



Dr. Patti Brosnan and Dr. Diana Erchick
Directors

<http://www.mcp-coaching.osu.edu>



NEWARK

Mathematics Specialists Choosing to Coach: Using the MCP Model

Dr. Patricia Brosnan
brosnan.1@osu.edu

Dr. Diana Erchick
Erchick.1@osu.edu

Symposium on Preparing P6 Mathematics Specialists and Coaches

May 17 – 19, 2009

Columbus Ohio

Funded by a CISCO Learning Institute Grant
to the State of Ohio



Brosnan & Erchick, 2009
The Ohio State University
Mathematics Coaching Program





MCP Mathematics Coaching Critical Features NEWARK

- Full-time, classroom-embedded professional development for all mathematics teachers, one coach per building
- Work with teachers intensively - daily with 3-4 teachers for 6 weeks, and then move on to another 3-4 teachers
- Support teachers in learning mathematics content, pedagogy, and assessment strategies to meet the students' diverse needs
- Team plan, team teach, debrief, re-plan, to create a data-based and student responsive pedagogy
- Honor confidentiality of all teacher and student data





A “Day-In-The-Life” of a MCP Coach

Period	Monday 12/15	Tuesday 12/16	Wednesday 12/17	Thursday 12/18	Friday 12/19
Before School		SWEA/ DSC mtg			
1 st Period	Kennedy 7 th Rm 117	Kennedy 7 th Rm 117	Kennedy 7 th Rm 117	COS Planning	Kennedy 7 th Rm 117
2 nd Period	Anderson 7 th Rm 207	Anderson 7 th Rm 207	Kennedy 8 th Rm 117	Stiles Family Ctr	Anderson 7 th Rm 207
3 rd Period	Plan/reflect	Plan/reflect	Plan/reflect	↓	Plan/reflect
4 th Period	Geiger 8 th Rm 213	Geiger 8 th Rm 213	Kennedy 8 th Rm 117	↓	Geiger 8 th Rm 213



Brosnan & Erchick, 2009
The Ohio State University
Mathematics Coaching Program



A “Day-In-The-Life” of a MCP Coach NEWARK

Period	Monday 12/15	Tuesday 12/16	Wednesday 12/17	Thursday 12/18	Friday 12/19
5 th Period	Materials Collection	Plan/reflect Kennedy	OSU-open Problems	Stiles Family Ctr	OSU-open Problems
6 th Period	Data collect/ revision	Data collect/ revision	Data collect/ revision	↓	Data collect/ revision
7 th Period	Davis 8 th Rm 213 inclusion	Davis 8 th Rm 213 inclusion	Davis 8 th Rm 213 inclusion	School PD activities	Davis 8 th Rm 213 inclusion
After School		Grading Com 4:30-6	Dentist 4:15 Band 7:00	5:30 Swim meet	

How MCP Coaches Spend Their Time In a Typical Week

1/2	Direct work with the teacher, in the classroom
1/5	Working with data (teacher data, student achievement tests, student open problem solving analysis)
About 1/6	Reflection and planning
About 1/6	Building level Professional development and other school activities (committees, community relations, etc.)

Preparing for the Coaching Process NEWARK

Coaches conduct analyses of:

- Teacher Interest Inventory - informs coach of teacher development experiences and interest in participation
- Teacher LAMP responses - informs coach of teacher knowledge and understanding of content and pedagogy
- Student test scores - informs coach of classroom context

Working with Individual Teachers

Scoring OATs together, teachers:	<ul style="list-style-type: none"> • Learn about student learning • Learn mathematics for teaching • Learn analysis with MCP data bases
Analyzing MCP Problem Sets, teachers:	<ul style="list-style-type: none"> • Learn about mathematical processes • Analyze student changes over time
Co-Planning/Co-Teach, debrief: teachers	<ul style="list-style-type: none"> • Learn pedagogy • Learn to apply results of analysis of student data to instructional decisions
Evidence of interactions	<ul style="list-style-type: none"> • Scenarios • MCP Coach Reports

Inside the Classroom

Teachers use the MCP Evidence Tracker to focus observation on student learning

Teachers co-plan, co-teach and debrief with coaches on implementing standards, student responsive pedagogy, integrated conceptual and procedural content, and mathematical processes

Teachers learn how students think and communicate thinking, and how they can use that knowledge in instruction.

