

Science Teachers' Pedagogical Knowledge at High School Level

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Abstract

The main purpose of this research is to study the science teachers' pedagogical knowledge at high school level. For this study, East district was selected from four districts of Yangon Region. Six townships for this study were chosen by using cluster sampling method. All (36) high schools from six townships and (195) high school science teachers who are teaching Chemistry, Physics, and Biology were selected as participants for this study. A questionnaire survey was used to collect the required data. This study included three dimensions of pedagogical knowledge. It consists of (30) items five-point Likert-scale for pedagogical knowledge. Using SPSS (23) version, descriptive analysis was employed to calculate mean, standard deviation for the quantitative data. Moreover, one-way ANOVA was used to examine whether there were any significant differences of high school science teachers' pedagogical knowledge between four groups in terms of teaching service. The results showed that instructional process is the weakest and assessment is the strongest in high school science teachers' pedagogical knowledge. According to research findings, (11%) was low level, (75%) was moderate level and (14%) was high level for pedagogical knowledge. Findings also indicated that high school science teachers' pedagogical knowledge between four groups significantly differs at ($p < .001$) level. The results claimed that most of the high school science teachers can assess students' learning process.

Key words: knowledge, pedagogical knowledge, science

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