A PROGRAM EVALUATION: IMPLEMENTING TECHNOLOGY IN NORTH CAROLINA PUBLIC SCHOOLS

A Dissertation

by

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ABSTRACT

A PROGRAM EVALUATION: IMPLEMENTING TECHNOLOGY IN NORTH CAROLINA PUBLIC SCHOOLS. (November 1999)

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This study focused on the process of implementing technology in 16 middle and junior high school classrooms located in 3 separate Local Educational Agencies (LEAs). Geographically, the 3 LEAs were in the coastal, coastal plain, and mountain-foothill areas of North Carolina. The study’s focus was derived from the national perspective that American schools are low-tech institutions in a high-tech society (Gerstner, 1995).

Information on the process of implementing technology in the classroom was collected through a survey instrument and a case study method. The CEO Forum’s STAR Chart Self-Diagnostic Score Chart survey instrument was modified to collect data in each of the following areas: hardware, connectivity, content, professional development, and integration and use (CEO Forum, 1997). Case study questions were derived from the North Carolina School Technology Commission and Center for Educational Leadership and Technology (CELT) (1993) study that analyzed several components of technology implementation in classrooms. The components from the CELT study that were used in this case study included (a) schools and classrooms, (b) schools’ administration and leadership characteristics, (c) financing, and (d) technology support and training.
Survey and case study data were analyzed using a chart essay, which presented data by charting the case study questions, the process used to answer the questions, and the findings pertaining to each question (Jones & Mitchell, 1990). The study's significant findings included data that were present in two or more of the four areas identified in the CELT study. Noteworthy findings included: (a) teachers wanted to participate in the hardware and connectivity decision-making processes, (b) teachers who had been involved in school-level technology committees were more willing to use technology in their classrooms, (c) administrators and teachers focused their first-year visions of technology on accountability issues, (d) teachers lacked sufficient time to practice new technology skills in the classroom, (e) teachers lacked access to training because their work schedules did not allow them time for training, and (f) communication among principals and their teachers affected teachers' perception of the amount and quality of program support provided to them.

This study should lead to further studies about the organizational structures that prevent classroom technology implementation processes from occurring and about how teachers' visions of classroom technology change during program implementation.