

An Investigation into Problem-Solving Ability and Logical-Mathematical Intelligence of Grade 8 Students

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Abstract

The main purpose of this study is to investigate problem-solving ability and logical-mathematical intelligence of Grade 8 students. The research design used in this study was a descriptive (survey) research design, and the required data were collected through the quantitative method. “Problem Solving Inventory” developed by Heppner and Petersen (1982), “Multiple Intelligence Inventory” (Mckenzie, 1999), “Multiple Intelligence Test Based on Howard Gardner’s MI Model” (Chislett & Chapman, 2006), “Multiple Intelligence Inventory” (Armstrong, 2009) and “Multiple Intelligence Inventory” (Breux & Magee, 2010) were used to prepare questionnaires as an instrument. All the questionnaires were adapted to investigate problem-solving ability and logical-mathematical intelligence of students. The participants were Grade 8 students from Nattalin Township, Bago Region (West) and they were selected using a simple random sampling method. The inferential statistics (independent samples *t* test and One way ANOVA) was employed for data analysis of this study. According to the result, there was no significant difference in problem-solving ability and logical-mathematical intelligence of Grade 8 students according to gender. Moreover, the findings revealed that there was no significant difference in problem-solving ability according to their grade points in mathematics, but there was a significant difference in logical-mathematical intelligence of Grade 8 students according to their grade points in mathematics.

Keywords: Problem Solving, Problem-Solving Ability, Mathematics, Intelligence, Logical-Mathematical Intelligence

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