

Ohio University
College of Education
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DISSERTATION ABSTRACT

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Teacher Computer Access, Student Computer Access, Years of Teaching Experience and Professional Development as Predictors of Competency of K-4 Ohio Public School Students on the National Educational Technology Standards

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This study examines the combined characteristics of teacher computer access, student computer access, years of teaching experience and professional development as predictors of competency on the NETS by students in grades K-4 in Ohio Public Schools. The NETS competencies are composed of a checklist of competencies by grade level for students in the United States school system. Teachers in Ohio Public Schools were asked to evaluate the level of competency of their student through the use of a Likert scale of values 1 through 5. One was considered “no competency” and five “expert”. A second section of the survey asked the respondents to list the barriers remaining in place that prevented the competencies from being achieved.

A multiple regression analysis was used to determine if the independent variables: teacher computer access, student computer access, years of teaching experience and professional development could predict the dependent variable Score. Score represented the score earned on the NETS competencies. Evaluation of the data indicated that these variables could indeed be used to predict student competency on the NETS. An ANOVA was used to examine the group differences across the state. No differences were found in the group means. An analysis of the comment data found that “Time” was the greatest barrier to achieving the competencies with respondents indicating that time was needed for professional development, curriculum development and practices in the use of technology in a classroom setting. Suggestions for future research include the study of school setting to determine how teachers could gain in time needed for technology professional development and curriculum integration of technology.