**Dewi Natalia Marpaung. Nim 8156142018. The Effectiveness of Innovative Practicum Guidance to Increase Student Learning Outcome on The Teaching Acid and Base Solution For Senior High School**. Thesis. Master of Postgraduate Program, State University of Medan, 2017

The purpose of this study was (1) to know the feasibility and perception of lecturer and chemistry teacher in practicum guidance integrated guide inquiry model based on BSNP of questionnaire has been modified (2) to know the student achievement that learned by using innovative practicum guidance higher that student's achievement that using practicum guidance from school on acid and base solution (3) to know the students science process skill that using innovative practicum guidance higher than student's science process skill using practicum guidance from school on practicum of acid and base solution (4) to know the effectiveness of innovative practicum guidance that was developed can increase student's achievement. The stage in this study were (1) analysis of practicum guidance that used in school target, (2) prepare and develop innovative practicum guidance (3) standardization of feasibility of innovative practicum guidance to expert judgment (lecturer and teacher) (4) implementation of practicum guidance in SMA Negeri 5 Medan, (5) revise practicum guidance and determine the effectiveness of innovative practicum guidance. Average of innovative practicum guidance in feasibility of content is 4.56, feasibility of language 4.60, feasibility of presentation is 4.55, and feasibility of graphing is 4.57. So can concluded that practicum guidance very valid and feasible to use. Student science process skills that use innovative guidance have average 77.73 means student have good skill, and science process skill that use practicum guidance from school average 55.71 means that student have competent skill. Increasing of student achievement proved by gain normalized, where student achievement in experiment class I have gain 0.76 higher than student achievement in experiment class II have gain 0.64. Effectiveness of innovative practicum guidance is 75% higher than practicum guidance that used in school is 63%.

Keywords: Acid and Base Solution, Innovative, Learning outcome, Practicum Guidance