

## ABSTRACT

Ruth Bonner-Thompson

Factors Affecting Computer Implementation and Impact

On Teaching and Learning in Northeast Louisiana

(Major Professor: Carolyn Talton, Ed. D.)

This study investigated the relationship between degree of computer implementation and (a) teacher personal use of computers, (b) teacher motivation, (c) curriculum integration training, and (d) curriculum integration support. The study also investigated the relationship between degree of computer implementation and (a) collaborative learning, (b) self-directed learning, (c) active learning, and (d) teacher practices. An analytical survey provided a numerical description of how the independent variables and the dependent variables were related in the population.

Quantitative data were analyzed using the following statistical procedures: (a) Mann-Whitney U test to determine the relationship between teacher motivation and degree of computer implementation, and to determine the relationship between frequency of teacher personal use of a computer and degree of implementation; (b) Kruskal-Wallis One-way Analysis of Variance by Ranks to determine the relationship between curriculum integration support and degree of implementation, and to determine the relationship between curriculum integration training and degree of implementation; (c) Pearson Product-Moment Coefficient of Correlation to determine the relationship between degree of implementation and (1) collaborative learning, (2) self-directed learning, (3) active learning, and (4) teacher practices; and (d) Stepwise Multiple Regression Analysis in a post hoc analysis to determine how the variables teacher motivation, teacher personal use of computers, curriculum integration training, curriculum integration support, collaborative learning, self-directed learning, active learning, and teacher practices relate to or predict the degree of implementation.