

**THE PROFILE OF SCIENTIFIC LITERACY OF JUNIOR HIGH
SCHOOL STUDENTS IN NATURAL SCIENCE SUBJECT**

RESEARCH PAPER

submitted as a requirement to obtain the degree of *Sarjana Pendidikan* in
International Program on Science Education (IPSE) Study Program



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Sarjana Pendidikan pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan
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I hereby declare that the thesis entitled ‘‘The Profile of Scientific Literacy of Junior High School Students in Natural Science Subject’’ and all its contents are truly my work. I do not plagiarize or quote citations from other research in ways that are not following the ethics of science applicable in scientific societies. For this statement, I am prepared to bear the risk of sanction if a later violation of scientific ethics is discovered or there is a claim from another party for the authenticity of my work.

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ABSTRACT

Scientific literacy appears to become more urgent in the 21st century by which it can help developing responsible citizens who fully aware and actively engage with global problems. The purpose of this research is to profile the scientific literacy of junior high school students in the natural science subject and the difference between students' scientific literacy and students' gender. The descriptive method with survey design was employed. The sampling method was simple random sampling. The participants involved were 203 ninth grade junior high school students who came from two public schools and one private school in Medan City. The instrument developed and used in this research was in the form of an online test consisting of 25 simple multiple-choice questions in Bahasa. Scientific literacy aspects, such as Scientific Competencies, Scientific Knowledge, and Attitudes toward Science were covered in the test. The results are students' scientific literacy is at Level 1, according to the science proficiency level descriptions. Students' achievements in Scientific Competencies Aspect is in a low category, meanwhile results in Scientific Knowledge and Attitudes toward Science Aspects are in the medium categories. There is no significant difference between students' scientific literacy achievements and students' gender. Therefore, scientific literacy needs to be promoted and trained since school years by using the relevant learning strategies used in learning activities.

Keywords: *Scientific Literacy, Science Proficiency Level, Natural Science, Gender*

PROFIL LITERASI SAINS SISWA SEKOLAH MENENGAH PERTAMA DALAM MATA PELAJARAN ILMU PENGETAHUAN ALAM

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ABSTRAK

Literasi sains menjadi lebih penting di abad ke-21 ini di mana literasi sains dapat membantu dalam pembinaan warga negara yang bertanggung jawab dan secara sadar aktif terlibat dengan masalah dunia. Tujuan penelitian ini adalah untuk mengetahui literasi sains siswa sekolah menengah pertama dalam mata pelajaran IPA dan perbedaan antara kemampuan literasi sains siswa dan jenis kelamin siswa. Penelitian ini menggunakan metode deskriptif dan desain survei. Metode pengambilan sampel adalah *simple random sampling*. Partisipan yang terlibat sebanyak 203 siswa Sekolah Menengah Pertama kelas sembilan yang berasal dari dua sekolah negeri dan satu sekolah swasta di Kota Medan. Instrumen yang dikembangkan dan digunakan dalam penelitian ini adalah dalam bentuk tes dalam jaringan (daring) yang terdiri dari 25 pertanyaan pilihan ganda dalam bahasa Indonesia. Aspek literasi sains, seperti Kompetensi Ilmiah, Pengetahuan Ilmiah, dan Sikap terhadap Sains dimasukkan ke dalam tes ini. Hasil penelitian adalah literasi sains siswa berada di Level 1 sesuai dengan deskripsi tingkat kemahiran sains. Capaian siswa dalam Aspek Kompetensi Ilmiah tergolong rendah, sedangkan hasil aspek Pengetahuan Ilmiah dan Sikap terhadap Sains berada di kategori sedang. Selain itu, tidak ada perbedaan yang signifikan antara pencapaian literasi sains siswa dan jenis kelamin siswa. Oleh karena itu, literasi sains perlu dipromosikan dan dilatih sejak masa sekolah dengan menggunakan strategi pembelajaran yang relevan dalam kegiatan belajar.

Kata kunci: *Literasi Sains, Tingkat Kemahiran Sains, Ilmu Pengetahuan Alam, Jenis Kelamin*

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