

## Heightening Pre-Service Teachers' Attitude towards Learning and Metacognitive Learning through Information and Communication Technology: Pre-Service Science Teachers' Perspective

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**Abstract :** Information and Communication Technology, ICT can heighten pre-service teachers' attitudes toward learning and metacognitive learning; however, there is a dearth of literature on the perception of the pre-service teachers on heightening their attitude toward learning and metacognitive learning. Thus, this study investigates the perception of pre-service science teachers on heightening their attitude towards learning and metacognitive learning through ICT. Two research questions and four hypotheses guided the research. A mixed methods research was adopted for the study in concurrent triangulation type of integrating qualitative and quantitative approaches to the study. The cluster random sampling technique was adopted to select 250 pre-service science teachers in Oyo township. Two self-constructed instruments: Heightening Pre-service Science Teachers' Attitude towards Learning and Metacognitive Learning through Information and Communication Technology Scale (HPALMIS,  $r=.73$ ), and an unstructured interview were used for data collection. Thematic analysis, frequency counts and percentages, t-tests, and analysis of variance were used for data analysis. The perception level of the pre-service science teachers on heightening their attitude towards learning and metacognitive learning through ICT is above average, with the majority perceiving that ICT can enhance their thinking about their learning. The perception was significant (mean=92.68, SD=10.86, df=249,  $t=134.91$ ,  $p<.05$ ). The perception was significantly differentiated by gender ( $t=2.10$ , df= 248,  $p<.05$ ) in favour of the female pre-service teachers and based on the first time of ICTs use ( $F(5,244)= 9.586$ ,  $p<.05$ ). Lecturers of science and science related courses should therefore imbibe the use of ICTs in heightening pre-service teachers' attitude towards learning and metacognitive learning. Government should organize workshops, seminars, lectures, and symposia along with professional bodies for the science education lecturers to keep abreast of the trending ICT.

**Keywords :** pre-service teachers' attitude towards learning, metacognitive learning, ICT, pre-service teachers' perspectives

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