ABSTRAK

Wahida Rahmadani, Analisis Kesulitan Belajar Biologi Siswa Pada Materi Bioteknologi di SMA Negeri se-Kota Medan.

Penelitian ini bertujuan untuk mengetahui Kesulitan Belajar Siswa di SMA Negeri Se-Kota Medan. Penelitian ini merupakan penelitian deskriptif. Populasi penelitian ini adalah seluruh siswa-siswi kelas XII yang berjumlah 7272 di 21 SMA Negeri se-Kota Medan yang tersebar di 15 kecamatan. Sampel diambil dengan teknik *Purposive Sampling* yaitu 524 siswa kelas XII di 7 sekolah dengan lokasi dan tingkat akreditasi berbeda yaitu Pusat Kota (SMA N 3 Medan, SMA N 4 Medan, SMA N 6 Medan, SMA N 10 Medan) dan Pinggiran kota (SMA N 11 Medan, SMA N 12 Medan dan SMA N 15 Medan). Teknik pengumpulan data menggunakan tes hasil belajar bioteknologi (tes pilihan ganda, essay dan peta konsep), angket kesulitan belajar siswa dan wawancara. Hasil penelitian disimpulkan bahwa materi bioteknologi bagi siswa SMA Negeri se-Kota Medan merupakan materi yang tingkat kesulitannya sangat tinggi (78%). Bentuk tes yang digunakan terdiri dari tiga jenis tes yaitu peta konsep dengan persentase kesulitan sebesar (71%), essay (72%) dan pilihan ganda (94%). Tes berdasarkan level kognitif didapatkan penyebab kesulitan belajar siswa terbesar berasal dari level C5 (26%), C4 (22%), C3 (21%), C2 (19%), C1 (12%). Persentase kesulitan belajar siswa berdasarkan sub materi yang tertinggi adalah sub materi rekayasa genetika (28%), hasil-hasil bioteknologi (25%), jenis-jenis bioteknologi (23%), dampak pemanfaatan bioteknologi (22%) dan pengertian bioteknologi (10%). Faktor penyebab kesulitan belajar siswa terbesar berasal dari faktor eksternal (44%) yang terdiri dari faktor laboratorium (49%), buku (45%) dan faktor guru (37%). Untuk faktor internal persentasenya sebesar (43%) yang terdiri dari faktor bakat (50%), minat (44%) dan faktor motivasi (36%). Melalui data *output independent sample t test,* kesulitan belajar berdasarkan jenis kelamin didapat nilai sig.(2 tailed) 0.01<0.05 dengan kesimpulan terdapat perbedaan yang signifikan siswa laki-laki dan siswa perempuan. Kesulitan belajar antara siswa yang bersekolah di pusat kota dengan siswa yang bersekolah di pinggiran kota tidak berbeda secara signifikan dengan nilai sig.(2 tailed) 0.051>0.05, sementara perbandingan siswa yang bersekolah di sekolah dengan akreditasi A dengan siswa yang bersekolah di sekolah dengan akreditasi B tidak berbeda secara signifikan dengan nilai sig.(2 tiled) 0.051>0.05.

Kata Kunci: *Kesulitan belajar siswa, faktor-faktor kesulitan belajar, hasil belajar berdasarkan gender, lokasi sekolah dan akreditasi sekolah*

ABSTRACT

Wahida Rahmadani. Analysis of Students' Biology Learning Difficulties in the matter of Biotechnology at all Public Senior High School (SMA) in Medan

The aim of the study is to determine students' learning difficulties at all Public Senior High School (SMA) in Medan. This research is descriptive. The population of the study is all students of class XII totaling 7272 in 21 Public Senior High Schools (SMA Negeri) spread over 15 districts. Samples were taken using *Purposive Sampling*, they are 524 students of class XII in 7 schools with the location and the difference level of accreditation (A and B), namely city center (SMAN 3 Medan, SMAN 4, SMAN 6, SMAN 10) and suburban (SMAN 11, SMAN 12 and SMAN 15). The techniques for data collection use biotechnology achievement test (multiple choice test, essays and concept map), questionnaires of students' learning difficulties and interviews. The finding of the study concluded that biotechnology materials for students of public SMA in Medan is a matter which level of difficulty is very high (78%). The test form used consists of three types of tests, namely concept map with difficulty percentage (71%), essay (72%) and multiple choices (94%). The test is based on cognitive levels of obtained that the largest cause students' learning difficulties come from C5 (26%), C4 (22), C3 (21%), C2 (19%), C1 (12%). The percentage of students' learning difficulties based on highest sub materials was sub matter of genetic engineering (28%), the results of biotechnology (25%), the types of biotechnology (23%), the impact of biotechnology (22%), and the understanding of biotechnology (10%). Factors caused the biggest students' learning difficulties derived from external factors (44%), which consist of laboratories factor (49%), books (45%) and the teacher factor (37%). The percentage of internal factors was (43%), which consist of the talent factor (50%), interest (44%) and motivational factors (36%). Through the data of output independent sample test, learning difficulties based on gender obtained sig.(2-tailed) $0.01 < 0.05$ with the conclusion there are significant differences of male and female students. Learning difficulties among students who attend school in the city center and students who attend school in suburban differ not significantly with the score sig.(2 tailed) $0.051 > 0.05$, while the ratio of students who attend schools with accreditation A and students who attend schools with accreditation B differ not significantly with the score sig.(2 tailed) $0.051 > 0.05$

Key words: Students learning difficulties, difficulties factors in learning biotechnology, achievement based on gender, location and accreditation of school.