Beyond the Classroom: MCP Coaches In Leadership Roles

- Grade level meetings
- Whole staff professional development sessions
- Textbook adoption and curriculum alignment support
- Responses to school board inquiries
- Union liaison
- Mentoring new coaches



NEWARK

Mathematics Coaching Program

Results Through 2008



Brosnan & Erchick, 2009
The Ohio State University
Mathematics Coaching Program



Population Pool

- Ohio Department of Education provided list of eligible schools for additional Title funding.
 - School Improvement Status
 - Title I Served
- Schools Self-Selected in each Group
 - MCP Coached
 - Literacy Coached
 - Other [Non-Coached]

MCP Numbers

Number of Schools: 103

Number of Coaches: 95

Number of Teachers:

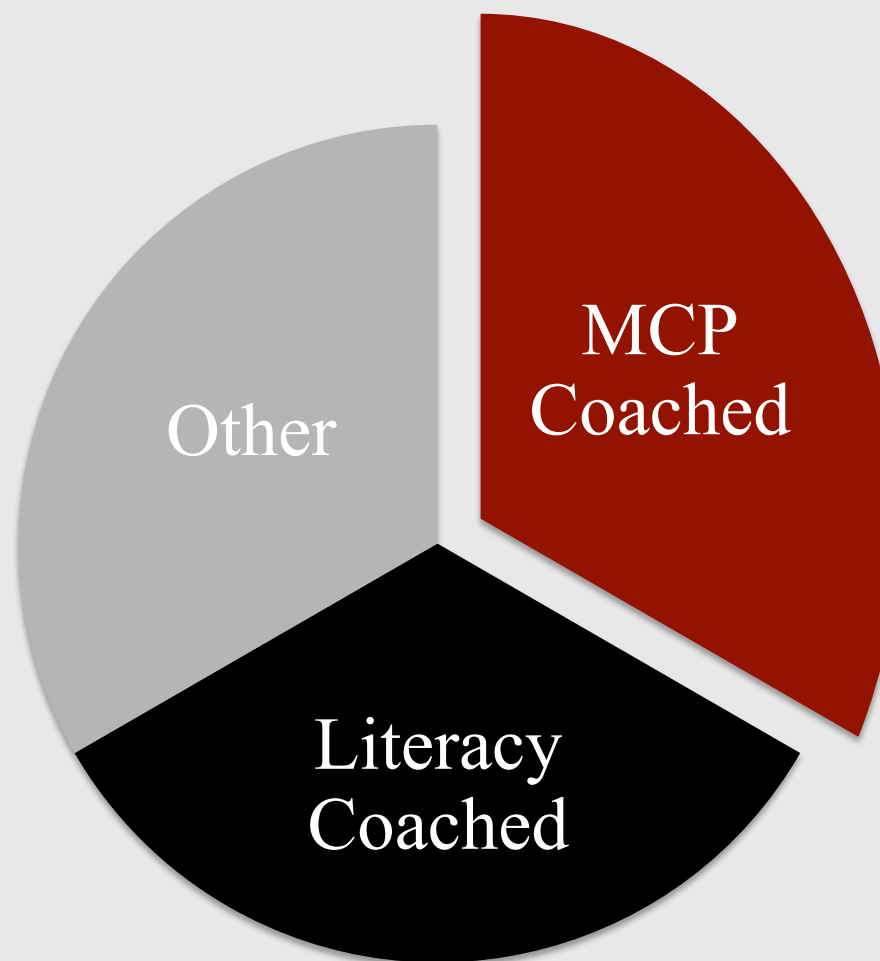
Grades K-6: ~2,060

Grades 3-6: ~1,030

Number of Students:

