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RESEARCH ABSTRACT FORM

TITLE: Solving the Math Education Problem: The Mathematics Coaching Program

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Results from standardized tests suggest significant gaps in the level of math proficiency between key demographics. Of particular concern is the low performance of African-Americans, economically disadvantaged students, and students in urban school districts. The Mathematics Coaching Program (MCP) has shown initial promise in resolving the issue in Ohio elementary schools. The purpose of this study was to suggest that the MCP could help bridge these performance gaps at the high school level as well.

This research used simple data comparison to show why the MCP is applicable beyond its current use. Using interactive Local Report Cards (iLRC), Ohio Graduation Test (OGT) math performance data was collected for high schools in Columbus, Cleveland, Cincinnati, and select suburbs around them. The data was then analyzed to see how performance varied with race, socioeconomic status, and location. The MCP cohort elementary schools' math performance data from the Ohio Achievement Test (OAT) was then used to show the improvement in scores of the MCP schools.

Results showed that Ohio high schools exhibit the same math performance gaps as those typically found in similar studies. The proven success of the MCP at the elementary school level suggests that implementing it in high schools could help solve the problem.

The focus of future research would be determining how the MCP would need to be altered to cater to the needs of high schools. Given the change in curriculum, students, and school infrastructure at the high school level, leaving the program unaltered would likely render it ineffective. The key is figuring out how to apply the same basic principles to a new environment.