Framing Equity: Helping Students "Play the Game" and "Change the Game"

Rochelle Gutiérrez

Abstract

This article introduces a framework for equity that entails the dimensions of Access, Achievement, Identity, and Power. Beyond knowledge and skills, teachers need an "equity stance" that embraces and works to balance the tensions between these four dimensions.

Discussion And Reflection Enhancement (DARE) Pre-Reading questions:

1. How do people in your working context define equity and what words do they use to discuss it?

2. How do *you* define equity and how do you know you are addressing it in your everyday practice?

"DARE" Post-Reading questions appear at the end of the article. This article (without DARE questions) originally appeared in Spring 2008 *Noticias de TODOS.*

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"Equity" is a hot topic in mathematics education these days. However, for many people, addressing equity issues rarely moves beyond the goal of closing the achievement gap (Gutiérrez, 2008). For me, equity is ultimately about the distribution of power--power in the classroom, power in future schooling, power in one's everyday life, and power in a global society (Gutiérrez, 2002). I draw on the idea that equity must be framed with both dominant and critical definitions. In working with teachers, I have found it useful to explicate four key dimensions (Access, Achievement, Identity, and Power) and to highlight the relationships and tensions between them. Let me explain.

Access relates to the resources that students have available to them to participate in mathematics, including such things as: quality mathematics teachers, adequate technology and supplies in the classroom, a rigorous curriculum, a classroom environment that invites participation, and infrastructure for learning outside of class hours. The Access dimension reflects the idea that students are affected by their "opportunity to learn." However, a focus on access is a necessary but insufficient approach to equity, in part because it fails to redress past injustices. Besides giving students necessary resources, we also care about student outcomes, or what I categorize as *Achievement*. This dimension is measured by tangible results for students at all levels of mathematics, including such things as participation in a given class, course taking patterns, standardized test scores, and participation in the math pipeline (e.g., majoring in mathematics in college, having a math-based career). Moving from mere access to achievement is important when considering that there are serious economic and social consequences for not having enough math credits to graduate from high school, not scoring high enough on a standardized achievement test to gain acceptance to college, or not being able to major in a math-based field that can confer a higher salary and prestige in society.

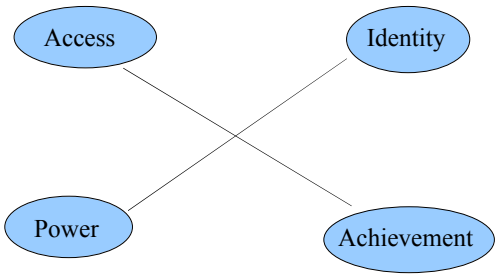
However, because many students find themselves down playing some of their personal, cultural, or linguistic capacities in order to participate in the classroom or the math pipeline and because some groups of students historically have experienced greater discrimination in schools, issues of *Identity* are also important to consider. For many mathematics educators, attending to students' identities means focusing on students' pasts (e.g., including the contributions of their ancestors). But, the identity dimension also concerns itself with a balance between self and others in a global society and acknowledges ways students are racialized (Martin, 2007), gendered and classed (Walkerdine, 1988). It includes whether students have opportunities to draw upon their cultural and linguistic resources (e.g., other languages and dialects, algorithms from other countries, different frames of reference) when doing mathematics, paying attention to the contexts of schooling and to whose perspectives and practices are "socially valorized" (Abreu & Cline, 2007; Civil, 2006). The goal is not to replace traditional mathematics with a predefined "culturally relevant mathematics" in an essentialistic way, but rather to strike a balance between opportunities to reflect on oneself and others as part of the mathematics learning experience.

The Power dimension takes up issues of social transformation at many levels. This dimension could be measured in voice in the classroom (e.g., who gets to talk, who decides the curriculum) (Morales, 2007; Zevenbergen, 2000; Adler, 1998), opportunities for students to use math as an analytic tool to critique society (e.g., exploring "risk" in society) (Mukhophadyay & Greer, 2001; Skovsmose & Valero, 2001; Gutstein, 2006), alternative notions of knowledge (D'Ambrosio, 2006), and rethinking the field of mathematics as a more humanistic enterprise (Gutiérrez, 2002).

