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Diversity, inclusion, anti-racism, decolonial practice and women in STEM – an opportunity to share good practice

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Dr Katy Bloom | Associate Professor
Initial Teacher Education
York St John University

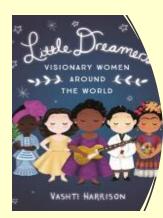
Session structure

- Who we are and what we do
- University panels and policies
- 'Macro' perspectives
- Applied opportunities and exemplars
- Q&A

YSJU

- Race Equality Charter
- Athena Swan
- Institute of Social Justice
- Decolonising the curriculum
- YSJU 2026 Strategy
- Celebrating Black History
- QAA Inclusive Education Framework (U of Hull)

The primary undergraduate students were asked: How has the conference helped to develop your understanding of inclusion & diversity?



- i am going to make sure i use lots of the resources Manjinder showed us as there were so many and i have noticed when doing my research for my wider curriculum essay many subjects, especially history and science seem to be very white male dominated.
- A lot of strategies and information regarding children from different ethnic minorities.
- Massively given a lot of perspective and really loved the key speakers their experiences really helped
- The lectures were very informative and I have come away with a lot of strategies that I would implement in my teaching.
- It has given me a deeper understanding of each group of people/children and this has enabled me to think of ways to support them more effectively
- The conference was extremely informative and left me wanting to do lots more research as I feel I have only scratched the surface of what there is to learn about the different groups! I have learnt lots today and thoroughly enjoyed the day - it was filled with eye opening information which has helped inform my future practice.
- It has given me a really good insight into the backgrounds children may have and how best to respond to this.
 It's broadened my knowledge on things I didn't previously have a lot of knowledge on and ways in which I can improve my teaching and outlooks.

Postgraduate secondary student feedback:



- have realised the importance for the need on a push on the change of the literary canon taught in schools and the curriculum!
- The links between colonialism and climate change are very interesting. Honestly, would have never made those connections before today
- very useful and formative session, we are always aware of these topics but we need to push this and educate our students so they can carry it on in their journeys
- As a History trainee this is making me begin to feel quite ignorant in the face of diversity in my teaching. It's definitely going to make me be mindful of this going forward
- referring to previous: In Music, we did a lesson on the slave trade to give context and an introduction to the origin of blues. I try to say "enslaved people/persons" rather than "slaves". thinking about the language i use. Advice on this told me that slave isn't an identity, rather a circumstance
- Were currently unpacking representation and why it's important in literature and the media. I used Marcus rashford for this as he's very relatable and many of the boys s in the class are football mad.
- we are currently discussing Marcus and Malala on our 'Inspirational people' module in English
- am teaching of mice and men though soon (which is unfortuanately a v racist and sexist text) so I will be trying to build in some discussion time and reflection time for students as well as addressing the issues
- This is showing me that I'm definitely not doing enough! I don't think diversity is really addressed in my lesson plans at all
- Thank you Manjinder, loads to think about and packed full with excellent resources.

Padlets

Padlet 1 was created for the <u>first YSJ</u> workshop on 'Anti-racist and decolonial practice' on 17.2.21 by staff and students across the university departments and schools. This was a flipped session with music, poetry, lived experiences and contributions from students and staff, and a guest speaker, Dr. Gurnam Singh. The Padlet is live and any member of the Teams group can add to it:

https://padlet.com/yorksj/decol

Padlet 2 was created for colleagues in Initial teacher education at YSJ. Colleagues add to this Padlet and share ideas with student teachers in teaching sessions and partnership school colleagues:

https://padlet.com/mjagdev1/mq0v0wrwvjr4v7ai



What do you understand by anti-racist and decolonial practice?

Urgent and essential efforts to decolonise curriculums might have a better chance of succeeding if they changed their language, if campaigners talked about widening curriculums rather than decolonizing them: for that is what decolonizing involves. It is entirely possible to teach the canon and also give students a sense of what sits outside it, to teach the extraordinary and prizewinning works of Naipaul, Ishiguro and Zadie Smith, for example, alongside those of Dickens and Joyce."

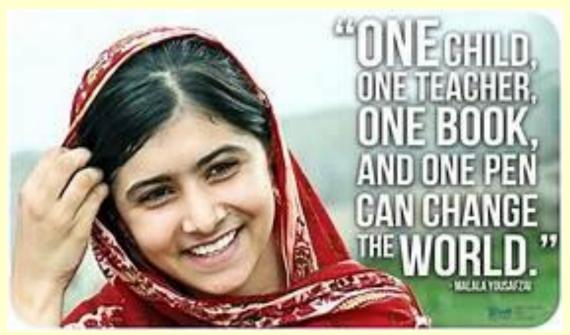
Sathnam Sanghera

"Why are the Falkland Islands owned by UK and not South American countries, Aunty?"





