



WHAT ARE STUDENTS SAYING ABOUT EQUITY IN THE MATH CLASSROOM

Howard County Public School System

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Welcome



Sacovia
7th Grader, Cradlerock School



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WHAT OUR STUDENTS ARE SAYING ABOUT EQUITY IN MATHEMATICS EDUCATION

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Outcomes

- Engage teachers and leaders in a **process** for analyzing “student voice” data to guide strategic planning for instructional improvement and student learning in mathematics classrooms
- Brainstorm ideas for amplifying the student’s voice in your school or district

Getting to Know You...

What measures of success are used to gauge the quality mathematics instruction in your school or district?

- Introduce yourself to a partner or two,
- Discuss your response to the question...

In what ways are your students' voices influencing improvement in mathematics instruction in your school or district?

Amplifying the Student Voice for Equity



- It is Not...
 - the latest educational catch phrase.
 - the instructional strategy of the week.
 - the newest initiative of the year.
- It is Not an Option...

It's an Imperative!

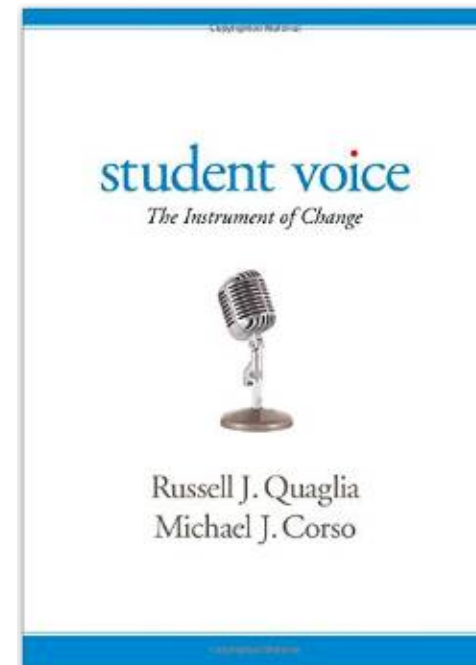
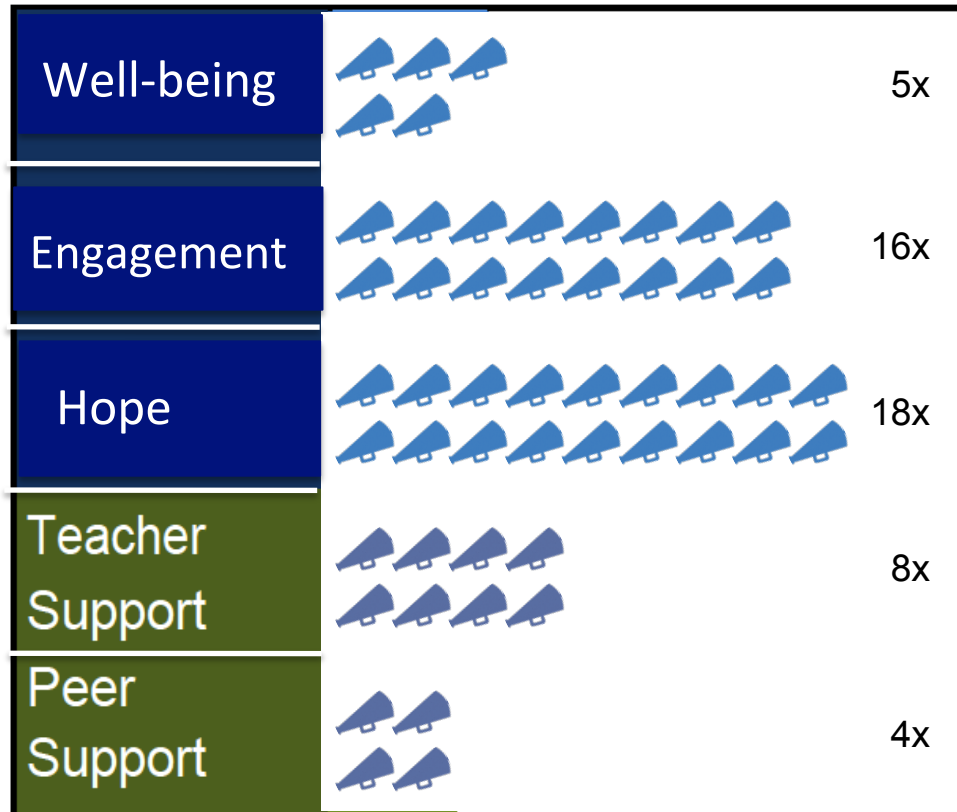
Student Voice Matters



Odds Analyses: U.S. Students (Grades 6-12)

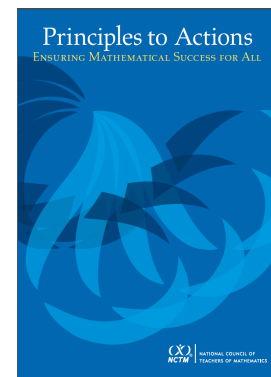
2013-14 My Voice Student Survey Data (controlling for race, gender, grade, and school)

