

## ABSTRAK

Sri Wartika. Nim 8166142012. Pengembangan Modul Pembelajaran Sistem Koloid Terintegrasi Model *Project Based Learning (PjBL)* Untuk Meningkatkan Hasil Belajar Siswa SMA. Tesis. Medan: Program Studi Pendidikan Kimia Pascasarjana, Universitas Negeri Medan, 2020

Tujuan penelitian untuk menganalisis bahan ajar kimia SMA penerbit YW semester II kelas XI kurikulum 2013 revisi 2016 sesuai BSNP, mengetahui apakah modul kimia sistem koloid terintegrasi model PjBL hasil pengembangan valid dan dapat digunakan sesuai standar BSNP, mengetahui peningkatan hasil belajar siswa menggunakan bahan ajar penerbit YW dan modul kimia hasil pengembangan dan mengetahui respon siswa menggunakan modul hasil pengembangan. Jenis Penelitian adalah penelitian pengembangan dan eksperimen. Penelitian dilakukan pada siswa kelas XI SMA Negeri 1 Sunggal dan SMA Swasta Muhammadiyah 18 Sunggal Tahun Pelajaran 2018/2019 semester genap. Untuk mengetahui peningkatan hasil belajar siswa setelah menggunakan modul hasil pengembangan, maka data diuji menggunakan independent sample T-tes dengan program SPSS 23. Hasil penelitian menunjukkan bahwa (1) hasil analisis bahan ajar kimia SMA penerbit YW semester II kelas XI kurikulum 2013 revisi 2016 sesuai dengan BSNP dengan kategori valid dan tidak perlu direvisi;(2) modul kimia sistem koloid terintegrasi model PjBL hasil pengembangan telah valid dan dapat digunakan sesuai standar BSNP dengan kategori sangat valid dan tidak perlu direvisi;(3) hasil belajar siswa menggunakan bahan ajar kimia SMA penerbit YW memperoleh peningkatan hasil belajar dengan kategori sedang dan siswa dengan modul kimia sistem koloid terintegrasi model PjBL hasil pengembangan memperoleh peningkatan hasil belajar dengan kategori tinggi;(4) respon siswa setelah menggunakan modul kimia sistem koloid terintegrasi model PjBL hasil pengembangan tergolong sangat baik dengan nilai persentase rata-rata 94,65 %.

**Kata kunci:** modul kimia, sistem koloid, *Project Based Learning (PjBL)*



## ABSTRACT

Sri Wartika. Nim 8166142012. The Improvement of Learning Module of Chemistry on Integrated Colloid System of Project Based Learning Model to Increase The Result of the Learning Process. Thesis. Medan: Chemistry Program, Postgraduate School of the State University of Medan, 2020.

The aims of the research are to analyze the textbook of chemistry for senior high school published by YW semester II class XI of curriculum 2013 revised on 2016 based on BSNP, to find out whether the module of colloid system integrated with the development of PjBL (Project Based Learning) is valid dan capable with the standard published by BSNP, to find out the increasing of students learning result after using learning module of colloid system integrated with Project Based Learning (PjBL) system and to find out the increasing of students learning result after using textbook and knowing students' responses module of colloid system integrated with PjBL (Project Based Learning). The type of the study is development research and experiment. It examines how the module of Integrated with Project Based Learning (PjBL) integrated with PjBL model is organized based on curriculum 2013 and the experiment is managed by analyzing the using of the module in senior high school. The study was carried out to the students of 9<sup>th</sup> grade of SMA Negeri 1 Sunggal and SMA Swasta Muhammadiyah 18 Sunggal school year of 2018/2019 in second semester. The data are examined by using independent sample of T-test by using SPSS 23 program. The result of the research : (1) the chemistry textbook published by YW semester II class XI 2013 curriculum revised in 2016 is matched with BSNP standard in the category of valid and unnecessary for revision; (2) The chemistry module of colloid system integrated with PjBL (Project Based Learning) model is valid and matched with BSNP standard in the category of very valid and unnecessary for revision; (3) The students' learning using chemistry textbook published by YW improved in the category of medium and the learning result by using the chemistry module colloid system integrated with developed PjBL (Project Based Learning) model is in the category of high; (4) Students' response to the learning process by using the chemistry module of colloid integrated with developed PjBL (Project Based Learning) model is in the category of very good with estimated value 94.65 %.

**Keywords: chemistry module, colloid system, Project Based Learning (PjBL)**