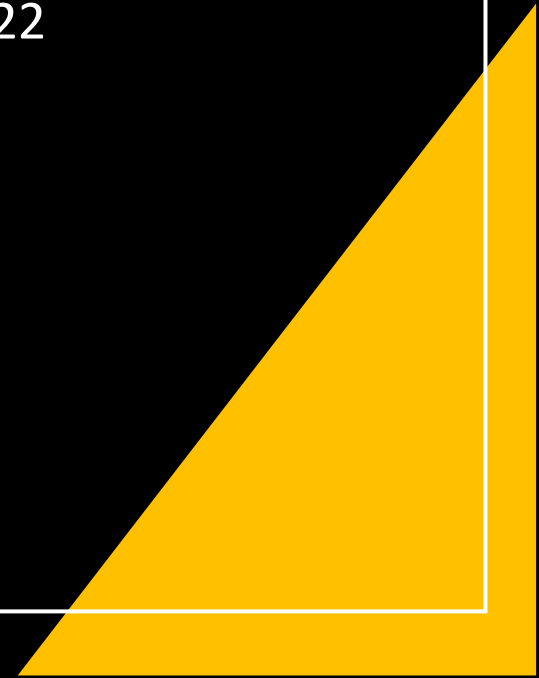


Towards a
socially just
mathematics
education: A
personal
reflection in
3 activities

York St John

Monday 20th June 2022

Tony Cotton





- I am a mathematics teacher and a teacher of teachers of mathematics. I believe our understanding of mathematics impacts on our understanding of the world

Who is Tony Cotton

Azeem Rafiq

- “For a person of colour to accept you’re being treated differently because of your race or religion is tough to take. You’re always asking, ‘Why?’ I didn’t want to believe it. After the loss of my son, I couldn’t look the other way.”



The key 'players'

Azeem Rafiq: Born in Pakistan moved to England 2001.
Secondary school in Barnsley

Michael Vaughan: Born 1974. Went to Silverdale Secondary,
Sheffield.

Joe Root: Born 1990. Went to King Ecberts School, Sheffield.

Gary Ballance: Born 1989 in Zimbabwe. Educated at Harrow
and Eton



It's about
education,
Miss!

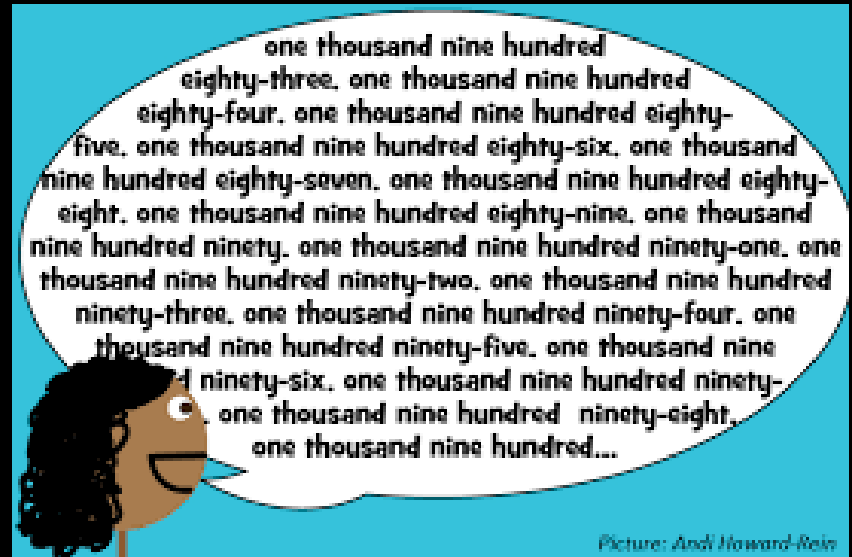
Sohm Kapila:
Margaret Glen Bott
School, Nottingham.
1995-2000

What is social justice?

- When did you first notice 'injustice' or 'unfairness' in an educational setting.

Activity 1

- How long do you think it would take to count to six million. Saying each number out loud



Mathematics impacts on our understanding of the world

Half of Britons do not
know 6m Jews were
murdered in Holocaust

The Guardian
10 November 2021



Political correctness gone mad?

And in the inner cities—where youngsters must have a decent education if they are to have a better future—that opportunity is all too often snatched from them by hard left education authorities and extremist teachers. And children who need to be able to count and multiply are learning anti-racist mathematics—whatever that may be.

Margaret Thatcher in speech to Conservative Party Conference 1987.



The same refrain?

The West should be “confident in its values” and not be “obsessing over pronouns or indeed seeking to decolonise mathematics”.

Oliver Dowden Conservative Party Co-Chairman

15 Feb 2022



What is anti-racist mathematics?

MT132 1990

- **Recognises pupils' cultural heritage.**
- **Draws on pupils' own experience.**
- **Develops pupils' understandings of cultures other than their own**
- **Counters bias in materials and teaching styles.**
- **Employs a variety of teaching strategies.**
- **Develops anti-racist attitudes through mathematics.**

Activity 2:

