

# The Racial Achievement Gap in Mathematics

Highlighting the numbers of African Americans and  
Latinos in below grade level math classes

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# Introduction

- For my research, I went back to the high school that I graduated from in 2004.
- As a current math teacher, I know many of the teachers there from college as well as from when I was a student.
- This allowed me access to interviews and data of the current faculty.

# Goal

- My goal was to identify the percentage of Black and Latino students at the school.
- Compare that percentage to the percentage of those same students in the below grade level Algebra classes.
- Will the percentages be similar?

# Marginalized Student Data

	Asian	Black	Latino	White
School estimate	12%	11%	2%	74%
Pre-Algebra	5%	27%	1%	66%
Algebra I	7%	17%	4%	72%
Algebra I Advanced	9%	5%	3%	84%
Algebra I Support	3%	27%	5%	64%
Algebra II	6%	20%	2%	72%
Algebra II Honors	31%	2%	2%	65%
	Advanced Classes	Below Grade level classes		

(M. Guinta, personal communication, April 23, 2013)

# Racial Gap



This data clearly shows that Black and Latino students are over represented in the lower level math classes. These low level classes are more likely to look like the picture on the left than the one on the right.

# Racial Achievement Gap Meeting

- Coincidentally, administration recently called a meeting about the racial achievement gap in math.
- Some teacher responses:
- “Parents are not involved.”
- “Students are not prepared.”
- “Students are lazy.” (J. N. Markstrom, personal communication, April 21, 2013)

# Theories

- Critical Race Theory
- Cultural Connections
- Deficit Theory

# Critical Race Theory

Individual racism, and outright hatred is not the only racism that exists today. Societal norms contribute to a systemic racism in our society.



There are no minorities amongst these CEOs.

# Making a Connection with a Different Culture

- Different cultures construct knowledge in different ways (Hall, 2001)
- It is important for teachers to adapt to student needs rather than force students to match the standards set by white society (Delpit, 2006)



Is she adapting to his needs or forcing him to adapt to her?

# Deficit Theory

The blame for negative educational outcomes falls on the students, parents and their communities rather than the teachers and schools (Flessa, 2009)

Teachers focus on the negative aspects, or deficits, of a student's life and use those qualities to place blame rather than concentrate on the positives and advocate for marginalized students.

# Deficit Theory



Can a student learn if they are coming from a neighborhood like this?  
That is a classic example of Deficit Theory.

# Analyzing CRT

- The subordination of people of color is created and maintained in the United States (Villenas & Deyhle, 1999).
- By over proportionally placing Blacks and Latinos in the low level math classes, teachers and the school are both continuing this White supremacy by not pushing the marginalized students to the advanced classes.
- Minorities are also at times treated with disrespect, which accounts for negative feelings towards school and white society (Villenas & Deyhle, 1999)

# Analyzing CRT

- “There was a survey that went out at the beginning of last year with questions about the school. The school wanted to know how parents felt about the school and administration. What they found were a lot of minority parents who responded that they felt disrespected by the school at times.” (J. N. Markstrom, April 21, 2013)
- If parents are feeling disrespected, there is a good chance that those marginalized students have similar feelings, as they are being treated poorly by the teachers as well.

# Analyzing CRT

- Even if these teachers are not aware of how they are treating these minority students and parents, the poor treatment is still happening.
- Any student, black, white, or brown, who is disrespected will not achieve at their highest potential.
- This lack of respect could account for the fact that there are twice as many Black and Latino students in the Algebra I Support class as there should be proportionally to the total school population.

# Analyzing Culture Connections

- There was only one minority teacher at the meeting to discuss the data of the racial achievement gap. That minority was as Asian-Indian.
- There was not one teacher at that meeting who looked like the students who are feeling the worst effects of this achievement gap.
- More minority teachers would be helpful, but more importantly, it is up to the teachers to find a better approach to working with students of color.
- Not acknowledging this cultural gap leads to the negative educational outcomes for marginalized students that are on display with this data.

# Analyzing Cultural Connections

- Black students are not being taught properly and are not being pushed hard enough by their White teachers (McIntyre, 1997).
- The fact that there are 32% Black and Latino students in the Algebra I Support is alarming, but the numbers of the Honors Algebra II class are equally alarming. Only 4% of those students are Black are Latino.
- We know that there are very few minority teachers, so clearly the White teachers are not pushing these students hard enough to reach these high level classes.

# Analyzing Cultural Connections

- Whether a teacher is teaching in rural Alaska or in the Pacific Islands, they must adapt to student needs rather than force students to adapt to White culture (Delpit, 2006).
- Even if they do live in the same community as the school, White teachers are still teaching across a cultural gap.
- It is imperative that the teachers try to connect to their students' different culture in a way that minority students can understand.

# Analyzing Cultural Connections

- Teachers are taught subject matter.
- They also need to be taught about multicultural education as a whole (Asher, 2007).
- The lack of understanding of multicultural education is helping maintain this racial achievement gap.
- If multicultural education as a whole is not discussed and addressed, this gap will continue to widen.
- What do the percentages have to reach before we as educators truly do something about the problem?