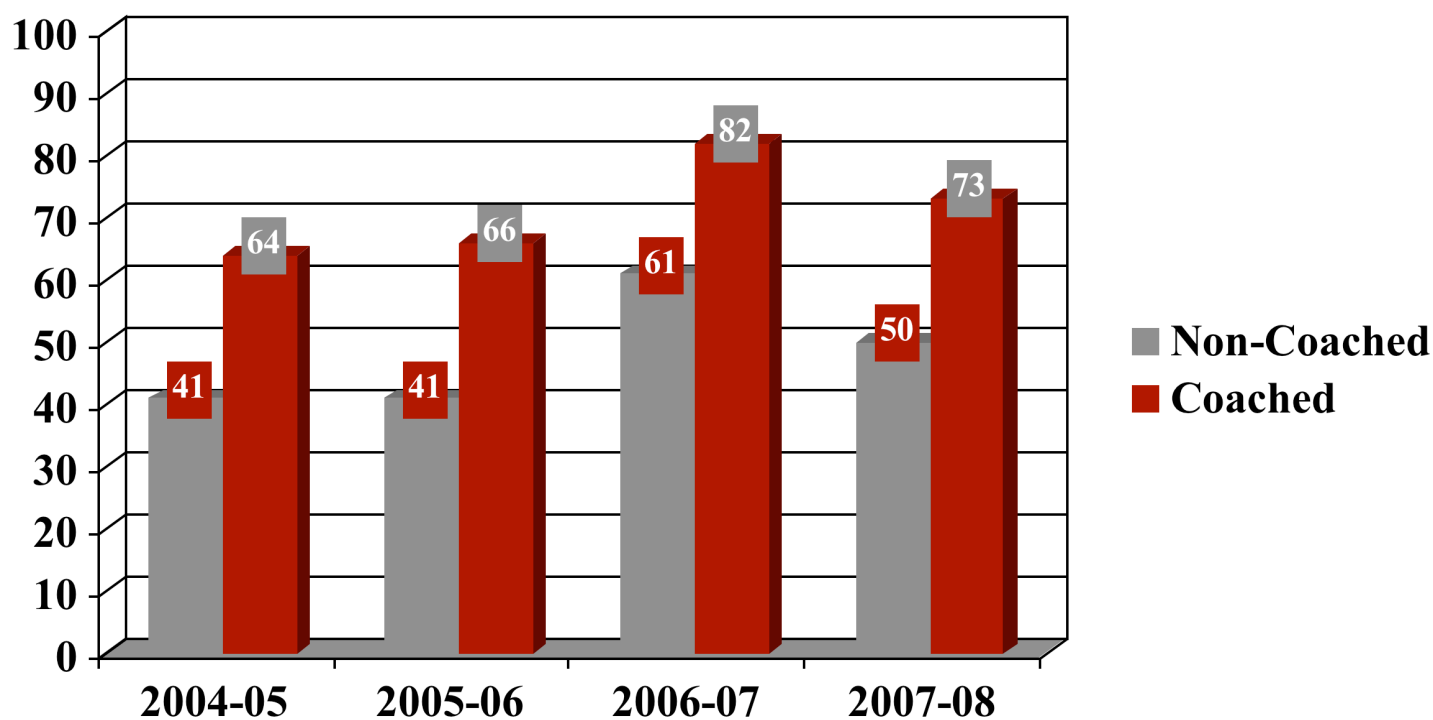
Grades K-6: ~51,500

Grades K-3: ~25,750



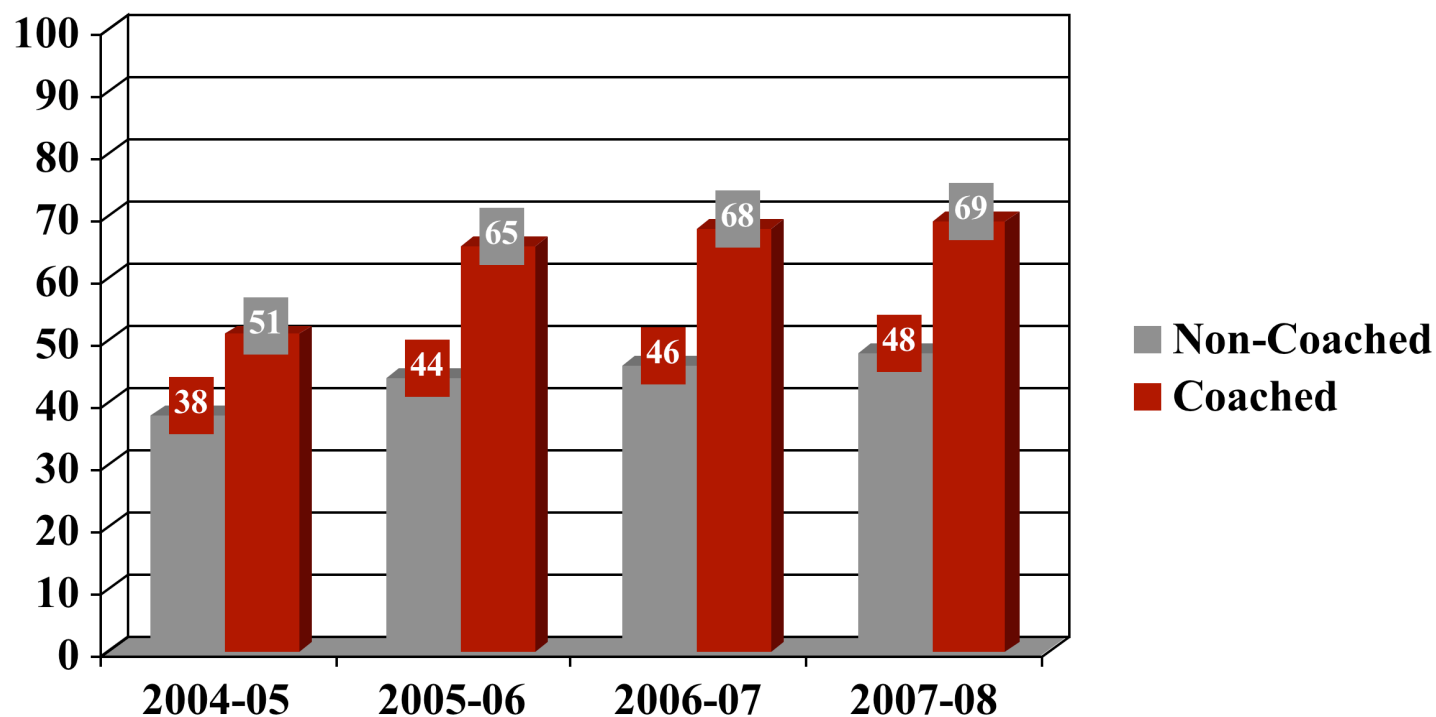
3rd Grade Mathematics Ohio