa ada korelasi positif antara motivasi siswa tehadapap peningkatan hasil belajar kimia siswa yang dibelajarkan dengan menggunakan bahan ajar kimia teritegrasi model pembelajaran discovery untuk siswa SMK pada materi struktur atom.

*Kata kunci: bahan ajar terintegrasi model pembelajaran discovery, penelitian dan pengembangan, motivasi*

# ABSTRACT

**FRENSI HASANAH. NIM. 8176142011. Development of chemistry teaching materials on atomic structure integrated discovery learning models for vocational high school students.** Thesis. Medan: Chemical Education Study Program, Postgraduate Program, State University of Medan, 2021.

This study aims to obtain teaching materials for chemistry subjects in Vocational Middle Schools and assessment of learning outcomes on atomic structure material according to the National Education Standards Agency for Vocational High Schools. Knowing the differences in student learning outcomes that are taught with integrated teaching materials discovery learning model with an increase in student learning outcomes that are taught using student handbooks provided by the school on atomic structure material. This research includes development research (research and development). The sample was selected using purposive sampling technique. The sample of this research was vocational students of Motorcycle Business Engineering which consisted of two classes, namely the experimental class and the control class, each of which was 34 students. The instrument in this study was the teaching material feasibility test sheet based on the National Education Standards Agency. Student learning outcomes tests were analyzed using the right side test and student motivation questionnaire. The results showed that based on the data obtained, there was a significant increase in the learning outcomes of students who were taught using chemistry teaching materials, the integrated atomic structure material discovery learning model for vocational high school students with those who were taught using books used by students. In the experimental class, an increase in learning outcomes was obtained by 83%. Meanwhile, the increase in student learning outcomes in the control class was obtained by 66%. So, the difference in increasing student learning outcomes in the experimental class with the control class is 17%. By using SPSS Windows 22, the results obtained from research with a significance value of $0.00 < 0.05$, the relationship between motivation and learning outcomes is correlated. Meanwhile, the Pearson correlation results obtained were 0.919 while the r table was 0.339 so it could indicate that motivation and learning outcomes were related.

*Keywords: integrated teaching materials, discovery learning models, research and development, motivation*