

## ABSTRACT

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Utilization and integration of technology by teachers: A case study  
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The purpose of this study was to investigate the learning process of teachers as they begin to implement an innovation. The research problem was based on the need to understand better the processes by which teachers come to integrate technology into their instructional practices. The Concerns-Based Adoption Model (Hall, Wallace, & Dossett, 1973) provided the conceptual framework for facilitating change in teachers' use of technology to support instructional practices. The constructivist approach to learning characterized the setting for the courses-Introduction to *Technology for Teachers (ITT)* and *Software Applications, Teaching Methods*, and *Software Development for Teachers (AMDT)*. Teachers learned basic computer operations/concepts and applied them for their own professional growth, productivity, and instructional practices.

This study required a methodology that allowed for individual thought and expression to be recorded and analyzed. Qualitative methods were of particular value in view of the fact that comments reveal how people come to understand what they experience (Stake, 1995). Triangulation (Denzin, 1989, p.13) of multiple data assisted in strengthening the general findings.

The study focused on the following questions: (1) How do teachers' stages of concerns about technology change after completing *ITT* and *AMDT*? (2) How do teachers' levels of technology use change after completing *ITT* and *AMDT*? (3) How do teachers' integrate technology after completing *ITT* and *AMDT*?

Findings revealed that teachers' stages of concerns and levels of use were changing from "self" concerns and use to "task and impact" concerns and use. Teachers were moving from "thinking about how to use" technology to "using" technology to meet their needs. Stage of concern interventions were found to facilitate teachers' changes. Effective technology integration was found to be accomplished when each teacher identified, designed, developed, and delivered his or her own meaningful application. These findings may provide others with new perspectives in studying, facilitating, and sustaining teachers' changes in instructional practices supported by technology.