

Teaching & Learning Mathematics for Social Justice  
CEMELA Short Course, January 2006

**Course Purpose:** The overall purpose of the course is for students (CEMELA Fellows and others) to begin developing theoretical frameworks on teaching and learning mathematics for social justice, as well as to engage practical examples from classrooms (both K-12 and teacher preparation). Students can use the developing frameworks, and real examples, to analyze their own practice, theorize about their research, and design investigations to further our collective knowledge about these topics.

**Day 1:** Philosophy, overview, and broader sociopolitical context of teaching/learning (mathematics) for social justice

Readings: Paulo Freire, *Pedagogy of the Oppressed* (1970/1998; chapters 1 & 2)  
Antonio Darder, *Reinventing Paulo Freire: A Pedagogy of Love* (2002; chapter 1)  
Eric Gutstein, *Reading and Writing the World with Mathematics* (2006; pp. 210-221)

Questions/Themes:

- \* What is the nature/purpose of education? Of mathematics education?
- \* What is the current social and political situation facing students, teachers, communities?
- \* What are the important issues to discuss for this week?

**Day 2& 3:** The theory and practice of teaching and learning mathematics for social justice

Readings: Eric Gutstein, *Reading and Writing the World with Mathematics* (chapters 1-3)

Presentations: Erin Turner's thesis research.

Questions/Themes:

- \* What is teaching and learning mathematics for social justice?
- \* How does teaching mathematics for social justice relate to Freire's pedagogy of the oppressed? To the current political situation?
- \* What does it look like and mean in practice?
- \* How do we understand the role of teachers, students, and parents/communities?
- \* What does it mean, specifically, for Latinos/as; what are the roles of language, culture, ethnicity, immigration status, nationality, "race"?
- \* What are some dilemmas (ie, "risks" and contradictions; difficulties) & complexities?
- \* What are/could/should be the nature of relationships between teachers, students, parents?

**Day 4:** Designing and developing curriculum

Readings: Eric Gutstein, *Reading and Writing the World with Mathematics* (pp. 199-207)

Presentations: Julia Aguirre's work on preparing teachers to teach for social justice.

- \* What are *classical, critical, community* knowledges? What are the relationships among and between them?
- \* Whose ideas drive curriculum? What could/should be the relationship of designing/developing curriculum to the particular context?
- \* How can we develop curriculum with students/parents/community as partners?
- \* What are some principles of developing/designing social justice curriculum?

**Day 5:** Knowledges needed to teach/research mathematics for social justice in Latino/a contexts.

- \* What do teachers need to know to teach mathematics for social justice?
- \* What do researchers need to know to research teaching & learning mathematics for social justice?
- \* How to we prepare ourselves and others?
- \* What are some open questions about teaching/learning mathematics for social justice?