Reflection...pause for thought...



Is the diversity of your students reflected in your lesson plans?

Is the language in your learning materials non-racist/sexist/discriminatory?

Do you review your resources/lesson plans regularly?

Are negative attitudes actively challenged?

Do you promote multiculturalism in lessons?

Do your resources use multicultural themes?

Do you actively avoid using stereotypes in classroom resources and examples?

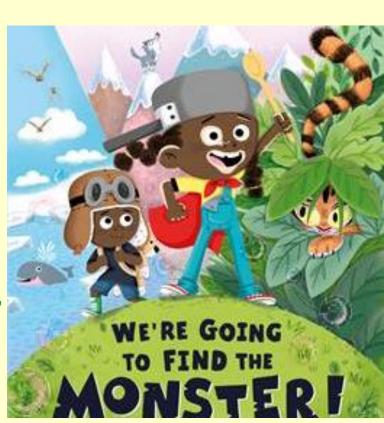
Do you actively reference and use examples from different traditions, cultures and religions?

Are you doing your best to challenge society's stereotypes?

Adapted from (Deer, 2020)

Anti-racist education

- Recognise pupil's cultural heritage in the classroom
- Draw on pupils' own experiences
- Develop pupils' understanding of cultures other than their own
- Counter bias on materials and teaching styles
- Have a variety of teaching styles
- Develop attitudes through curriculum subjects
- Explore history and cultural contributions
- Black historians, scientists, geographers, mathematicians, artists, writers etc.
- Use official statistics critically



YSJ Teacher education diversity and inclusion conference and materials - June 2022

York Drama LAMDA group performance: celebrating Black inventors

Teachers and Year 6 pupils, Scarcroft Primary school, York: 'Migration Project'

Elected Young Mayor for Hull: 'Hull's Young Mayor's Antiracism in Schools' campaign'

Creativity and Deputy Headteacher, colleague, Chapel Allerton Primary school, Leeds

Professor Avtar Matharu: 'Decolonisation of research project with postgraduate students' - Director of Green Chemistry Centre, University of York

Adeeba Malik – QED: 'Turning Challenges into Opportunities since 1990': https://www.qed-uk.org/

Haddy Njie and Jake Furby: Speak Up Diversity, York: https://speakupdiversity.org/

Dr. Tony Cotton: 'Social Justice, Anti-racism or decolonising the curriculum. A reflection through 3 mathematical activities', Associate

Professor, Social Justice in education, University of Nottingham, author of *Understanding and Teaching Primary Mathematics*.

Ashish Kundi: 'Teacher consciousness', Bridlington High school

Dr. Gurnam Singh: 'From intelligence to wisdom: the need of age', Associate Professor of Equity, Office of Teaching and Learning, Coventry University

Professor Ipek Demir: 'Decolonising Research and Teaching: We want epistemic justice, not just diversity managerialism', Director Centre for Ethnicity and Racism studies, University of Leeds

Maxine Squire: 'Importance of developing an understanding of cultural competence in schools.' Assistant Director of Education and Skills, City of York Council

Resources from presentations and blog: https://blog.yorksj.ac.uk/ite/ysj-teacher-education-diversity-inclusion-conference/

- 1. Izzy Haigh Year 2 Primary undergraduate student: Wider curriculum Benin history, geography, art and religious education
- 2. Tatiana Boorman PGCE Primary student: working with primary-aged children with English as an additional language
- 3. Sam Copland PGCE Primary student: The impact of diverse literature on subconscious racial bias and stereotyping in young child ren
- 4. Molly O'Toole Year 3 Primary undergraduate student: How far do schools aim to address Eurocentric perspectives when planning and delivering their curriculum?

