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COMPETENCY ASSESSMENT OF HIGH SCHOOL PHYSICS TEACHERS

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ABSTRACT

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The focus of this study is assessment of the competency of high school physics teachers in the Science and Technology Coordinating Council (STCC) network schools in Region V. The assessment was based on the principle that the teacher is the most important factor that contribute to efficiency of learning. The research combined a descriptive survey technique through a researcher-made questionnaire, classroom observation, tests, and existing records. The analysis was made both in qualitative and quantitative way. Five instruments were used and they are as follows: content knowledge test for physics teachers, integrated science process skills test, teacher questionnaire, student assessment by teacher, and classroom observation guide. The statistical techniques used were: descriptive statistics, Pearson product correlation, stepwise multiple regression, item analysis with the use of indexes of discrimination and difficulty, Kuder Richardson formula 20, and Kendall Tau correlation. The .05 level was adopted in all tests of significance. This study showed that the high school physics teachers were rated competent in all the four measures of competency namely: knowledge of physics, science process skills, job performance in the classroom (as measured by classroom observation) for method and laboratory, and teacher-related variables except in graduate physics units earned. Teachers' job performance in the classroom (as measured by classroom observation by peers, student assessment of the teacher in the classroom and official efficiency rating of the teacher by the principal in collaboration with the science department head) is positively correlated with the science process skills possessed by secondary physics teachers, but negatively related to content knowledge competency of teachers. It is significantly related only to years of physics teaching experience. Twenty-five percent of the variation in the teachers' classroom performance could be explained by the contribution of years of teaching experience and in-service training in physics, which served as predictors for the criterion measure. The undergraduate mathematics units earned by the teacher is significantly but negatively related to knowledge of physics competency. The physics teachers were rated "very good" in the overall method of teaching.



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The following recommendations are forwarded:

1. There is a greater need to train the teachers in the laboratory aspect in physics since they were found only to be satisfactory in that aspect. This could be done through in-service training of the teachers or through activities of Physics Teachers Association.
2. The science process skills test should be administered to teachers of other disciplines like chemistry and biology in order to find out how they perform when compared to physics teachers. This could be the subject of a thesis by other graduate students.
3. Further studies should be conducted to look into factors related to teacher competencies so that physics teaching could be improved.



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