Teacher Quality Enhancement
Middle School Project:
Community College Cohort Program in Science

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State Teacher Quality Enhancement Grants

Improving Teacher Quality through:
• Certification standards
• Accountability
• Alternative pathways
• Teacher shortages

Why Middle Level in Illinois?
• Only 17% of middle level teachers have specialized training appropriate for adolescent learners.
• Current endorsement requirements are inadequate.
• Need specialized training
• Nearly 1/3 of Illinois students are in the middle grades.

The TQE Consortium Partners
• University Faculty
  – Education
  – Arts & Sciences
• Community College Faculty
  – Arts & Sciences
• Middle Level Schools
• Middle Level Teachers in Residence

Programmatic/Curricular Goals
• Design a standards-based middle grades teacher preparation program
• Develop faculty expertise in curriculum innovation and web-based design
• Innovate strategic models for attracting more teachers, especially in rural and urban areas
  • Preservice Recruitment
  • Preservice Persistence
  • Preservice Placement
  • Inservice Job Attainment
  • Inservice Induction/Retention
• Increase accessibility via variety of delivery options

Teaching Practicum in Science
• Creating Partnerships Between CSU and Partner Community Colleges and Schools
Motivation

- Student Teaching:
  - often comes very late in academic career
  - is a high stress situation for many
- Developing instructional materials:
  - helps to foster deep understanding of content
  - helps students think about the material in a new way

Teaching Practicum in Science

- Create a low stress teaching experience early in the academic training of teacher candidates as part of content course
- Invite middle school students to CSU for a science afternoon
- Teacher candidates construct the activities, work with the students, and determine the impact on the student learner

Background

- Modeled after a Teaching Practicum done at the University of Washington
  - Instituted as part of content course
  - High school students are invited to the University
  - Teacher candidates develop and implement the lessons

  Practicum was adapted to fit our local situation

Establishing a Connection

Vernon Johns Middle School: Englewood, Chicago

School Mission:
The Vernon Johns Community Academy will maintain a positive working relationship with parents and community members based on mutual respect and cooperation.

Teacher
CSU alumni

Assessing Initial Ideas

Teacher candidates constructed questions
  - to elicit initial student ideas and help students begin to think about the concepts in the lesson
  - to place them in a better position to address student difficulties and build on student strengths
  - to aid in the development of instructional materials
Designing the lesson

Teacher candidates:
- designed a stand alone 2-hour lesson on topics covered during first weeks of course
  including measurement, distance, speed, and velocity
- worked in groups on constructing the lessons
- utilized results of pretests to address specific student needs

Implementing the Lesson

- Teacher candidates prepared their individual stations
  - i.e. set up equipment, prepared worksheets, etc.
- Middle school students arrived at CSU
- Each group of teacher candidates worked with four to five middle school students
- At end of lesson an assessment question was administered to the students

Reflections

- Was the experience enjoyable? challenging?
- Were you able to foster a student-centered learning environment? Were students engaged? Were you able to get students to construct an understanding for themselves or did you find yourself explaining too much?
- In observing other teachers in your group, did you notice things they did that you thought worked very well with the students? things that did not work well with the students?
Reflections

- Include a description of performance on the pre- and posttest. What did the pretests tell you about what should go into your materials for the practicum? Did you see an improvement from the pretest to the posttest?
- How did the actual experience in the class go? Did everything work out well? What items in your materials worked very well? What items need improvement? What would you change for the future?

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