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Teachers' Conceptions of the Constructivist Model of Science Teaching and Student Learning

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ABSTRACT This study sought to determine how teachers' conceptions of the constructivist view influence: (a) science teaching and thus student learning; (b) the teachers' and students' roles during the science teaching and learning process; and, (c) the science teaching and learning sequence. A convenient sample of 60 teachers on the Bachelor of Education (Primary) Degree programme completed a 66-item questionnaire probe adapted from Constructivist Learning Environment Survey (CLES) questionnaire. Twenty (20) teachers initially included in the original sample of 60 teachers were used in an in-depth class discussion of each item on the questionnaire probe and issues raised were reported as interview data. Descriptive statistics were used employed to present the quantitative data. The study found that most teacher respondents conceptualized that pre-instructional concepts act as a foundation upon which knowledge is constructed in the mind of learners. The study also found that most science teachers do not have a broader view of the constructivist theory. Therefore, science teachers should teach science from students' perceptions and backgrounds but without distorting the principles upon which science is based.