Achievement Test Results

Percentage at or above Proficient



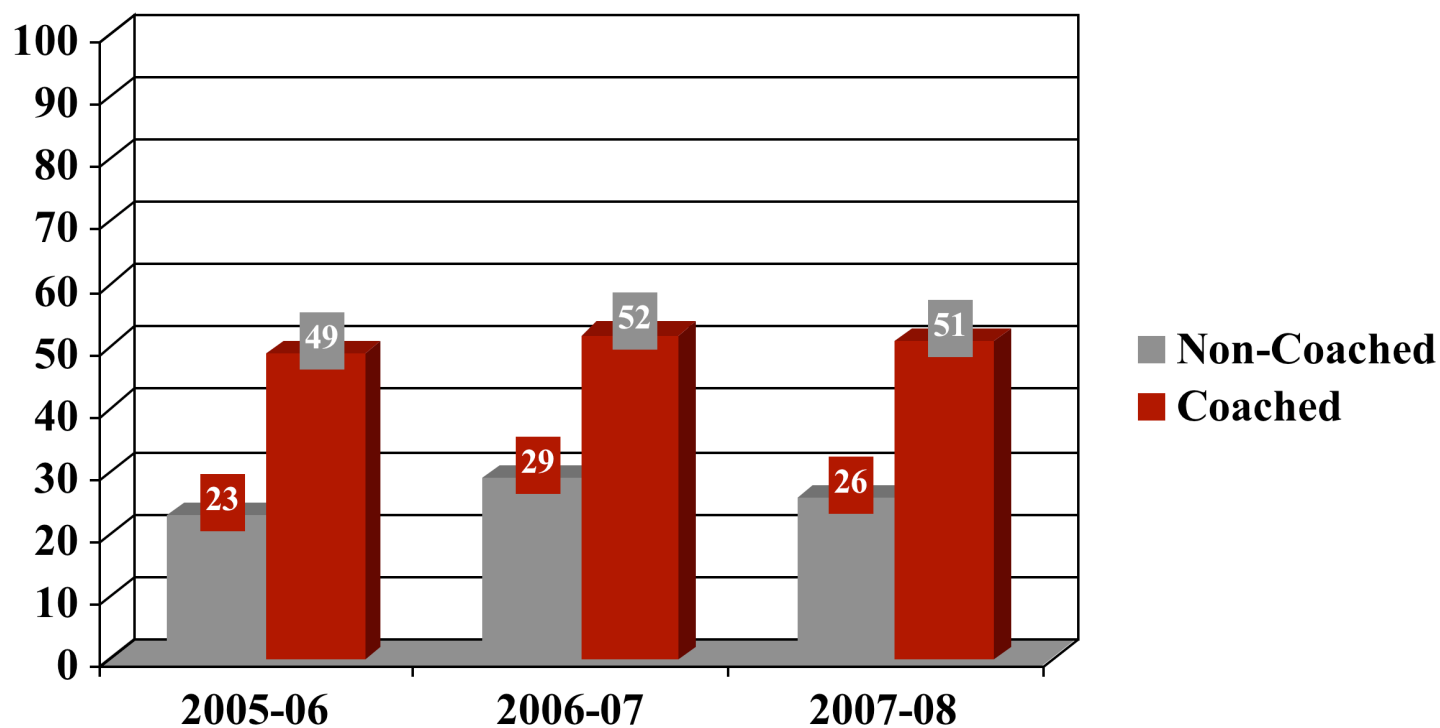
4th Grade Mathematics Ohio Achievement Test Results

