Developing Preservice Teachers Through a New Model of Instructional Methods

Rationale

Beginning teachers in career and technical education face many complex challenges (Heath-Camp & Camp, 1990), have unrealistic expectations and experience major frustrations (Lynch, 1994). Teacher educators wrestle with the challenge of preparing teachers for a pluralistic society. This challenge is becoming more complex as schools and communities are becoming more diverse (Adams & Hall, 2002) and university-based teacher education programs are not adequately preparing teachers for changes in education (Lynch, 1996) and diversity (Breitborde, 1996; Ladson-Billings, 1991). Adams and Hall (2002) found that business and marketing teachers had feelings of discomfort when dealing with diverse student populations. Career and technical education teachers need better preparation in meeting the needs of special (and diverse?) students (Ruhland & Bremer, 2002). CTE teachers need new and alternative instructional strategies to actively engage students in the learning process to raise academic standards (Ruhland & Bremer) and prepare students from diverse cultures (Adams & Hall). Adams and Hall recommended that enhanced preparation and professional development is needed if career and technical education is to have a positive impact on the education of our youth and our workforce during the 21st century. This particular project investigates preservice teachers’ development in the context of a new professional development experience in agricultural education.

Objectives

The purpose of this project is to determine the influence of epistemological beliefs, learner expectations, and imbedded traditions on the development of preservice teachers in a new instructional methods model in agricultural education. Additionally, because teachers and learners alike make meaning of their experiences based on their beliefs (Baxter Magolda, 1992), this study will explore the teachers’ and students’ motivation and epistemological beliefs of teaching and learning in an undergraduate/graduate teaching methods course during the 2003 and 2004 cohorts. The specific objectives of this proposed project are to:

1) Describe the teachers based on past experiences, embedded traditions, motivation, and epistemology of teaching and learning.
2) Ascertain how beliefs and motivations are affected by the “culture shock” that ensues in the classroom.

3) Explore the influence of “real-world” experiences on preservice teacher’s beliefs, motivation, and professional development.

4) Explore the tensions caused in the educational environment between instructor and learners and how the discomfort creates challenges to student comfort zones. Additionally, determining if those perceived tensions influence performance modifications.

5) Explore a model of professional development of preservice teachers for learner-centered teaching and accommodating learner differences in career and technical education.

**Work Plan**

The following procedures will be completed to meet the objectives of this proposed research project.

1. Review the literature and identify or create an instrument for teacher motivation and learner epistemology. Develop new items to measure learner tension and anticipated change in students’ diversity embracement. The target date for the completion of this activity would be October 1, 2004.

2. The research assistant will observe the instructional activities and interactions between instructor and students as agricultural education methods instruction takes place. Observations will occur throughout the fall semester. Target date for the completion of this activity would be December 15, 2004.

3. Data will be collected through student questionnaires, formal and informal interviews, and written student reflections. Throughout the semester students will complete questionnaires and reflections, which will be used to measure student learning. Students will also complete two teaching practicums in the real-world. The researchers will interview students after each real-world teaching experience. Target date for completion of this activity would be December 15, 2004.

4. Data will be entered and analyzed using computerized data analysis software. Target date for completion of this activity would be January 31, 2005.
5. A summary report of the research findings will be prepared and reported to the Illinois University Council for Career and Technical Education. Target date for the completion of this activity would be March 9-10, 2005.

**Improve and positively impact CTE in Illinois**

This study strives to address a 2004-2005 high importance goal set forth by the Illinois University Council for Career and Technical Education to produce a product that will enhance professional development for preservice CTE teachers. Findings from this study addressing professional development of preservice Illinois CTE teachers will positively impact the field as an additional knowledge will be added to the greater body of knowledge in career and technical education teacher development. As a result of the need for a new era in agriculture, disseminating the effects of a learner-centered undergraduate/graduate teaching methods class on the imbedded traditional belief systems of preservice agriculture teachers will assist post-secondary teacher educators to better prepare new teachers for future challenges regarding diversity and cultural pluralism. This study strives to better understand and appreciate the diverse needs and talents of all students thereby creating an enhanced curriculum to better serve the professional development needs of preservice career and technical teachers in Illinois.

**Deliverable Products**

A final report will be written to evaluate the research procedures, summarize the findings, and recommend action for improving practice and further research. The research project will be evaluated based on the successful implementation of the research procedures outlines, observations of student behaviors, student responses during the classroom activities, responses to the interviews, and the reliability and validity of the findings. Implications of the findings will be assessed regarding further research, curriculum and program development, and professional development for preservice teachers. A new model (hopefully) will be developed to assist teacher educators to better train new professionals for the new era of career and technical education. After the completion of the initial study, the research assistant will continue collecting data throughout the spring semester to further document the professional development experience of the preservice teachers. Additional interviews will be conducted with 1st and 2nd year teachers who have been participants in the “real-world” professional development
experience. The interviews will be used to assess their perceptions of how the program impacted their development and success as a young agriculture education professional.

References