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Empowering mathematics students and teachers through exemplary curriculum, professional development, and leadership

Project Summary

Windows and Mirrors in Mathematics

Angie Kraft & Mollie Siegel, ***CPM Teacher Research Corps 7.0****, 2020–21* (See the full report.)

Background

This study focuses on how to incorporate Emily Style's theory of windows (encountering positive representations of other cultures) and mirrors (seeing one's own culture) into a mathematics classroom. Angie Kraft and Mollie Siegel undertook this work during the 2020–21 school year while teaching remotely. Their goal was to build culturally relevant experiences designed to maintain equity in their classrooms and increase access to math content for all students.

Innovations

We share three student projects that provided students with opportunities to share about their cultures and backgrounds and to learn about those of their peers. In addition to these projects, we share our use of student check-ins throughout the year as a way to monitor student well-being during remote learning, receive feedback on projects, and get to know students.

Findings

Our innovations had a significant impact on our classroom community. Our students displayed an increased sense of belonging in the classroom, had opportunities to share about their backgrounds and cultures, and learned more about their peers. As teachers, we also learned more about our students and saw improved relationships.

Contribution

Our work provides insight into what it looks like to incorporate culturally responsive practices into the classroom. We hope our work encourages teachers to utilize more of these practices as they get to know their students and build their classroom communities.

Disclaimer. CPM is glad to share the promising ideas produced through the work of the Teacher Research Corps. It is expected that teachers will rely on their knowledge of their students, the mathematics they are teaching, and the circumstances surrounding their specific teaching assignment when modifying their own behavior and selecting appropriate instructional strategies. A given strategy may have a positive effect on student learning in some situations and a negative effect in others. Please use your own best judgment as you continue to improve your teaching practice. ***See https://cpm.org/trc/ for more about CPM's Teacher Research Corps.***