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Keeping the Focus on Social Justice in a K-6 Mathematics Coaching Program

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MCP Goals and Commitments: Connecting to Social Justice

- Develop "mathematical voice" (Erchick, 2001; 2002)
- Develop awareness and strengthening of agency
- Use an **informed** mathematical voice and agency to make the best decisions for the context
- Work toward some answers, for all of us, to the question of practice: "How can we teach for social justice?" (Tyson and Park, 2006)



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Today's Session

- Patti Brosnan
 - About the MCP: Context and Perspectives
- Melva Grant
 - Power Dynamics in Coaching and MCP Classrooms
- Donna Farland
 - Student Dispositions in MCP Schools
- Diana Erchick & Cynthia Tyson
 - Teaching Social Justice in the MCP
- Lisa Poling
 - Reflections upon Mathematics and Social Justice Pedagogy in the MCP



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The Mathematics Coaching Program (Patti Brosnan)

- Evolution of our Perspective.
- 34 Low-Performing Elementary Schools.
 - 34 coaches
 - 500 teachers
 - 12,500 students
- Students from urban and rural communities.
- Disproportionate numbers of minorities,



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Social Justice Presence



The Ohio State University Mathematics Coaching Program (MCP)





The MCP Structural Model





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Mathematics Coaching Program (MCP)



Mathematics Coaching & Power Dynamics (Melva Grant)

Research question:

• Within an MCP coached classroom, what is the nature of power related to mathematics teaching and learning?

Rationale & Framework:

- Teaching and learning within classrooms are full of teacher-student interactions that are controlled by teachers
- Coaches PD focused on MCP teaching philosophy
- Coaches work done well influences mathematics teaching, learning, and classroom environment



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Preliminary Findings

Locations of power related to coaching:

- 1. Planning for Instruction
- 2. Instructional Strategies
- 3. Classroom Culture

In general, teachers, influenced by coaches, relinquished power (authority) and students gained power (autonomy and responsibility).





Implications & Questions

- MCP coaching may encourage power shifts related to mathematics teaching and learning, are these changes sustainable beyond MCP?
- How might a shift in the power dynamics, from teacher to student, related to mathematics teaching and learning affect the opportunity gap for underserved populations?







Identifying the Relationship between Social Justice & Student Disposition (Donna Farland)

The role of the classroom teacher





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The Ohio State University Mathematics Coaching Program (MCP)





Focus of Research Project

- *Question:* How do students in MCP classrooms perceive mathematics class and or/ mathematics in their environment?
- *Methodology:* Students were given one or more opportunities to represent their perception of mathematics or math in the context of the classroom.







Results

- Selected findings:
 - 99% of the students associated mathematics as 'getting the right answer'
 - 95% of the drawings pictured addition
 - 85% associated doing math problem sets from a textbook
- Student drawings can be a useful tool for mathematics coaches' planning for professional development and for teachers' planning and instruction in a data-based pedagogy.



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Teaching Social Justice by the Numbers: Toward a Pedagogy of Social Justice in the MCP (Diana Erchick & Cynthia Tyson)

- Research question:
 - What is the relationship between the curriculum as delivered to coaches in the MCP and coach understanding of and commitment to social justice?
- Methodology:
 - Participants: 12 experienced MCP coaches
 - Data sources and analysis: Analysis of curriculum, session discussions; writing prompt responses; and
 reflective planning discussions.



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Curriculum and Methodology

- Getting Started: Pre-study analysis
- The Nature of the Journey: Implemented curriculum
- **Data Collection:** Review of curriculum, observation documentation, and participant contributions
- Analysis: On-going, iterative process with developing curriculum and coach growth; External observation and evaluation





Preliminary Results

- Types of awareness
- Wants and needs
- Spheres of influence
- (Re)developing curriculum
- Connections to the MCP



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The Bridge That Connects The MCP to a Social Justice Agenda (Lisa Poling)

Recognition that...

• knowledge is socially and politically constructed.

- critical thinkers are making the decisions.
- critical thinking is related to critical action.



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Transformation from Private to Political

- Habit of the Mind:
 - Internalization
 - Reflecting
 - Conversations with other coaches and eventually their peers
 - Making a commitment



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Mathematics Education... a Political Act

Mathematics as a Gate Keeper:

Citizenship

•Democracy

Social Context

•Pedagogy

"When a student is ready, a teacher will appear" African Proverb



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Open for Discussion!

- What questions does this work raise?
- What discussions do we need to have about this work both in the MCP and in the broader mathematics education community?
- What more does this work need to accomplish?



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Thank You!!



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