

Chonticha Eiamopas 2014: Constructing of Attitude Scale toward Scientific Learning Activities based on Mad Science Model for Prathomsuksa 4-6 Students. Master of Education (Educational Research and Evaluation), Major Field: Educational Research and Evaluation, Department of Educational. Thesis Advisor: Assistant Professor Suntara Tobua, Ed.D. 136 pages.

The purpose of this research was to construct the attitude scale toward scientific learning activities based on Mad Science model for Prathomsuksa 4-6 students. The specific objectives were to construct and validate the attitude scale test; to set norms for interpreting the test score; and to construct the test manual. Using multi-stage sampling method, research sample for test validation and norms construction consisted of 853 people for learning activities based on Mad Science model for Prathomsuksa 4-6 students secondary educational service area office in second semester, academic year 2013. The constructed test comprised of 45 items which, aimed to assess 4 public; attitude toward scientific learning activities, attitude toward instruction media and teaching aid, attitude toward teacher and attitude toward measurement and evaluation based on Mad Science model. The test used items with Likert scale had five response alternatives: Strongly agree, Agree, Neitheragree, Disagree and Strongly disagree.

The research results showed that the attitude scale toward scientific learning activities based on Mad Science model for Prathomsuksa 4-6 students. The significant findings were as follows: 1) The content validity by calculating the item objective congruence Index (IOC), were in the range of 0.75-1.00 2) The discrimination power of item were analyzed by t-test was different statistically significant at the 0.05 levels that range of 3.85-8.75 3) The construct validity of correlation coefficient between each factor and total score were between 0.80-0.82 at 0.01 level of significant 4) The concurrent validity was used the statistical test. It revealed that this test had concurrent validity by using the known-group technique which discriminated high and low attitude scale toward scientific learning activities based on Mad Science model different statistically significant at the 0.05 levels 5) Cronbach's alpha reliability coefficient for the whole test was 0.83 6) The local norms for the attitude scale test score interpretation presented in the form of normalized T-score for the whole test were in the range of T21-T76. 7) The manual for the test had objectivity, suitable and convenient for usability, easy to understand, and fully important composition.

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Thesis Advisor's signature