Percentage at or above Proficient

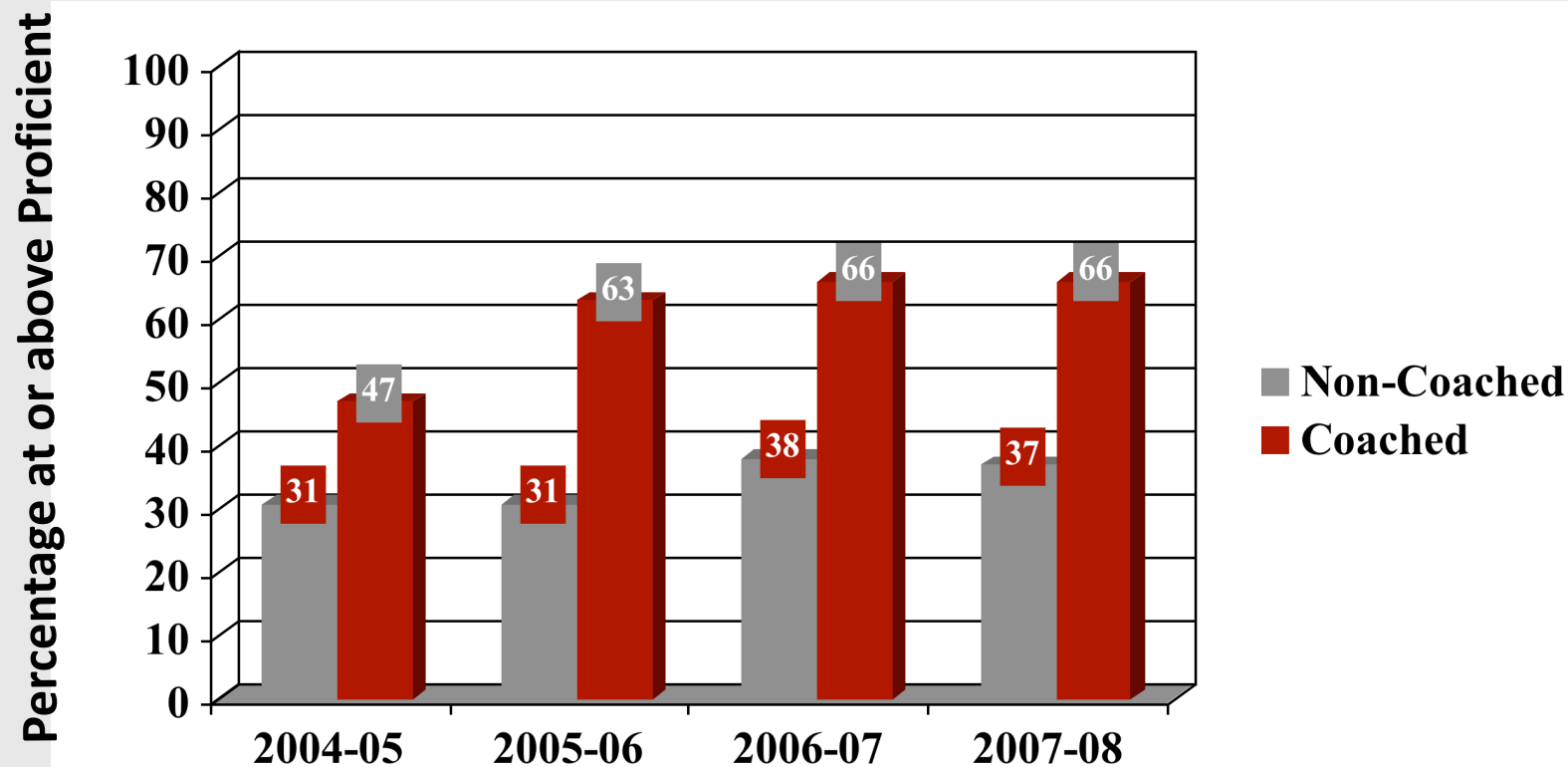


5th Grade Mathematics Ohio Achievement Test Results

Percentage at or above Proficient

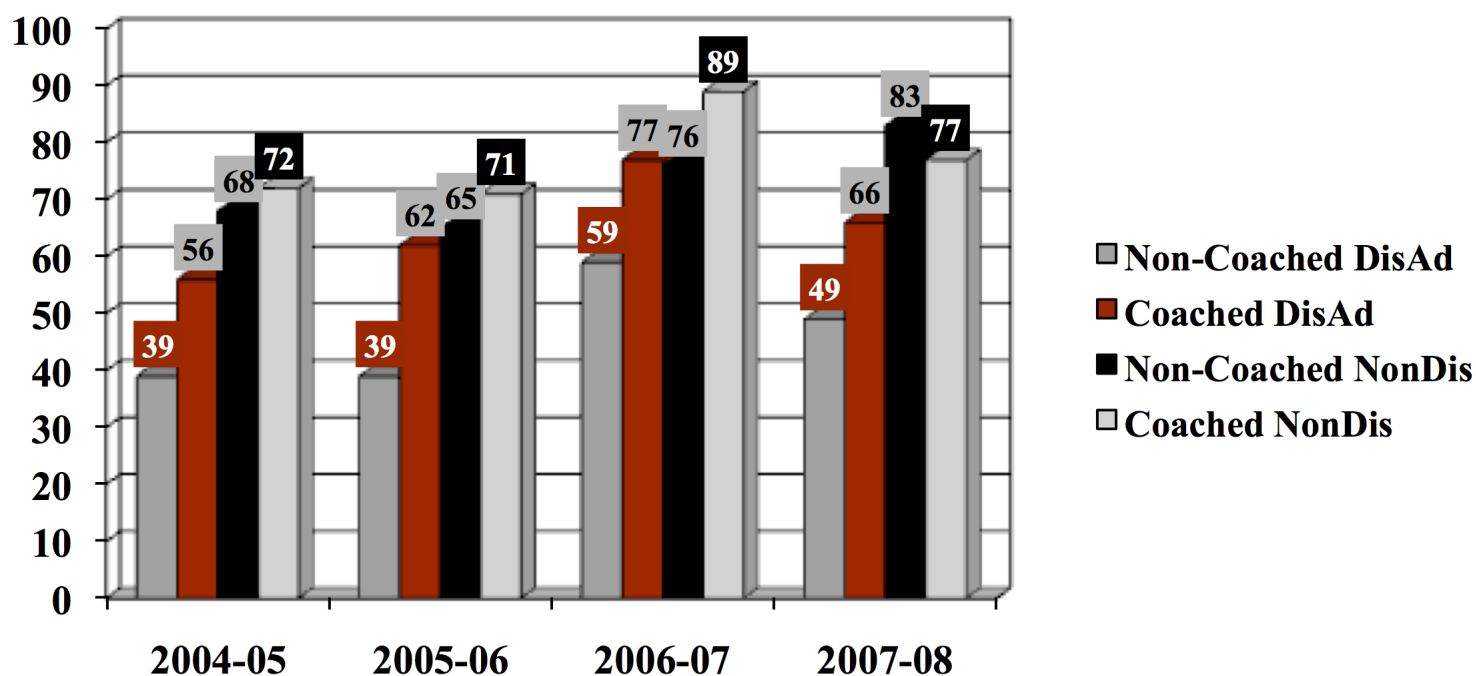


6th Grade Mathematics Ohio Achievement Test Results



