

The purposes of this research were (1) to develop a brain gym program to enhance Thai reading comprehension ability (2) to study the development in Thai reading comprehension ability of students under a brain gym program (3) to compare the effectiveness of a brain gym program to enhance Thai reading comprehension ability. The sampling groups of this research were the 5th grade students in 2007 educational year of Phayathai School, Bangkok from five groups with 40 students each, and were randomized from 5 classrooms which 4 of them were experimental groups and another was control group. This research had been conducted in the Research and Development method for 12 weeks. The data collecting tools of this research were the ability test of Thai reading comprehension ability, the questionnaire of satisfaction towards brain gym, and reflective thinking observation form. The data were analyzed by using basic statistics and the Repeated Measures ANOVA

The research findings were as follows:

1. The details of a brain gym program to enhance Thai reading comprehension ability of students were (1) Eight brain gym exercises for enhancing Thai reading comprehension ability (2) the reflective thinking (3) the brain gym exercises were conducted in the morning, before Thai Language class and in the afternoon.

2. There were differences in the development of the Thai reading comprehension ability between students under a brain gym program and students who were not under the program with the statistical significance at .05 which the students under a brain gym program had more development in their Thai reading comprehension ability. In overall, the students who practiced brain gym exercises in the morning without the reflective thinking had no difference in their development of Thai reading comprehension from the students who practiced brain gym exercises with the reflective thinking in the morning, before Thai language class and in the afternoon, and students in the control group with the statistical significance at .05. However, after comparing each result, the research found that the long-term brain gym exercises tended to increase more development. The development of students who practiced brain gym exercises and reflective thinking had increased 35.02% in average while the development of students who only practiced brain gym exercises in the morning had increased 21%.

3. The most effective brain gym program was the brain gym exercises with the reflective thinking before Thai language class and the brain gym exercises with the reflective thinking in the afternoon and the brain gym exercises with the reflective thinking in the morning respectively.