Access and Achievement can be thought of as comprising the dominant axis, preparing students to participate economically in society and privileging a status quo. The dominant axis, where access is a precursor to achievement, measures how well students can play the game called mathematics. Identity and Power make up the critical axis. The critical axis, where identity can be seen as a precursor to power, ensures that students' frames of reference and resources are acknowledged in ways that help build critical citizens so that they may change the game. All four dimensions are necessary if we are to have true equity. Learning dominant mathematics may be necessary for students to be able to critically analyze the world, while being able to critically analyze the world may provide entrance into dominant mathematics. It is not enough to learn how to play the game; students must also be able to change the game. As educators, we need to be clear on our stance--that we are advocates for our students to do both. Doing so requires situating ourselves in the tensions that exist in this work (Gutiérrez, 2009).

This equity diagram seeks not to simplify the complexity but rather to offer a useful "mapping space" for ideas when trying to reflect on one's practice. As a researcher, it is useful for me to see the kinds of approaches that teachers and families take to address equity. Take, for example, the issue of "power." While teachers in interviews may say they "want to empower students," they almost always mean it only as it relates to achievement, not with respect to helping students reach personal goals of excellence that may intersect with the doing of mathematics (e.g., helping their communities solve a local problem).

Dimensions of Equity



I am not implying that at the heart of all teachers' equity agendas is Access and/or Achievement while it is Identity and/or Power for most marginalized students and their families. Many educators already embrace the idea that students need to see themselves reflected in the curriculum and be offered opportunities to develop further agency in the world. My experience in working in urban communities is that some marginalized families do not want their students to develop "agency" in the ways that critical researchers seem to think is important, as they worry that it will take away from schools giving their students the tools to excel in school, or they feel they are already doing this "critical" work with their children at home.

As a researcher dedicated to equity, I attempt to situate myself in "Nepantla," the crossroads of these tensions, to highlight the phenomena at hand. Being able to name the dimensions helps us move toward highlighting tensions between the dimensions so that we might be more reflective about how we can successfully balance attending to them all.

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Discussion And Reflection Enhancement (DARE)
Post-Reading Questions

1. What do you think it means to help students "play the game"? What do you think it means to help them "change the game"? In what way(s) do you believe you work to help students "change the game"? Why do we need to change the game? Is "the game" referring to mathematics or mathematics education or both?

2. Which of the four dimensions are addressed by an achievement gap focus? What is missing? Why is that important?

3. What are some examples of "past injustices" that an opportunity-to-learn view misses?

4. In what way(s) does Gutiérrez' concept of equity overlap with or depart from the way in which equity is articulated in the National Council of Teachers of Mathematics' position statement (accessed at http://www.nctm.org/about/content.aspx?id=13490)?

5. The four equity dimensions are written from the point of view of students and learning. Do these dimensions also apply to teachers and teaching? In other words, do teachers, administrators, and teacher educators need to be thinking about access, achievement, identity, and power with respect to teaching? If so, what might this involve?

6. Gutiérrez claims, "As educators, we need to be clear on our stance--that we are advocates for our students to do both. Doing so requires situating ourselves in the tensions that exist in this work." What might it mean to situate oneself in the tensions that exist in this work?

7. Try this: The next time you teach, *make note of the ways in which you are attempting positively to address dimensions of identity and/or power in your classroom*. Would students agree with your list? What would it take to address more strategically these dimensions? Are there individuals in your working context that you feel are already doing this better with whom you can become an ally?

8. Read the Gutiérrez (2009) paper listed in the References. Come up with a tension you have experienced that is not highlighted in the article. Why is this tension important in an equity stance? In what ways do you embrace this tension and in what ways do you reject it?

"DARE to Reach ALL Students!"