Acknowledgements

My warmest thanks go to my advisor, Dr. I-li Yang, for her inspiring and pointed guidance, and consistent encouragement throughout my research for this work. Then, I want to give my thanks to the committee members, Dr. Po-ying Lin and Dr. Chen, for their reading of the manuscript and for their profound comments and suggestions. My gratitude is also extended to the classes 108 and 110 in Ping-jeng Senior high school in 2003, who took part in the experimental treatment seriously and made the research data highly credible. In addition, I would like to thank my colleagues in Ping-jeng Senior High School, who provided substantial help and encouragement in my hardest times of doing the research.

Finally, I would like to extend my heart-felt thanks to my family. My parents' and sibling's support and blessing and, especially my loving husband's help and encouragement have made this work possible.