Project Summary

Supporting Multilingual Students

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Background

I innovated my teaching to better support multilingual students who are new to the country and are learning both mathematics and the English language. I describe different ways students gain access to mathematical tasks and ways to draw on students' experiences and backgrounds.

Innovations

I share key innovations that were implemented in my classroom that supported multilingual learners. These innovations include:

- Use of manipulatives
- Use of vocabulary dictionaries
- Consistent prompts for weekly reflections
- Creating project-based tasks

Findings

In this study, I found that the use of manipulatives, vocabulary dictionaries, and weekly reflections must be done consistently in multilingual classrooms. The use of manipulatives invites greater access for students to engage in abstract mathematical concepts because it first invites conversations about the manipulatives that can then transform into conversations about the abstract concepts later on. Vocabulary dictionaries allow students to co-construct meanings of mathematical vocabulary using examples and non-examples, as well as encourage conversations about non-mathematical meanings of the word. Weekly reflections stimulate metacognition for students who are learning the rhythm of schooling and their progress in developing in mathematical sensemaking and language learning.

Additionally, I discuss the implications of modifying CPM curriculum to include more culturally relevant, open-ended, project-based learning experiences for multilingual learners, as it invites organic conversations during the long-term project, as well as opportunities for students to share their own knowledge and experiences.

Contribution

This paper provides teachers with actionable strategies and structures that can be used throughout the year to support multilingual students' verbal participation during conversations in multiple languages and engagement with mathematics. It also provides teachers with a way to view teaching multilingual students through an anti-assimilationist and joyful lens.

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/research/ for more about CPM's Teacher Research Corps.***