# ABSTRAK

**Vidia Imanda Pasaribu. NIM. 8176173010. Analisis Kemampuan Literasi, Berpikir Tingkat Tinggi, Keterampilan Proses Sains dan Sikap Mahasiswa pada Perkuliahan Taksonomi Spermatophyta. Tesis. Program Pascasarjana Universitas Negeri Medan (Unimed). Medan. 2021.**

Penelitian ini dilaksanakan di Universitas Negeri Medan yang bertujuan untuk mengetahui: (1) kemampuan literasi; (2) kemampuan berpikir tingkat tinggi; (3) keterampilan proses sains; (4) sikap ilmiah mahasiswa; (5) hubungan antara kemampuan literasi sains dengan kemampuan berpikir tingkat tinggi mahasiswa; (6) hubungan antara keterampilan proses sains dengan kemampuan berpikir tingkat tinggi mahasiswa; (7) hubungan antara kemampuan literasi sains dengan sikap ilmiah mahasiswa dan (8) hubungan antara keterampilan proses sains dengan sikap ilmiah pada mata kuliah Taksonomi Spermatophyta mahasiswa semester empat jurusan biologi Universitas Negeri Medan. Populasi dalam penelitian ini adalah semua mahasiswa semester empat tahun 2019 Jurusan Biologi Universitas Negeri Medan yang berjumlah 280 orang. Sampel penelitian ini diambil dengan teknik pengambilan sampel secara acak (*random sampling*) dengan jumlah sampel sebanyak 117 mahasiswa. Instrumen dalam penelitian ini berupa tes kemampuan literasi mahasiswa, kemampuan berpikir tingkat tinggi, dan keterampilan proses sains, serta angket sikap ilmiah mahasiswa. Metode penelitian ini bersifat deskriptif kuantitatif dengan Uji Regresi dengan taraf signifikansi $\alpha = 0,05$. Hasil penelitian ini diperoleh bahwa: (1) kemampuan literasi mahasiswa rata-rata 70,73 dengan kategori Baik; (2) kemampuan berpikir tingkat tinggi mahasiswa rata-rata 75,68 dengan kategori Baik; (3) kemampuan keterampilan proses sains mahasiswa rata-rata 67,05 dengan kategori Baik; (4) sikap ilmiah mahasiswa rata-rata 69,17 dengan kategori Baik; (5) terdapat hubungan signifikan antara kemampuan literasi sains dengan kemampuan berpikir tingkat tinggi mahasiswa ($r = 0,415$; $P = 0,000$); (6) terdapat hubungan signifikan antara keterampilan proses sains dengan kemampuan berpikir tingkat tinggi mahasiswa ($r = 0,968$; $P = 0,000$); (7) terdapat hubungan signifikan antara kemampuan literasi sains dengan sikap ilmiah mahasiswa ($r = 0,546$; $P = 0,000$); dan (8) terdapat hubungan signifikan antara keterampilan proses sains dengan sikap ilmiah mahasiswa semester empat jurusan biologi Universitas Negeri Medan ($r = 0,936$; $P = 0,000$). Hasil penelitan ini mengimplikasikan bahwa literasi sains, dan keterampilan proses sains memberikan pengaruh terhadap kemampuan berpikir tingkat tinggi dan sikap lmiah mahasiswa menjadi lebih baik.

*Kata Kunci:* Berpikir Tingkat Tinggi, Keterampilan Proses Sains, Literasi, Sikap Ilmiah

# ABSTRACT

**Vidia Imanda Pasaribu. NIM. 8176173010. Analysis of Literacy Ability, High Level Thinking, Science Process Skills and Student Attitudes in the Spermatophyta Taxonomy Lecture. Thesis. Postgraduate Program, State University of Medan (Unimed). Field. 2020.**

This research was conducted at the State University of Medan which aims to determine: (1) literacy skills; (2) higher order thinking skills; (3) science process skills; (4) students' scientific attitude; (5) the relationship between scientific literacy skills and students' higher order thinking skills; (6) the relationship between science process skills and students' higher order thinking skills; (7) the relationship between scientific literacy skills and students' scientific attitudes and (8) the relationship between science process skills and scientific attitudes in the fourth semester student of the Spermatophyta Taxonomy subject, majoring in biology at the State University of Medan. The population in this study were 280 students in the fourth semester of 2019 Department of Biology, Medan State University. The research sample was taken by using random sampling technique (random sampling) with a total sample of 117 students. The instruments in this study were tests of students 'literacy abilities, higher order thinking skills, and science process skills, as well as a questionnaire on students' scientific attitudes. This research method is descriptive quantitative with regression test with a significance level of $\alpha = 0.05$. The results of this study indicate that: (1) the average literacy ability of students is 70.73 in the Good category; (2) students' high-order thinking skills on average 75.68 in the Good category; (3) the ability of students' science process skills on average 67.05 in the Good category; (4) the scientific attitude of the students was 69.17 on the average in the Good category; (5) there is a significant relationship between scientific literacy skills and students' higher order thinking skills ($r = 0.415$; $P = 0.000$); (6) there is a significant relationship between science process skills and students' higher order thinking skills ($r = 0.968$; $P = 0.000$); (7) there is a significant relationship between scientific literacy skills and students' scientific attitudes ($r = 0.546$; $P = 0.000$); and (8) there is a significant relationship between science process skills and the scientific attitudes of fourth semester students of the Department of Biology at the State University of Medan ($r = 0.936$; $P = 0.000$). The results of this study imply that scientific literacy and science process skills have an effect on higher-order thinking skills and better student scientific attitudes.

*Keywords:* Higher Level Thinking, Science Process Skills, Literacy, Scientific Attitude