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Teachers' Implementation of Integrated Science, Technology, Engineering and Mathematics (STEM) Education in Nigeria: Roles of Gender, Qualification and Teaching Experience

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ABSTRACT Some nations have already subscribed to STEM education and have continued to champion its progress, however, others seem to be lagging far behind in STEM education. This study, therefore, investigated the teaching of integrated STEM Education in Nigeria. Guided by four research questions and three hypotheses, the study employed a descriptive research approach. A sample of 207 STEM teachers drawn using proportionate and simple random sampling techniques participated in the study. A structured questionnaire developed by the researchers was used for data collection. The reliability index of the instrument, as obtained using Cronbach's alpha, was 0.84. Descriptive and inferential statistics were used for data analysis. The findings revealed a low level of the implementation of Integrated STEM Education (ISTEME). Additionally, teacher qualification significantly influenced teachers' implementation of ISTEME. However, both gender and teaching experience had no significant influence on the teaching of ISTEME. It is concluded that STEM education in Nigeria still operates at low level and teachers' qualification has a significant role on its implementation. In light of the findings, recommendations were proffered.