Feedback from YSJ Teacher education diversity and inclusion conference

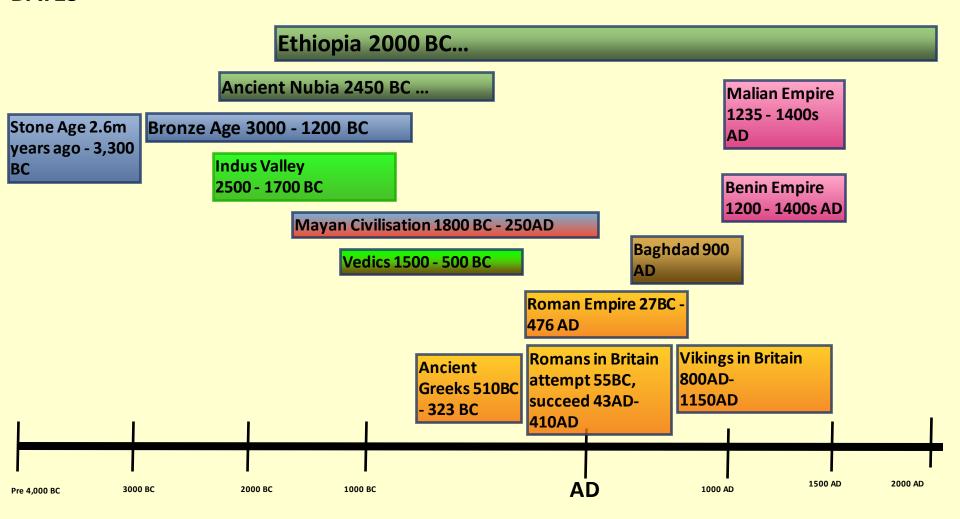
- -children sharing their learning they were brilliant, and really highlighted why we do what we do!
 -absolutely fantastic conference, thank you! I learnt a lot, got inspired and enjoyed the day and all for free!
 -I really appreciated the number of breaks included, this gave a chance for us to stretch our legs, have a drink and reset before the next set of presentations
- catering was brilliant!
- thank you so much for organising and delivering such a wonderful conference, it was thought provoking, inspiring, challenging and motivating.
- Thank you so much for the invitation to the conference. I have learnt so much and i really valued the experience.
- Thank you for organising an amazing and enriching conference. I came back with so much more new knowledge and understanding!
- Thank you for organising such an inspirational day.
- It was great to meet you in person and give a talk at the event. So much enthusiasm! I hope my talk gave people food for thought.
- Many thanks for your hard work in putting together such an inspiring day.

Marcus Rashford on the curriculum for GCSE media studies

- Marcus Rashford on the curriculum for GCSE media studies CBBC Newsround
- Rashford's use of social media has been added to the media studies curriculum and will be included in lessons from September.
- Year 10 and 11 pupils will study the way the Manchester United star uses online platforms to **fight against child poverty** and racism.
- Marcus Rashford used the popularity of his social media to pressure the government to provide free meals to vulnerable pupils in England throughout the school holidays during the pandemic.
- He's also used his social media to make sure children have enough access to books at school, as well as partnering with chef Tom Kerridge to encourage healthy eating.
- AQA, who produce the school curriculum for GCSE's, hope the inclusion of the footballer on the course will help students <u>understand the importance</u> of social media as an influencing tool, and also help them learn about the social and race issues he raises.
- Sandra Allan, AQA's head of curriculum for Creative Arts, said: "Marcus Rashford is one of the most influential and inspirational young people in the UK, so students can learn a huge amount from how he uses social media to make a real impact. It's not just an opportunity for them to learn about social media it's also a great way to learn about important social and race issues as part of our commitment to equality, diversity and inclusion in the curriculum."

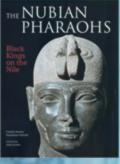


DATES



WHY IS MY CURRICULUM WHITE?











North East Africa-Nile Valley - modern Egypt and Sudan









Great Zimbabwe

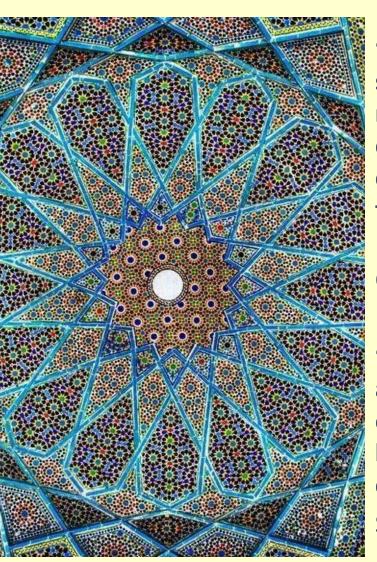
in the country now called Zimbabwe







Anti-racist and decolonial teaching practice



"Decolonizing the curriculum means creating spaces and resources for a dialogue among all members of the university on how to imagine and envision all cultures and knowledge systems in the curriculum, and with respect to what is being taught and how it frames the world."