# Analyzing Deficit Theory

- “They are lazy” or “they have not been prepared for this class” are both examples of Deficit Theory.
- It is the students themselves, as well as the families, who are to blame for this achievement gap rather than the teachers and the school.
- These pre-conceived notions among racial lines will affect student outcomes.
- “Researchers on both the right and left argue with increasing frequency that this focus on failure is a potential self-fulfilling prophecy and, therefore, a part of the problem (Flessa, 2009, p. 344).

# Analyzing Deficit Theory

- Flessa intended his discussion to be about marginalized students in urban areas.
- I contend that that same principle applies to these students in suburban areas.
- Students will rise to the level of expectations set by the teachers.
- The “self-fulfilling prophecy” can easily be seen with the data from this high school. The number of Blacks and Latinos in the low classes compared to the high class screams low expectations.
- These low expectations are seen in the data, there are less than half of the amount of marginalized students in the Honors Algebra II class!

# Analyzing Deficit Theory

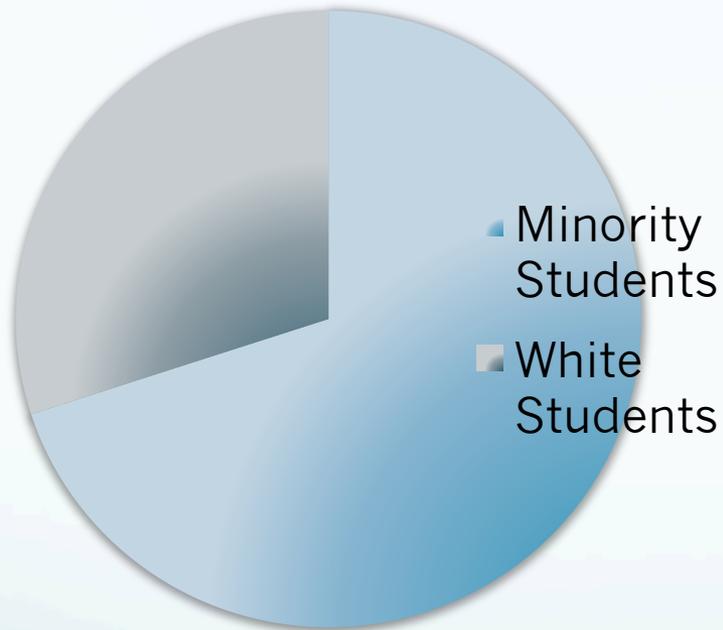
- Pointing blame outward, citing lack of parental involvement.
- Principals explained, “...school failure as an inevitable outgrowth of community failure-in effect, blaming parents and students” (Flessa, 2009, p. 336)
- Teachers may already believe that there is little that they can do to help these students because they believe that they will not have a partnership from the families, so it is a lost cause.

# Solutions

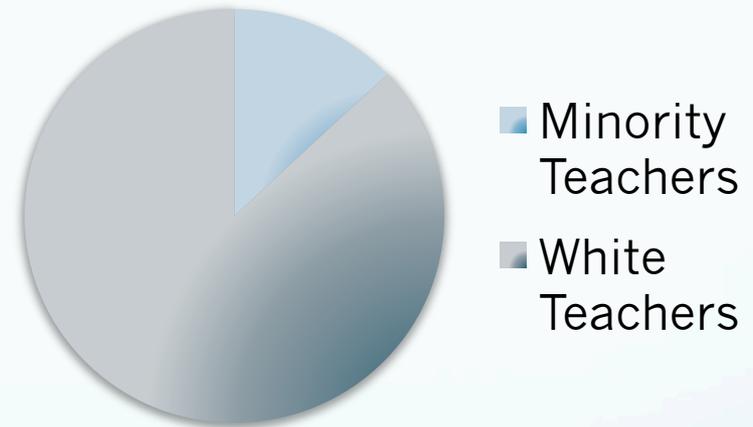
- We need to be able to use words like “racism” and “privilege” (Johnson, 2006).
- A defensive reaction cannot be the initial response.
- When marginalization of students is fully recognized, teachers will be more aware of Deficit Theory, connecting to cultures and CRT.

# Solutions

## Students



## Teachers



By 2026, it is projected that minorities will be 70% of the students in American public schools (Parker, 2003)

According to the Southern Education Foundation, only 13% of teachers are from minority groups (Landsman, 2001)

# Solutions

- Minority student population is rising well beyond the expected level of minority teachers.
- This points to the drastic need for professional development on multicultural education. Teachers need to be taught how to work with minorities.
- Teachers need to be taught how to rid the school of Deficit Theory, CRT and be able to connect across cultures.
- Professional development can reduce the racial achievement gap and produce positive educational outcomes – the ultimate goal of all teachers!

# A New Outlook

- Four months ago, I think that I would have agreed with the teachers at this meeting about data. I would have placed blame outwards, or expected minority students to adapt to the White standards put in place. Through the readings, writings and discussions of this course, I am now able to see a much bigger picture. The word oppression has a whole new meaning to me now, as I am able to see it from a systemic point of view, rather than individualized. I will take this new outlook and bring it into my own classroom to provide a math education for students that is free of oppression and promotes positive educational outcomes for all. A teacher can make a difference.

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