

## Assessing the Pre-Service and In-Service Teachers' Continuation of Use of Technology After Participation in Professional Development

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**Abstract :** This study was conducted to assess the continuation of the use of technology in science and mathematics teaching of the pre-service and in-service teachers who attended the professional development programme. It also assessed professional development, personal, institutional, and technological factors contributing to the continuous use of technology in teaching. The study involved 42 teachers, thirteen pre-service teachers, and twenty-nine in-service teachers. A mixed-method research approach was used to collect data for this study. Findings showed that the continuous use of technology in teaching after the termination of the professional development arrangement was high among the pre-service teachers, and differed for the in-service teachers. The regression model showed that knowledge and skills, access to technology and ease of use were strong predictors ( $R^2 = 55.3\%$ ) of the teachers' continuous use of technology after the professional development arrangement. The professional development factor did not have a direct effect on the continuous use of technology, rather had an influence on personal factors (knowledge and skills). In turn, the personal factors had influence on the institutional factors (access to technology) and technological factors (ease of use), which together had an effect on the teachers' continuous use of technology in teaching.

**Keywords :** technology, professional development, teachers, science and mathematics

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