PREFACE

I would like to say the praise and gratitude to God Almighty, for all the graces and blessings that provide health and wisdom to me so that this study can be completed properly in accordance with the planned time.

This thesis with title "The Effect of Children Learning in Science (CLIS) Model on Students' Learning Outcomes in Thermal Expansion Topic at VII Grade in SMP N 1 Tebing Tinggi" is arranged to acquire the degree of "Sarjana Pendidikan", Faculty of Mathematics and Natural Sciences State University of Medan.

I would like to thank Mr Dr. Ridwan Abdul Sani, M.Si as Thesis Advisor who has provided guidance and suggestions to me since the beginning of the research until the completion of this thesis writing. Thank you very much also to Mr. Prof. Drs. Motlan, M.Sc., Ph.D, Mrs. Dr. Derlina, M.Si, Mr. Alkhafi M. Siregar M.Si who have provided input and suggestions from the research proposal to complete the preparation of this thesis make this thesis better. Thanks also presented to Mr. Drs. J.H. Panggabean, M.Si, as the Academic Supervisor and the Examiner lecturer and also the entire Lecturer and Staff in Physics Department FMIPA UNIMED who have helped me.

Appreciation were also presented to Headmaster and all teacher in SMP N 1 Tebing Tinggi especially for my guided Teacher, Mrs. Rosmiati, S.pd, my dearest students in class VII-8 and VII-9 SMP N 1 Tebing Tinggi who have helped during this research.

I would like to thank especially to my dear father J. Damanik and my dear mother R. Siagian and also my sisters Febrina M Damanik, Agustina S Damanik, my brothers Surya D.P Damanik, Jarrenson P Damanik and all family who have always prayed and gave me encouragement and funding keep me struggle to complete the study in UNIMED.

Especially thanks to all my friend in Bilingual Physics Class 2009, Agnesia Damanik, Astrid P. Hrp, Avolen B.I. Siahaan, Carolina Nainggolan, Debora B Sitanggang, Dewi S Situmorang, Evi V. Silalahi, Fetriana Simanihuruk, Gita R Anugrah, Hanna M. Hutabarat, Henriko Hutabarat, Janiar S Gultom, Jefri S. Waruwu, Lucius Marbun, Mas Andri Marbun, Pretti T. M Ambarita, Ribka M. Tambunan, Rika Y. Fitri, Riris M. Rumahorbo, Rita Situmorang, Tionar M. Malau who have helped, prayed and gave supported to me, nice to know all of you and our memories will always remain in my mind. Appreciation were also presented to UKMKP UP-MIPA as a place for me to grow up spiritually. I also would like to thank my Brother Leybert Purba who have pray and support me makes me grow up spiritually in "Metanoia" together with Agnesia M.D, Janiar S.G., Rita S.S. Thanks also to my friends in Library Team UP-MIPA, Novalia Manihuruk, Hertiana Manurung, Rani Banjarnahor, Mei Marpaung. Thanks to Jasmen E. Sihotang, Asri B Saragih for their support and for trust me to guide them. Last but not least, I would like to thank to my best friends, Reni Sirait, Desi M Sijabat, Yeni Malau, Marlina Tambunan, Keasy Manurung, Bernard R Nainggolan and Pratiwi D Sirait who have helped and gave supported during my research.

Last word, the author have do as much as possible in completing this thesis, but the author aware and recognize that there are many drawbacks in terms of both content and grammar, then the authors welcome any suggestions and constructive criticism from readers for this thesis perfectly. The author hope the contents of this thesis would be useful in enriching the knowledge and be useful for all of us.

> Medan, May 2013 Author,

Rani S.N Damanik