

## ABSTRAK

**Eryati Zetkas.** Analisis Kesulitan Belajar Siswa Materi Bioteknologi Kelas IX SMP se-Kota Padangsidimpuan. Tesis Program Pasca sarjana Universitas Negeri Medan (Unimed), 2016.

Penelitian ini bertujuan untuk mengetahui jumlah siswa yang tidak tuntas pada materi Bioteknologi, menganalisis indikator yang paling sulit dipahami, menganalisis Ranah Kognitif pada materi Bioteknologi, dan mendiagnosis faktor penyebab kesulitan belajar pada materi Bioteknologi. Penelitian ini bersifat diskriptif kualitatif dengan jumlah sampel sebanyak 335 siswa. Teknik pengambilan sampel digunakan teknik cluster random sampel. Teknik pengumpulan data adalah instrument tes pilihan berganda untuk penguasaan materi Bioteknologi, angket dan wawancara. Data diolah dengan teknik persentase. Berdasarkan hasil penelitian tes penguasaan materi Bioteknologi menunjukkan bahwa: (a). Ada sebanyak 151 siswa yang tuntas dengan persentase (45,62%) dan sebanyak 180 siswa tidak tuntas dengan persentase (54,38%); (b). Indikator kompetensi yang mengalami kesulitan belajar adalah membedakan produk bioteknologi pangan yang konvensional dan modern (18,91%), mengidentifikasi manfaat bioteknologi (30,25%), memberikan beberapa contoh pembuatan makanan dan minuman dengan penggunaan bioteknologi konvensional (30,49%), membuat produk bioteknologi pangan sederhana yang dapat dimanfaatkan dalam kehidupan sehari-hari (29,16%), mengurutkan langkah-langkah pembuatan kultur jaringan (13,92%), mengidentifikasi proses dan keuntungan serta kerugian melakukan kultur jaringan (51,67%), mengidentifikasi proses dan keuntungan serta kerugian melakukan hidroponik (44,27%), mendeskripsikan cara bercocok tanam dengan media aeroponik (35,31%), mengidentifikasi proses produk rekombinasi gen dengan sifat baru yang kita inginkan (32,03%), dan mengidentifikasi dampak bioteknologi (22,03%). Ditinjau dari ranah kognitif kesulitan belajar siswa pada materi Bioteknologi pada C1 sebesar 50,93%, C2 sebesar 32,22%, C3 sebesar 25,39%, C4 sebesar 32,52%, dan C5 sebesar 30,51%, C6 sebesar 25,73%. Faktor internal penyebab kesulitan belajar pada materi Bioteknologi yaitu minat sebesar 38,14%, motivasi sebesar 42,20%, dan bakat sebesar 41,33%. Sedangkan faktor eksternal peran guru sebesar 23,10% dan sarana sebesar 13,71%.

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

## ABSTRACT

**Eryati Zetkas.** The Analysis of Biotechnology Learning Difficulties Students Class IX Junior High School in Padangsidempuan City. The Thesis of the Program Graduate State University of Medan (Unimed), 2016.

This study aims to determine the number of students who did not complete the Biotechnology material, analyzing the indicators of the most difficult to understand, analyze Cognitive Domains on Biotechnology material, and diagnose the causes of learning disabilities in Biotechnology material. This research is descriptive qualitative with a total sample of 335 students. The sampling technique used cluster random sampling. The data collection technique is a multiple-choice test instrument for the mastery of Biotechnology, questionnaires and interviews. The data is processed by using a percentage. Based on the results of tests mastery of biotechnology research shows that: (a). There were 151 students who completed the percentage (45.62%) and as many as 180 students did not complete the percentage (54.38%); (b). Indicators competencies with learning difficulties is distinguishing conventional food biotechnology products and modern (18.91%), identifying the benefits of biotechnology (30.25%), giving a few examples of the manufacture of food and beverages with the use of conventional biotechnology (30.49%), make simple food biotechnology products that can be used in everyday life (29.16%), sort the steps of making a tissue culture (13.92%), identify the process and the advantages and disadvantages of undertaking a tissue culture (51.67%), identify the process and the advantages and disadvantages do hydroponics (44.27%), describe how to grow crops with aeroponic media (35.31%), identifying the gene recombination products with new properties that we want (32.03%), and identify the impact biotechnology (22.03%). Judging from the cognitive difficulties of students in Biotechnology material on C1 of 50.93%, 32.22% C2, C3 amounted to 25.39%, C4 amounted to 32.52%, and 30.51% of C5, C6 of 25 , 73%. Internal factors that cause learning difficulties in Biotechnology material that is of interest at 38.14%, amounting to 42.20% motivation and talent of 41.33%. While external factors the role of teachers by 23.10% and amounted to 13.71% means.

**Keywords:** Learning Difficulties Students, Biotechnology, Indicators, Domains Cognitive Factors Learning Difficulties.