

## ABSTRAK

**ELENA MAYANTI NDURU.** Kontribusi Fasilitas Belajar, Kompetensi Guru, Keterampilan Proses Sains dan Sikap Ilmiah terhadap Hasil Belajar Biologi Kognitif Siswa SMA di Kecamatan Telukdalam. Program Pascasarjana Universitas Negeri Medan, 2015.

Penelitian ini bertujuan untuk mengetahui nilai kontribusi yang diberikan oleh fasilitas belajar, kompetensi guru, keterampilan proses sains, dan sikap ilmiah terhadap hasil belajar biologi kognitif siswa SMA baik secara langsung maupun secara tidak langsung. Penelitian ini merupakan penelitian *ex-post facto*. Sampel diambil dengan 2 tahapan; pertama, secara *cluster random sampling* dan didapatkan enam kelas X program MIA dari tiga sekolah yang berbeda. Kedua, secara random dipilih satu dari dua kelas yang diperoleh dari tahap pertama di masing-masing sekolah sehingga jumlah total sampel yang didapat sebanyak 105 siswa. Data diambil dengan cara observasi, wawancara, angket persepsi siswa tentang fasilitas belajar, angket persepsi siswa tentang kompetensi guru biologi, tes keterampilan proses sains terintegrasi, angket sikap ilmiah dan dokumen hasil ujian akhir semester mata pelajaran biologi. Semua instrumen sudah divalidasi sebelum digunakan. Data dianalisis dengan analisis jalur menggunakan program *software SPSS for windows 19.0*. Nilai kontribusi dari masing-masing variabel tersebut diperoleh dari hasil analisis regresi. Hasil penelitian menunjukkan bahwa: (1) Fasilitas belajar dan kompetensi guru secara simultan berkontribusi sebesar 47,0% dan berpengaruh signifikan terhadap keterampilan proses sains, (2) Fasilitas belajar dan kompetensi guru secara simultan berkontribusi sebesar 20,1% dan berpengaruh signifikan terhadap sikap ilmiah siswa, (3) Fasilitas belajar, kompetensi guru, keterampilan proses sains, dan sikap ilmiah secara simultan berkontribusi sebesar 61,5% dan berpengaruh signifikan terhadap hasil belajar biologi kognitif siswa, (4) Pengaruh tidak langsung fasilitas belajar melalui keterampilan proses sains terhadap hasil belajar biologi kognitif siswa adalah signifikan, (5) Pengaruh tidak langsung kompetensi guru melalui keterampilan proses sains terhadap hasil belajar biologi kognitif siswa tidak signifikan, (6) Pengaruh tidak langsung fasilitas belajar melalui sikap ilmiah siswa terhadap hasil belajar biologi kognitif siswa adalah signifikan, dan (7) Pengaruh tidak langsung kompetensi guru melalui sikap ilmiah siswa terhadap hasil belajar biologi kognitif siswa adalah signifikan.

*Kata kunci: Fasilitas Belajar, Kompetensi Guru, Keterampilan Proses Sains, Sikap Ilmiah.*

## ABSTRACT

**ELENA MAYANTI NDURU.** Contributions of Learning Facilities, Teachers' Competence, Science Process Skills and Attitudes Towards Science to Students' Biological Cognitive Learning Outcomes of Secondary School in the District Telukdalam. PostGraduate Program, State University of Medan, 2015.

This study was aimed to determine contributions of learning facilities, teachers' competence, science process skills, and attitudes towards science to students' biological cognitive learning outcomes of secondary school, both directly and indirectly. This study was an ex-post facto. Sampling were carried out by two stage; the first by cluster random sampling and six classes of X grade science program were acquired from three different secondary schools in the District Telukdalam. The second stage by randomly drawn one class of two classes which were acquired on the first stage from each school and total sample were 105 students. Data were collected by observation, interview, students' perception on learning facilities and teachers' competence were derived from questionnaire, integrated science process skills test, students' attitude toward science questionnaire and document of biological final examination output. All of the instruments were validated before used. The data were analysed by path analysis using software SPSS for windows 19.0. Contributions and the influence of these variables were derived from the regression analysis. The results showed that: (1) Learning facilities and teacher's competence simultaneously given contributions as big as 47,0% and significantly influence to the science process skills, (2) Learning facilities and teacher's competence simultaneously given contributions as big as 20,1% and significantly influence to the student's attitude towards science, (3) Learning facilities, teacher's competence, science process skills, and attitude towards science simultaneously given contributions as big as 61,5% and significantly influence on students' biological cognitive learning outcomes, (4) Indirect effect of learning facilities through science process skills to the cognitive learning outcomes of biology is significant, (5) Indirect effect of teacher's competence through science process skills to the cognitive learning outcomes of biology is not significant, (6) Indirect effect of learning facilities through attitudes towards science attitude to student's cognitive learning outcomes of biology is significant, and (7) Indirect effect of teacher's competence through attitudes towards science attitude to student's cognitive learning outcomes of biology is significant.

Keywords: Learning Facilities, Teachers' Competence, Science Process Skills, Attitude Towards Science.