

ABSTRAK

I MADE NUADA. Analisis Sarana dan Intensitas Penggunaan Laboratorium Terhadap Keterampilan Proses Sains dan Hasil Belajar Biologi Siswa SMA Negeri se-Kota Tanjungbalai. Tesis. Program Pascasarjana Universitas Negeri Medan. 2015.

Penelitian bertujuan untuk mengetahui: (1) Gambaran kondisi sarana laboratorium; (2) Intensitas penggunaan Laboratorium Biologi dalam menunjang pembelajaran; (3) Faktor penghambat yang dihadapi guru biologi dalam pemanfaatan Laboratorium; (4) Hubungan sarana laboratorium terhadap keterampilan proses sains; (5) Hubungan sarana laboratorium terhadap hasil belajar; (6) Hubungan intensitas penggunaan laboratorium terhadap keterampilan proses sains; dan (7) Hubungan intensitas penggunaan laboratorium terhadap hasil belajar siswa SMA Negeri se-Kota Tanjungbalai. Penelitian ini adalah penelitian deskriptif dengan pendekatan kuantitatif. Subjek penelitian adalah guru biologi dan siswa kelas XI IPA. Data dikumpul menggunakan kuesioner, observasi dan wawancara, keterampilan proses sains diperoleh melalui kegiatan praktikum dan hasil belajar melalui tes pilihan berganda. Data dianalisis menggunakan statistik deskriptif. Berdasarkan hasil penelitian menunjukkan bahwa: (1) Keadaan laboratorium kategori sangat baik (86,31%), dokumentasi kategori kurang baik (50,89%), perlengkapan kategori baik (67,85%), frekuensi pemanfaatan kategori baik (65,63%), keterampilan pengelolaan kategori baik (63,69%), keselamatan dan kesehatan kerja kategori kurang baik (55,71%); (2) Intensitas penggunaan laboratorium rata-rata 5 kali dalam satu semester; (3) Faktor-faktor yang menjadi penghambat pemanfaatan laboratorium: (1) Perlengkapan yang tidak memadai; (2) Kurangnya pelatihan menggunakan laboratorium; (3) Kompetensi guru yang kurang memahami penggunaan alat dan bahan; (4) Kurangnya waktu dalam melaksanakan kegiatan praktikum. (4) Hubungan sarana laboratorium terhadap keterampilan proses sebesar 0,891 uji signifikansi 0,007; (5) Hubungan sarana laboratorium terhadap hasil belajar 0,898 dengan uji signifikansi 0,006; (6) Hubungan intensitas penggunaan laboratorium terhadap keterampilan proses sains 0,769 dengan hasil uji signifikansi 0,043; dan (7) Hubungan intensitas penggunaan laboratorium terhadap keterampilan proses sebesar 0,887 dengan uji signifikansi 0,008.

Kata Kunci: Sarana Laboratorium, Intensitas, Keterampilan Proses Sains, dan Hasil Belajar

ABSTRACT

I MADE NUADA. Analysis of Facilities and Intensity of Laboratory Application for Scientific Process Skill and Biology Learning Achievement of Higher School Student in Tanjungbalai. Thesis. Postgraduated Program State University of Medan. 2015.

This research intended to identify: (1) The condition of laboratory; (2) The intensity of biology laboratory application for supporting learning; (3) Inhibition factor for biology teacher in using laboratory; (4) The correlation between laboratory and scientific process skill; (5) The correlation between laboratory and learning achievement; (6) The correlation between laboratory application and scientific process science; (7) The correlation between laboratory application and learning achievement of student higher school at Tanjungbalai city. This is descriptive study with quantitative approach. The subject consisted of biology teacher and student of science in eleventh grade. The data gathered by questionnaire, observation and interview, scientific process skill obtained through the activities of lab work and learning achievement using multiple choice test. Those data analyzed by descriptive statistic. Result indicated: (1) The completeness of facilities in laboratory was very good categorized is 86.31%, documentation not good categorized is 50.89, equipment, application frequencies, and management skill was good categorized is 67.85%, 65.63%, 63.69%, and safety and then health was not good categorized is 55.71%; (2) The intensity of laboratory application amounted to 5 times for a semester; (3) Inhibitions factor of laboratory application consisted to: (1) The incompleteness; (2) Less of training for using laboratory; (3) Teacher competence in comprehending the function of tools and material; (4) It is time less was the activity of practicum. (4) The correlation between laboratory and student scientific process skill as 0.891 with 0.007; (5) The correlation between laboratory and student learning achievement as 0.898 with 0.006; (6) The correlation between laboratory application to scientific process skill to 0.043; and (7) The correlation between the intensity of laboratory application and scientific process science as 0.887 with 0.008.

Keyword: Laboratory facility, Intensity, Scientific Process Skill, and Learning Achievement.