# ABSTRAK

Leny Novita: **Pengembangan Buku Ajar Kimia Inovatif SMA/MA kelas XI Semester 2 Menggunakan Model Pembelajaran *Project Based Learning* (PjBL) Berdasarkan Kurikulum 2013**. Tesis. Medan: Program Studi Pendidikan Kimia Pascasarjana Universitas Negeri Medan, 2014

Perkembangan paradigma mengenai potensi yang dimiliki oleh sumber daya manusia mengakibatkan tuntutan di segala bidang, tidak hanya kualitas SDM, namun karakter SDM itu sendiri. Inovasi pembelajaran yang dimasukkan ke dalam buku ajar diharapkan dapat meningkatkan mutu pendidikan dan menumbuhkembangkan karakter generasi bangsa. Penelitian ini bertujuan mengembangkan buku ajar kimia inovatif SMA/MA kelas XI semester 2 berdasarkan standar isi kurikulum 2013 yang digunakan untuk menciptakan pembelajaran yang kreatif, efektif, dan menyenangkan, serta membantu peserta didik memperoleh hasil belajar yang optimal. Populasi penelitian adalah seluruh SMA Negeri di Sumatera Utara. Sampel dalam penelitian ini diambil secara *sampling purposif*, yaitu SMA Hang Tuah Belawan, SMAN 9 Medan dan SMAN 19 Medan masing-masing sebanyak 2 kelas. Kelas Eksperimen dan Kelas Kontrol. Teknik analisis data menggunakan *independent sample t-test* dengan *SPSS 20 for windows* pada taraf signifikansi $\alpha = 0{,}05$. Hasil penelitian menunjukkan (1) Buku ajar kimia inovatif yang dikembangkan untuk SMA/MA kelas XI semester 2 telah layak dan sesuai dengan kurikulum 2013, (2) Berdasarkan hasil analisis data masing-masing sekolah menunjukkan bahwa pengaruh penggunaan buku ajar kimia SMA/MA kelas XI semester 2 berdasarkan kurikulum 2013 memberikan hasil belajar kimia yang lebih baik dibandingkan dengan hasil belajar siswa yang diajar tanpa menggunakan buku ajar kimia inovatif, (3) Keefektifan buku ajar kimia dalam meningkatkan daya ingat siswa menunjukkan pada kelompok eksperimen (95%) lebih tinggi dibanding kelompok kontrol (93%). Penggunaan buku ajar yang dikembangkan berdasarkan kurikulum 2013 untuk siswa SMA/MA kelas XI semester 2 efektif dalam meningkatkan hasil belajar siswa.

**Katakunci:** *Buku Ajar Kimia, Kurikulum 2013, Model Pjbl, SMA*

## ABSTRACT

Leny Novita: **Development of Innovative Chemistry Textbook SMA / MA Class XI Semester 2 Using Learning Model Project Based Learning (PjBL) Based Curriculum 2013**. Thesis. Medan: Chemistry Education Studies Graduate Program, State University of Medan, 2014

The development paradigm of the potential of human resources resulted in demands in all areas, not just the quality of human resources, but human character itself. Learning innovations incorporated into textbooks is expected to improve the quality of education and develop the character of the nation's generation. This research aims to develop an innovative high school chemistry textbook / MA XI for second half class based on the 2013 curriculum standards that are used to create a creative learning, effective, and fun, and help learners gain optimal learning results. The population is all high schools in North Sumatra. The sample in this study were taken by purposive sampling, namely SMA Hang Tuah Belawan, Medan SMAN 9 and SMAN 19 Medan each as much as 2 classes. Experiment and Control Class. Data were analyzed by using independent sample t-test with SPSS 20 for windows at significance level $\alpha = 0.05$. Results showed (1) the innovative chemistry textbook developed for SMA / MA class XI 2nd half was decent and in accordance with the curriculum, (2) Based on the results of the data analysis of each school showed that the effect of using innovative high school chemistry textbook / MA XI 2nd half class based 2013 curriculum gave a better chemistry learning outcomes compared to student learning outcomes that taught without using innovative chemistry textbook, (3) The effectiveness of chemistry textbooks in improving student memory showed that the experimental group (95%) higher than the control group (93%). Using of the developed textbooks based 2013 curriculum for high school/MA students class XI 2nd semester effectively improved student learning outcomes.

***Keywords:*** Textbook of Chemistry, Curriculum 2013, the PjBL model, high school