MAED 513: Current Issues in Mathematics Education
Summer, 2007
TENTATIVE Syllabus

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TENTATIVE Description of the Course:

Contemporary literature, trends, recommendations and issues in mathematics curriculum, instruction, evaluation and professional development. Includes survey of recent movements as a context for understanding current directions. Also includes analysis of statewide, national and international assessments and evaluation of school mathematics programs. Focus is on programmatic issues rather than on individual lessons or teaching strategies.

Course Overview

We will be flexible. The key, of course, is for the course to be of use to you as teachers. Weeks 3 & 4 are very tentative. What you, in pairs, decide to present will determine them to a great degree.

Week 1: Michigan's changing graduation requirements. What are they? Do they make sense? Are they achievable? Can/Should ALL students take Algebra II? Where will Michigan get the highly qualified mathematics teachers necessary? Where will Michigan get the money for the highly qualified teachers?

Week 2: Assessment. What is appropriate assessment of students? How do assessments differ? (How) do assessments align with curriculum and/or enacted curriculum? How do the various assessments (MEAP, ACT, Algebra I test, etc.) correlate with NCTM's ideas relative to assessment?

Week 3: Highly qualified teachers. What are they? What makes a teacher "highly qualified"? Do highly qualified teachers produce better results? How do we measure results?

Week 4: NCLB & GLCEs/HSCEs.

The issues we discuss will not have simple answers; in fact, they may not have one "correct" answer at all. There is so much that magnifies the complexity in the issues of mathematics education: how learners learn (& what we don't know about that); local control; parental (non-)involvement; student motivation; bureaucratic inertia; teacher preparation; & on, & on. Hence, while we may make claims and assertions, other, equally reasonable people make come to different conclusions. What is important is to understand what the issues are and why they arise. Then we are able to contemplate approaches that may be successful in addressing them.

Prerequisite: Permission of the instructor.

Textbooks and Materials required:

No textbook is required. We will use a variety of online resources and instructor provided readings.

Assessment:

Participation is an important part of the course and will be assessed on an ongoing, informal basis. Participation includes timely arrival along with adequate preparation and active contribution to the professional conversations of our class.

Readings that will form the basis of discussions will be assigned most days. On the first two Mondays (6/25 & 7/2) you will turn in a 2-3 page paper reacting to the week's discussions.

The paper due on 6/25 will respond to our discussions on Michigan's new high school requirements. You should respond to one or more of the following questions: Do they make sense? Are they achievable? Can/Should ALL students take Algebra II? Where will Michigan get the highly qualified mathematics teachers necessary? (You may also tackle an alternative question of your own devising that is related to the topic but maybe focuses more directly on your situation.)

Topic for the second paper will be provided during the second week.

In pairs you will prepare and lead a class discussion on an appropriate topic. These presentations/discussions will generally take place anytime during the 3rd and 4th weeks (though, I'd like to save the last day of class for a wrap-up). (If you wish to do so earlier, see me & we can discuss timing.) You should pick a topic of interest to the two of you (I will not assign pairs). It may be one of those raised during the first day discussions or not. Of course, it will be related to a current issue of mathematics education. If two or more pairs want to collaborate and develop a multi-day presentation/discussion, that is fine. Typically, you will have a reading assignment (handout or web-based) that you will make the day before your presentation & discussion section.

Note: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office at 2001 C. B. Hedgcock (227-1700; TTY 227-1543). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state and University guidelines.