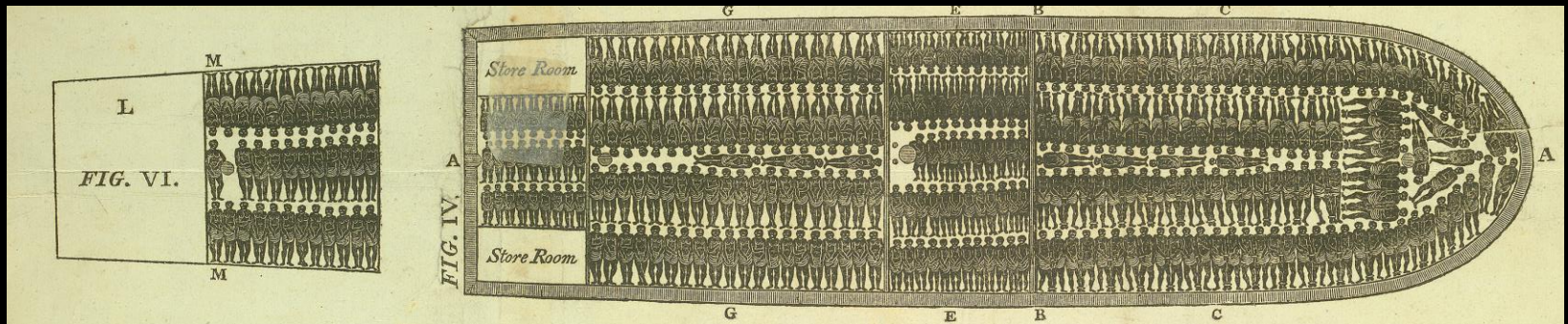
How many boxes measuring
50cm x 50cm x 2m could
you fit in a space measuring

2m x 10m x 35m

A large yellow right-angled triangle is positioned in the bottom right corner of the slide, with its hypotenuse facing the top-left.

Brooks Slave Ship

By April 1787, the diagram was widely known across the UK, appearing in newspapers, pamphlets, books and even posters in coffee houses and pubs. An image had rarely been used as a propaganda tool in this way before and it proved to be very effective in raising awareness about the evils of the slave trade.



Activity 3

- How long would it take you to walk 4060 km?



Mathematics Teaching and Drama: MT263.

Mathematics for Equality and Justice

- My vision is that we create a system of learning that prioritises our relationships with each other, rather than how we achieve in competition with each other. In that way we could learn about each other's needs, as *ordinary* needs, which we could find ways of meeting. I think that within a generation of having a learning system without competition, we could have a world where people are valued for what they can give, which is ultimately who they are. Those who need the most care could be seen as giving the opportunity to others to get close and understand the commonality of vulnerability. This, in turn, could make us all feel safe about our own vulnerability. Real inclusion, for me, is about the promotion of peace and equality.

Maresa Mackeith

Mathematics Teaching 279

Special issue “Re-envisioning
Mathematics Education”

Why did it take
you so long?

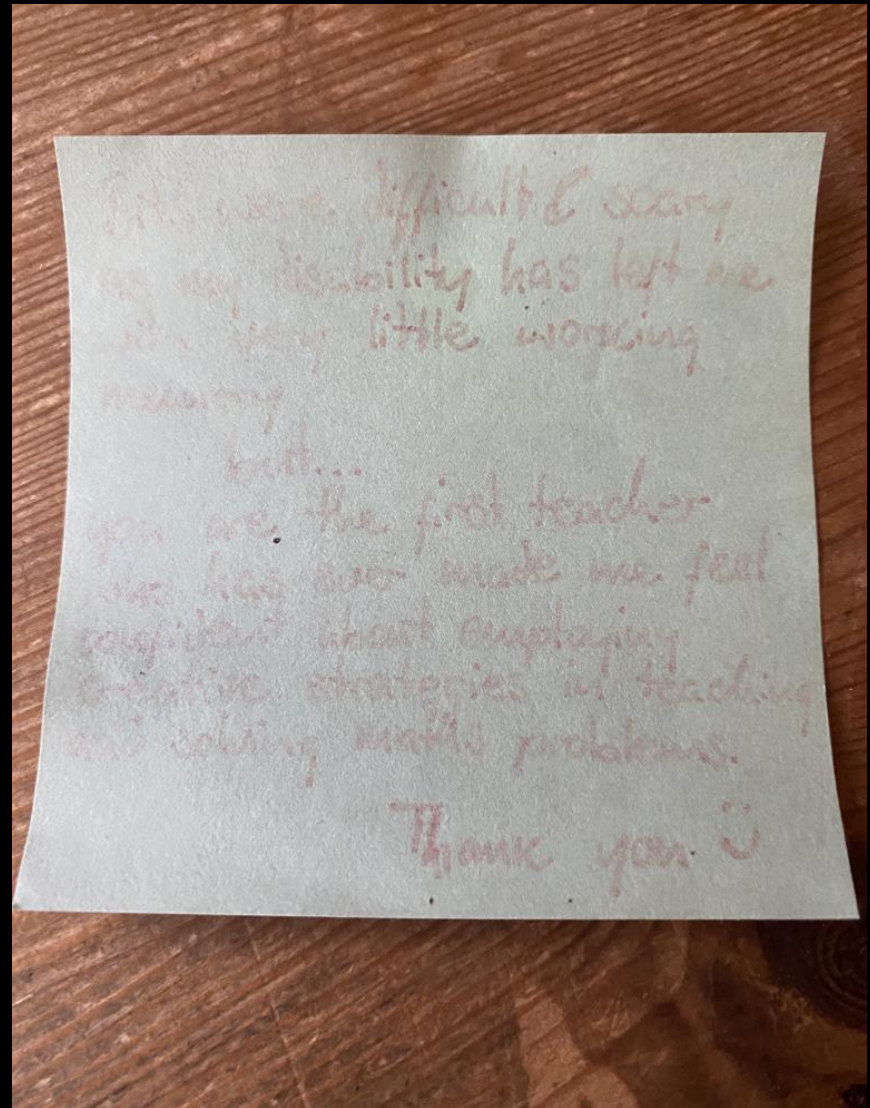




Multiculturalism?
Anti-Racism?
Decolonisation?

We can make a difference

Bits were difficult and scary as my disability has left me with very little working memory. But ... you are the first teacher who has ever made me feel confident about employing creative strategies in teaching and solving maths problems. Thank you :)



What is your vision?
Where do you have the power to act?
What is your first step?

