Training Preservice Teachers to Become Technology Leaders

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Abstract: This presentation describes a preservice teacher education program for non-traditional students at the master's level. Seminars that support the teacher candidates through their preservice and first inservice years are described. The seminars are used to build technology skills, instructional strategies integrating technology, and teaching portfolio development. Activities that support technology skill and application development during the seminars and the classroom residencies have been found to make these students leaders in technology in their residencies and in their first teaching assignment.

The Initial Teacher Education (ITE) program at the University of Colorado at Denver is an innovative preservice teacher preparation program designed for adults wishing to change careers and become educators. The graduate students or teacher candidates are placed in partner schools for a full year of residencies, working with K-12 students, classroom teachers and school staff. In addition to the residencies, they take university courses and complete a teaching portfolio to qualify for their basic teaching license.

Teacher candidates also work with university faculty in a leadership area to develop specialized skills. While all teacher candidates in this program develop basic educational technology skills, those in the Information and Learning Technologies Leadership Area focus on developing more advanced skills that will enable them to become technology leaders in their school. These teacher candidates are selected for this leadership area for their willingness to learn more about technology and its applications in education. Some have been video producers, web designers, and self-taught computer whizzes and already know a lot about how to use technology. Others come to the program with minimal to non-existent experience with technology. These teacher candidates are encouraged to take an introductory technology class before their residencies begin.

Over a period of two years, the leadership area professors regularly meet with their teacher candidates for leadership area seminars. While some seminar time is spent on increasing teacher candidate knowledge of technologies commonly used in schools, the majority of time is spent examining how technology can be integrated into the school day and exploring innovative uses of technology. Monthly assignments require the teacher candidates to develop presentations, evaluate software, and design plans for using technology. In their residencies, teacher candidates are expected to carefully consider the media they choose to use in the lessons they teach. They are required to teach at least one lesson during each of the three residencies that includes an innovative use of the technology available at their school.

We are now in the fifth year of this program and can see the effects of our teacher candidates on the teachers they work with, the partner schools in which they were placed, the ITE program and their fellow students, and the schools where they eventually become teachers. Teacher candidates are often the first to use technology in a classroom and serve as models for the teachers they work with. When working on group projects with teacher candidates from other leadership areas, the use and integration of technology takes on a higher priority because of their advocacy. The majority of these teacher candidates become technology leaders in the schools where they obtain their first teaching positions and most are immediately drafted to serve on the school's technology committee.