School Variables Affecting Student Academic Motivation



Establishing a Foundation for our Conversations

| Beliefs about access and equity in mathematics | |
|--|---|
| Unproductive beliefs | Productive beliefs |
| Students possess different innate levels of ability in mathematics, and these cannot be changed by instruction. Certain groups or individuals have it while others do not. | Mathematics ability is a function of opportunity, experience, and effort—not of innate intelligence. Mathematics teaching and learning cultivate mathematics abilities. All students are capable of participating and achieving in mathematics, and all deserve support to achieve at the highest levels. |
| Equity is the same as equality. All students need to receive the same learning opportunities so that they can achieve the same academic outcomes. | Equity is attained when students receive the differentiated supports (e.g., time, instruction, curricular materials, programs) necessary to ensure that all students are mathematically successful. |
| Equity is only an issue for schools with racial and ethnic diversity or significant numbers of low-income students. | Equity—ensuring that all students have access to high-quality curriculum, instruction, and the supports that they need to be successful—applies to all settings. |
| Students who are not fluent in the English language are less able to learn mathematics and therefore must be in a separate track for English language learners (ELLs). | Students who are not fluent in English can learn the language of mathematics at grade level or beyond at the same time that they are learning English when appropriate instructional strategies are used. |
| Mathematics learning is independent of students' culture, conditions, and language, and teachers do not need to consider any of these factors to be effective. | Effective mathematics instruction leverages students' culture, conditions, and language to support and enhance mathematics learning. |
| Students living in poverty lack the cognitive, emotional, and behavioral characteristics to participate and achieve in mathematics. | Effective teaching practices (e.g., engaging students with challenging tasks, discourse, and open-ended problem solving) have the potential to open up greater opportunities for higher-order thinking and for raising the mathematics achievement of all students, including poor and low-income students. |



Telling Our Story

- **Step 1** - Creating a State of Readiness
- **Step 2** - Student Interviews
- **Step 3** - Data Analysis
- **Step 4** - Taking Action



Step 1 – Creating a State of Readiness

- How would you feel if a group of central office staff came into your school and interviewed your students?
- How would you feel if, based on that student feedback, the school administration launched a series of actions in response to that student feedback?
- What conditions would you prefer to exist before engaging in an improvement process based on “Student Voice”?

Step 2 – Student Interviews

If you wanted to learn how to improve classroom instruction from your students, what questions would you ask?

Step 2 – Student Interviews

Here is what we asked...

- Describe your mathematical journey from elementary school to high school?
- Tell us about a time when you learn something new and were really excited. Why were you really excited?
- What recommendations would you make to improve the quality of learning in the mathematics classroom?

Step 3 - Analyzing The Student Voice

In groups...

- Organize and then scan the set of student response cards
- 1st Review – Assuming the role of teacher (of these students), what themes or big ideas emerge?



Step 3 - Analyzing The Student Voice

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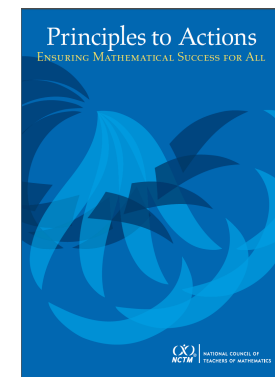
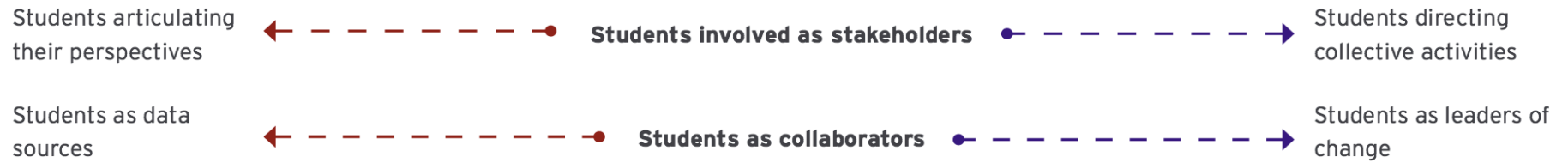


FIGURE 3
THE SPECTRUM OF STUDENT VOICE ORIENTED ACTIVITY



| Expression | Consultation | Participation | Partnership | Activism | Leadership |
|--|--|---|--|--|---|
| Volunteering opinions, creating art, celebrating, complaining, praising, objecting | Being asked for their opinion, providing feedback, serving on a focus group, completing a survey | Attending meetings or events in which decisions are made, frequent inclusion when issues are framed and actions planned | Formalized role in decision making, standard operations require (not just invite) student involvement, adults are trained in how to work collaboratively with youth partners | Identifying problems, generating solutions, organizing responses, agitating and/or educating for change both in and outside of school contexts | (Co-)Planning, making decisions and accepting significant responsibility for outcomes, (co-)guiding group processes, (co-)conducting activities |

Most student voice activity in classrooms resides at this end of the spectrum.



The need for adults to share authority, demonstrate trust, protect against co-optation, learn from students, and handle disagreement **increases** from left to right.

Students' influence, responsibility, and decision-making roles **increase** from left to right.

Step 4 – Take Action

- Part I – In the role of teacher, What actions might you take to in response to your student's voice? (based on out activity)
- Part II – How might you work to amplify student voice in your school or district? (across the continuum)

Our Thoughts?

- Scaling up school interviews
- Scaling up Learning Labs
- Engaging students in curriculum development processes
- Empowering students to provide ongoing, formative feedback to teachers
- Students as members of staff interview teams



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