

TEACHING AND LEARNING MATHEMATICS

Three Visions to Work Towards

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What are 2 – 3 words that come to mind when you hear this song?



Carlos Embales y los Roncos Chiquitos

Quítalo del Rincón

Ricardo Díaz

Que contesta el que lo sepa y que aprenda el que no sabe
Que venga otro a la pizarra que se sepa la lección
Y al que no quiera aprender
Le enseñamos, ¡muy contentos!

20+3?	23	30+6?	36
30+3?	33	30+6?	36

Quítalo del rincón y pásalo a la ventana
Y ya verás como mañana él aprende la lección
Al momento, ¡muy contento!

20+3?	23	30+6?	36
30+3?	33	30+6?	36

Esta lección la supo Juana, sin llegar a la ventana
Cuando estudio lo hago en serio, yo estudio con jarana
Si uno no quiere creer, preguntárselo a mi hermana
Sumo, multiplico, y resto, y solo en una semana
La rumba la baila Juana, sentada en la palangana
Esta rumba no termina, por lo menos hasta mañana

My students' words:

polyrhythm • joy • community

My students' and my words:

**polyrhythm • joy • community
liberation**

How do we make this happen in the mathematics classroom?

1



1



**polyrhythm • joy • community
liberation**



What does this look like in mathematics?

2



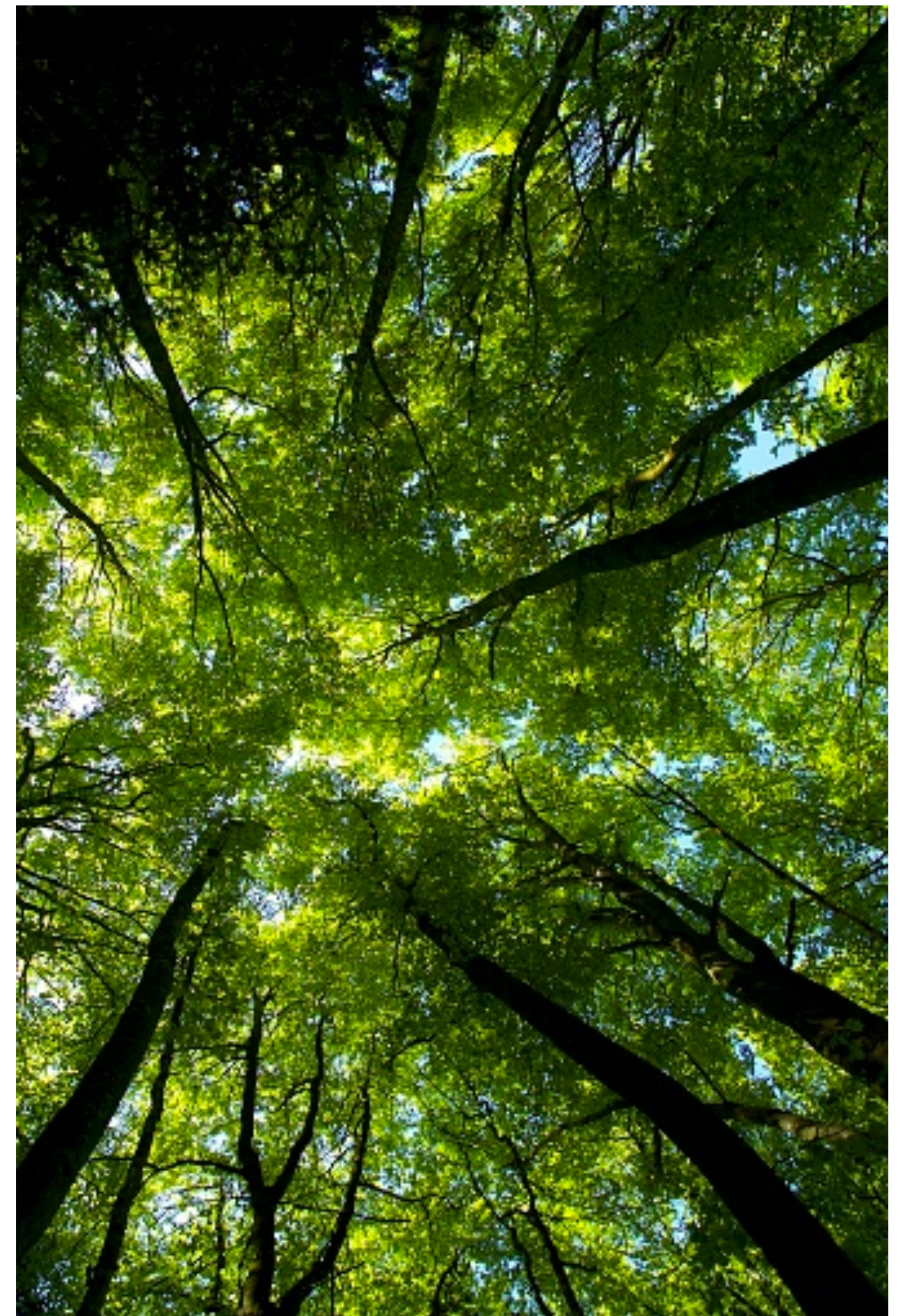
2



In undisturbed beech forests the trees synchronize their performance so that they are all equally successful.

