ACKNOWLEDGEMENT

I thank God the Almighty, Lord Jesus Christ for His love and mercy in my life. For His guidance and help until I finish my thesis with the title "The Effect of Mind Maps on the Student's Learning Achievement and Retention in Cellular Biology topic of Grade XI IPA at SMA N 1 Sidikalang Academic Year 2014/2015". This thesis would not be completed without supports, guidances, and suggestion from many parties.

First and foremost, my appreciation goes to the Dean of FMIPA UNIMED, Prof. Drs Motlan, MSc, PhD, the Head of Biology Department, Drs Zulkifli Simatupang, M.Si. My thesis supervisor Dra. Martina A. Napitupulu, M.Sc.for her guidance and help. She has been so supportive during my difficult time, and has been the reason for me to keep going. Prof. Dr. rer.nat. Binari Manurung M.Si, Dra. Martina Restuati, M.Si, and Dr. Fauziyah Harahap, M.Si., helps are also importantly acknowledged for the suggestions and comments.

I especially thank Lazuardi, M.Si as my academic supervisor for his guidance during my study. His role is preciously admired. I will not forget Mr. Alben Sianturi, the of Principal of SMA 1 Sidikalang for his cooperative support during my research at the school, giving me permission to do research in the school. Mr. Wahidin, The head teacher of XI IPA 1 and XI IPA 2 for his kindness and patience in guiding and giving me opportunity to learn to be a teacher and researcher.

A very special thanks goes to my beloved Mom and Dad, Bengar Sihombing and Normalina Purba for all the love they have given. They spent a life time on their knees, praying for me they love so dear. My brother and sister, Monalisa Sihombing and Makmur Pranata Sihombing, for their helps and prayers.

At last, I remember all prayers and support in various way that everybody has showed me for the completion of my thesis. May this thesis can contribute to improve the quality of education in this country. Thank you.

Medan, 27 March 2015