

**THE DIFFERENCE OF STUDENTS' LEARNING OUTCOMES BY
USING QUANTUM LEARNING AND DIRECT INSTRUCTION
IN SUBTOPICS ELECTROMAGNETIC WAVE
IN PHYSICS OF FIRST GRADE OF
SMA NEGERI 1 BERASTAGI
ACADEMIC YEAR
2011/2012**

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Program Study Bilingual Physics Education



THESIS

**Submitted to Fulfill the Requirement for Getting the Degree of Sarjana
Pendidikan**

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MEDAN
2012**