The trees, it seems, are equalizing differences between the strong and the weak. Their well-being depends on their community.

Even strong trees get sick a lot over the course over their lives. When this happens, they depend on their weaker neighbors for support.



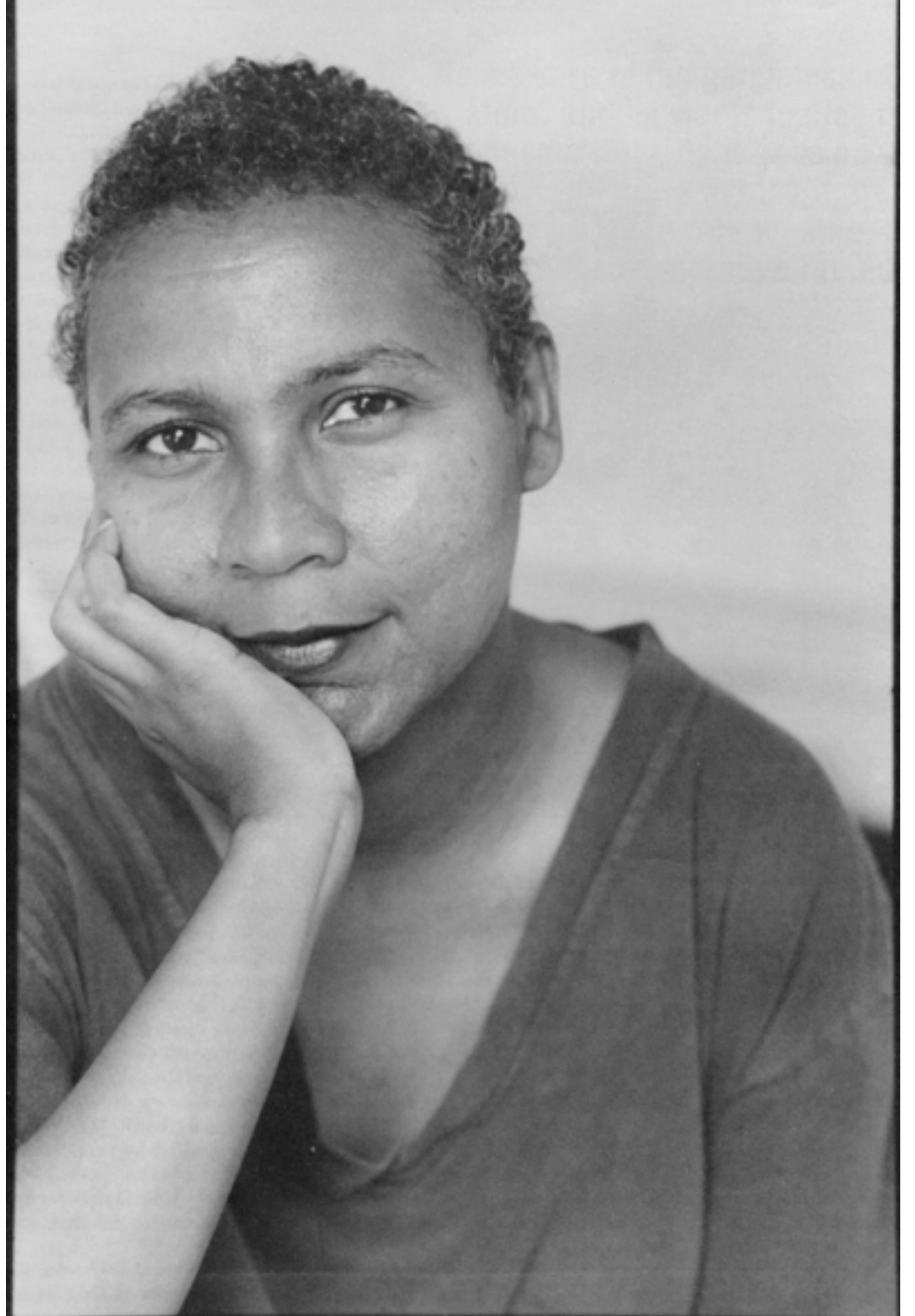
Peter Wohlleben
The Hidden Life of Trees

**polyrhythm • joy • community
liberation**



What does this look like in mathematics?

3



3

For black folks, teaching –educating– was fundamentally political because it was rooted in antiracist struggle.

School changed utterly with racial integration. Bussed to white schools, we soon learned that obedience, and not a zealous will to learn, was expected of us.

That shift taught me the difference between education as the practice of freedom and education that merely strives to reinforce domination.



bell hooks

Teaching to Transgress

**polyrhythm • joy • community
liberation**



What does this look like in mathematics?

iii muchas gracias !!!