THE INTERACTION EFFECTS OF SCHOOL LOCATION AND TEACHING EXPERIENCE ON SELF-EFFICACY PERCEIVED BY THE PRIMARY SCIENCE TEACHERS TOWARDS INTEGRATED STREAM TEACHING

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Abstract: Integrated STEM is expanded to integrated STream, where the “r” denotes the amalgamation of reading and writing elements to bridge the gap between STEM disciplines. Since integrated STream is a new approach, it is pivotal to gauge the teachers’ self-efficacy in executing integrated STream teaching. Therefore, this cross-sectional survey design reports on the effect of school location and years of teaching experience on the self-efficacy of primary science teachers towards integrated STream teaching. For this purpose, the STream Teaching Self-Efficacy Scale (STSES) was administered to 200 primary science teachers throughout the nation. The STSES consists of five subscales: STream instructional strategies self-efficacy, STream classroom management self-efficacy, STream community involvement self-efficacy, STream student engagement self-efficacy, and STream outcome expectancy. Data obtained from the STSES survey was analysed using two-way MANOVA to identify the effects of school location and years of teaching experience towards self-efficacy perceived by the primary science teachers towards integrated STream teaching. The findings show that school location and years of teaching experience significantly affect the self-efficacy perceived by the primary science teachers towards integrated STream teaching. School location and years of teaching experience also have a significant interaction effect (Wilks’ lambda = 0.860, F (15, 519) = 1.950, p < 0.005) on primary science teachers towards integrated STream teaching. The finding of this study is resourceful for the STEM stakeholders and policy makers to design the STream teaching materials for training the teachers.

Keywords: Integrated STream teaching, self-efficacy, school location, teaching experience