

**A COMPARATIVE STUDY OF TEACHERS' SELF-EFFICACY FOR  
TEACHING STEM SUBJECTS AND ATTITUDES TOWARD STEM  
EDUCATION ACCORDING TO GENDER AT WATTANA  
WITTAYA ACADEMY, BANGKOK, THAILAND**

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**Abstract:** The purpose of conducting this research was to determine the level of teachers' self-efficacy when teaching STEM subjects and their attitudes towards STEM education at Wattana Wittaya Academy in Bangkok, Thailand. A second purpose was to determine whether there was a significant difference in teachers' self-efficacy for teaching STEM subjects and attitudes toward STEM education according to gender. As a source of data collection, the researcher used Teachers' Self-Efficacy for Teaching STEM Subjects and Attitudes Toward STEM Education (T-STEM Questionnaire). The respondents were 67 teachers completed the questionnaire. The data obtained were analyzed by descriptive statistics, means and standard deviations and independent samples *t*-test. The findings of this study were as follows: Teachers had a high level of self-efficacy for teaching STEM subjects. Teachers had positive attitudes toward STEM education. There was no statistical difference between teachers' STEM teaching self-efficacy for teaching STEM subjects and attitudes toward STEM education according to gender at Wattana Wittaya Academy, Bangkok, Thailand. Recommendations for practice and future research are provided.

**Key Words:** Self-efficacy, STEM Subjects, Attitudes, Teachers, Gender, Wattana Wittaya Academy, Thailand.

**Introduction:** STEM is an abbreviation of four educational disciplines: science, technology, engineering, and mathematics. STEM education is generally focused on creating interdisciplinary learning. Teachers' self-efficacy for teaching STEM subjects and attitudes towards STEM education play an important role in determining students' interest in STEM subjects and in providing equal opportunities to access and benefit from quality STEM education (Bandura, 1997). Female STEM teachers have a positive impact on girls' performances in STEM education and careers. In contrast, girls' learning experience in STEM education is compromised when teachers hold

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