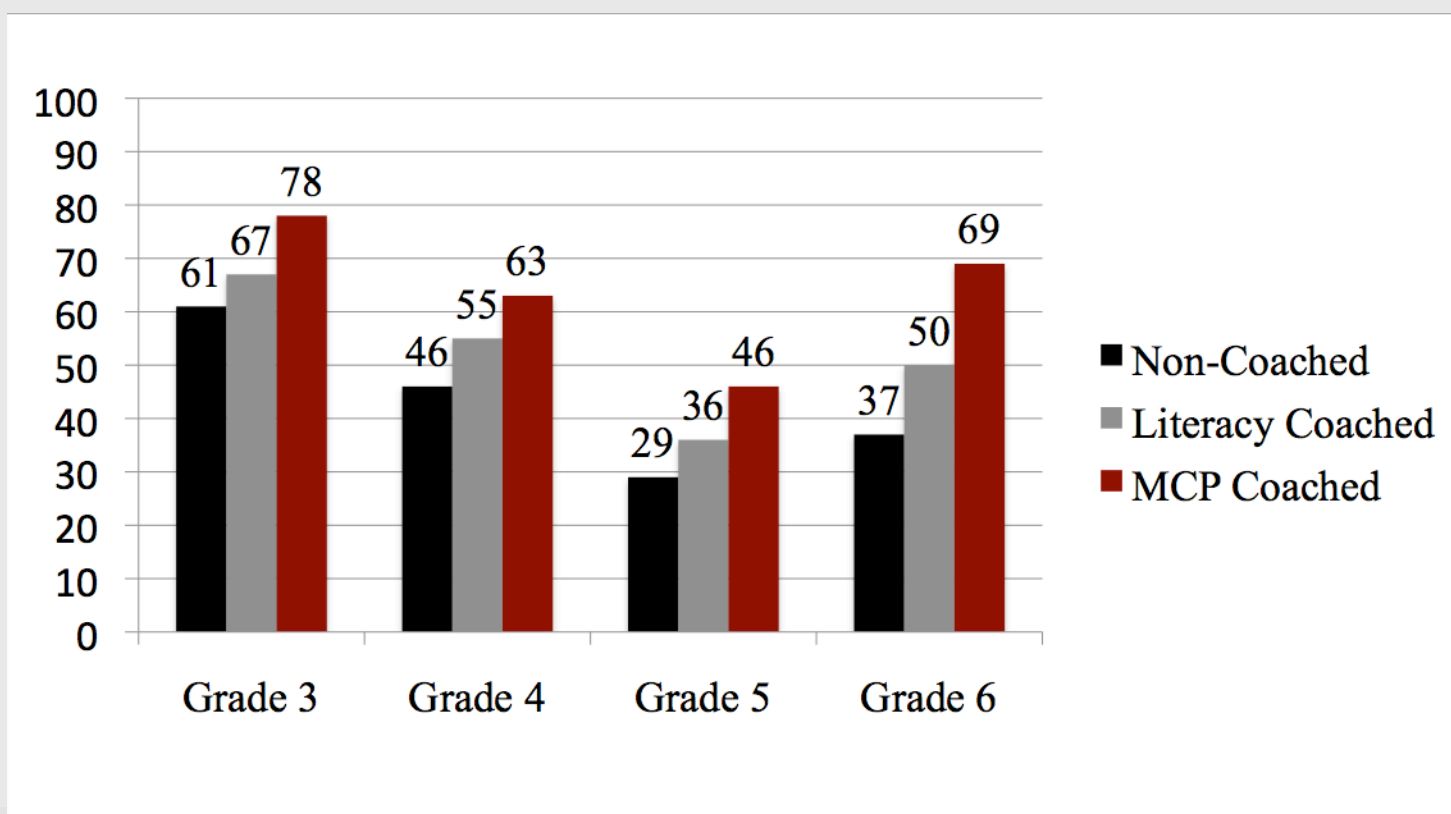
3rd Grade Results by Economic Status

Percentage at or above Proficient

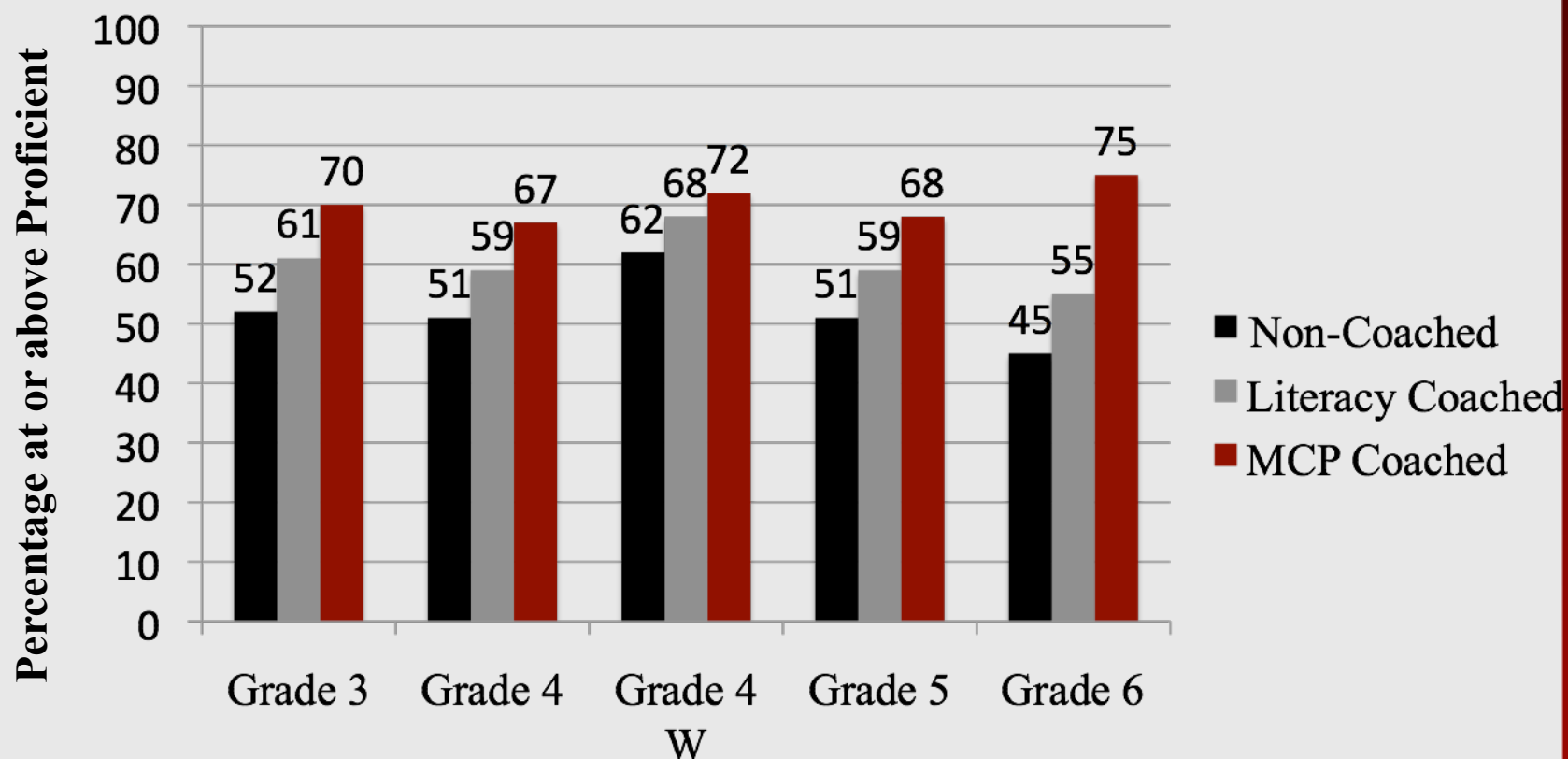


Mathematics Scores 2006-2007

Percentage at or above Proficient



Reading & Writing Scores 2006-2007



MCP Coach's Are Supported By...

- The MCP Team, in monthly Professional Development sessions
- MCP Facilitators, in local, small group sessions and with individualized assistance
- Each other in MCP Facilitator groups
- Administrator support
- Regional State Support Personnel
- MCP/ODE Assurances
- The ODE and it's infrastructure ...



NEWARK

Thank you!



Brosnan & Erchick, 2009
The Ohio State University
Mathematics Coaching Program

