ABSTRAK

Zulpadly. NIM. 8146174047. Analisis Kesulitan Belajar Siswa SMA Negeri pada Materi Bioteknologi Se-Kabupaten Rokan Hilir. Tesis Program Pasca Sarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui; (1) kesulitan belajar siswa pada materi Bioteknologi di lihat dari level kognisi; (2) indikator pada materi Bioteknologi yang sulit dipahami oleh siswa Kelas XII SMA Se-Kabupeten Rokan Hilir; (3) faktor eksternal dan internal yang dominan menjadi penyebab kesulitan belajar Bioteknologi; (4) kesulitan belajar Bioteknologi berdasarkan akreditasi sekolah; (5) perbedaan kesulitan belajar Bioteknologi antara sekolah di kota dan di pinggiran. Penelitian ini bersifat deskriptif kwantitatif. Populasi dari penelitian ini siswa kelas XII jurusan IPA dari SMA Negeri se- Kabupaten Rokan hilir yang terdiri dari 11 SMA, yaitu SMAN 2 Pujud, SMAN 5 Tanah Putih, SMAN 4 Tanah Putih, SMAN 1 Kubu, SMA 2 Bangko Pusako, SMAN 2 B Sinembah, SMAN 1 R Melintang, SMAN 1 Tj. Melawan, SMAN B. Pusako, SMAN 4 Bangko Pusako, SMAN 1 Bangko, dan SMAN 1 B. Hampar. Total sampel adalah sebanyak 644 orang siswa. Sampel dipilih dengan menggunakan tekhnik *purposive sampling*. Pengumpulan data dilakukan menggunakan instrument tes pilihan berganda untuk penguasaan materi Bioteknologi, dan angket. Data diolah dengan menggunakan statistik deskriptif menggunakan persentase dan uji *t*. Hasil penelitian menggunakan tes penguasaan materi Bioteknologi menunjukkan bahwa hanya 70 siswa yang tuntas (10,87%) dari 644 siswa. Terdapat sebanyak 574 siswa tidak tuntas (89,13%). Berdasarkan indikator pembelajaran, diketahui bahwa siswa yang mengalami kesulitan belajar terbesar terdapat pada indikator Menjelaskan proses rekayasa genetika 67,44%, Menjelaskan proses Kultur jaringan 63,44%, Menjelaskan proses rekombinasi gen 63,07 dan Menjelaskan Dampak penggunaan rekayasa genetika 63,17%. Ditinjau dari aspek kognitif, diketahui bahwa kesulitan belajar terbesar terdapat pada level C5 dengan persentase sebesar 59,90% diikuti oleh C4 sebesar 59.41%, C6 sebesar 56.07%, C3 sebesar 53.03%, C2 sebesar 53.02% dan diakhiri oleh level C1 sebesar 50.24%. Faktor internal penyebab kesulitan belajar pada materi bioteknologi rata-rata berada pada kategori sedang yaitu minat belajar siswa 57.20%, motivasi belajar 59.05% dan bakat 56.30%. Sedangkan faktor eksternal penyebab kesulitan belajar pada materi bioteknologi berada pada kategori sedang yaitu peranan guru sebesar 59.59% dan sarana 47.13%. Dari hasil penelitian didapatkan rata-rata persentase kesulitan belajar siswa yang berada di pusat kota sebesar 50,06% dan di pinggiran kota sebesar 60,05%. Hasil uji t menunjukkan bahwa terdapat perbedaan kesulitan belajar Bioteknologi yang signifikan di antara sekolah yang berada di kota dan pinggiran dengan nilai signifikansi 0,024 < 0,05. Selanjutnya berdasarkan Akreditasi sekolah diketahui bahwa rata-rata kesulitan belajar siswa di sekolah akreditasi A sebesar 51,04% sedangkan akreditasi B sebesar 60,87%. Dari hasil uji *t* diperoleh bahwa terdapat perbedaan hasil belajar siswa pada materi bioteknologi antara sekolah akreditasi A dengan sekolah akreditasi B dengan nilai signifikan 0,027 < 0,05.

Kata Kunci: *Kesulitan Belajar Siswa, Bioteknologi, Indikator Belajar, Ranah Kognitif, Faktor-Faktor Kesulitan Belajar*

ABSTRACT

Zulpadly. **NIM. 8146174047. Analysis of Student Learning Difficulties on Biotechnology Subject Matter of Senior High School in Kabupaten Rokan Hilir. Thesis. Postgraduate Program, State University of Medan. 2016**.

This study aims to determine; (1) the difficulty of students in Biotechnology matter in view of the level of cognition; (2) indicators on Biotechnology elusive material by students of class XII SMA in Kabupaten Rokan Hilir; (3) external and internal factors were the dominant cause of learning difficulties Biotechnology; (4) difficulty learning Biotechnology based school accreditation; (5) Biotechnology learning difficulties difference between schools in the city and on the outskirts. This research is descriptive quantitative. The population of this study majoring in science class XII student of SMA Se-Kabupaten Rokan Hilir consists of 11 high school, SMAN 2 Pujud, SMAN 5 Tanah Putih, SMAN 4 Tanah Putih, SMAN 1 Kubu, Bangko Pusako SMA 2, SMAN 2 B Sinembah, SMAN 1 R Melintang, SMAN 1 Tj. Melawan, SMAN B. Pusako, SMAN 4 Bangko Pusako, SMAN 1 Bangko and SMAN 1 Batu Hampar. The total sample is as much as 644 students. Samples were selected using *purposive sampling* techniques. Data is collected using a multiple-choice test instrument for the mastery of the material Biotechnology, and questionnaires. The data was processed using descriptive statistics and t test using percentages. The results using the test mastery of Biotechnology show that only 70 students who completed (10.87%) out of 644 students. There are as many as 574 students were not completed (89.13%). Based on indicators of learning, it is known that students who have learning difficulties are greatest in the indicator Explains 67.44% the process of genetic engineering, tissue culture process Explains 63.44%, 63.07 Explaining the process of recombination and Explaining the effects of using genetically engineered 63.17% , Judging from the cognitive aspect, it is known that the greatest learning difficulties are at the level of C5 with a percentage of 59.90%, followed by 59.41% for C4, C6 amounted to 56.07%, amounting to 53.03% C3, C2 amounted to 53.02% and topped by a C1 level of 50.24%. Internal factors that cause learning difficulties at an average biotech material in middle category is 57.20% interest in student learning, motivation to learn to 59.05% and 56.30% talent. While external factors that cause learning difficulties in the matter of biotechnology in middle category that is the role of teachers by 59.59% and 47.13% means. From the results, the average percentage of students' learning difficulties who are in the city center amounted to 50.06% and in the suburbs of 60.05%. T test results showed there are differences in Biotechnology significant learning difficulties among schools in the city and suburbs with significant value 0.024 <0.05. Furthermore, based on accreditation of the school in mind that the average students' learning difficulties in school accreditation of A is 51.04% while accreditation of B is 60.87%. From the results of the t test showed there are differences in student learning outcomes in biotechnology materials between schools accreditation of A by accreditation of B schools with significant value 0.027 <0.05.

Keywords: *Student Learning Difficulties, Biotechnology, Learning Indicators, Cognitive, Learning Difficulties Factors*