Keele University Manifesto for Decolonising the Curriculum, 2018

"For the colonized, decolonizing the mind is really about returning to the annals of history to find ourselves, to become fluent in our cultural knowledge systems, to cultivate critical consciousness, and to reclaim our humanity"

Sylvia Tamale



Teaching the Truth: Decolonising Education

by Marie Kristensen

https://www.equal.education/blog/teaching-the-truth-decolonising-education

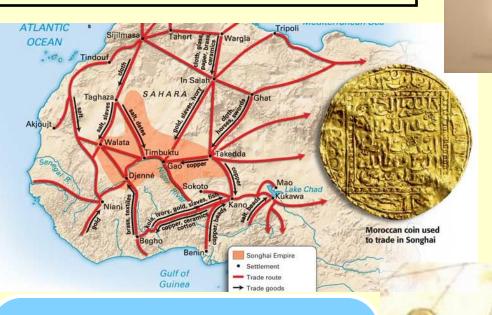
DECOLONISATION IS ABOUT WHAT WE TEACH

IT IS ALSO ABOUT HOW WE TEACH

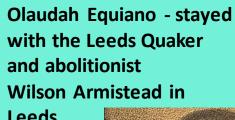
WHO WE TEACH WITH AND THE DEVELOPMENT OF THE TEACHING PROFESSION

<u>Decolonising the curriculum - BBC Bitesize</u> – sixth formers

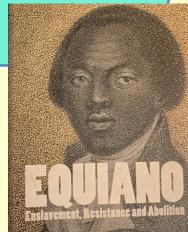
West Africa had great empires with structured, sophisticated societies in existence before the Trans Atlantic Slave Trade.



MANSA MUSA The richest man in world history to date.









Djenno (literally ancient Djenne) is one of the oldest continuously inhabited sites in all of sub-Saharan Africa. Closely linked with the history of Timbuktu, the Great Mosque is thought to be the largest standing mud architecture structure in the world and one of the best examples of Malian architecture.

- 1562 First English slaving expedition by Sir John Hawkins
- **1672** Royal Africa Comapny granted charter to carry Africans to the Americas
- 1772 <u>Granville Sharp</u> won an historic ruling in the Somerset case which held that no slave could be forcibly removed from Britain. (Slavery itself was still permitted).
- **1778** Slavery made illegal in Scotland.
- 1786 Thomas Clarkson, publishes
 - A Summary View of the Slave Trade and of the Probable Consequences of its Abolition.
- 1787 John Newton publishes Thoughts upon the African Slave Trade.
- 1789 Olaudah Equiano publishes
 - The Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, the African.
- 1790 The first bill for the Abolition of the Slave Trade fails.
- **1791** Slave rebellion on the island of <u>St Domingue</u> (later Haiti).
- 1792 House of Lords reject an Abolition Bill passed by the House of Commons.
- **1794** France abolishes slavery in all its territories.
- 1797 Death of Olaudah Equiano
- **1804** Slave rebellion on the island of <u>St Domingue</u> successful and the first independent black state outside Africa Haiti is established.
- **1807** On 25 March, transatlantic slave trade abolished by the British Parliament.
- 1833 The Abolition of Slavery Act is passed by the British Parliament, abolishing the practice of slavery in all British territories.
- Britain was the most dominant in the Trans Atlantic Trade between 1640 and 1807.
- It is estimated that Britain transported 3.1 million Africans (of whom 2.7 million arrived, so 400,000 didn't make it) to the British colonies in the Caribbean, North and South America and to other countries.





Ancient Africa was a developed continent when Europe wasn't. Remember this applies to the Greeks and then the Romans!
Whenever we explore a topic where one group of people go to another land to settle, we should ask ourselves:

- Why did they go there?
- Did they stay there?
- What was that experience like for them?

 What was the experience like for the people already living there?



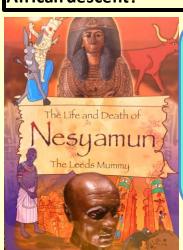




The African Ancients

How can we use the great achievements of ancient Africa to present a positive narrative about people of African descent?





Local links... the stories of these people linked to Yorkshire:

The Ivory Bangled Lady of York
Septimus Severus
Nesyamun





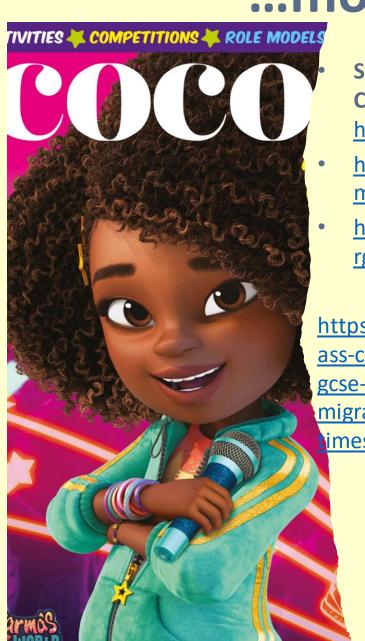
Architecture: imagination, drawing, design, scale, maths & science - angles, weights, physics, engineering - leverage.

Social ideas - purpose, location, money, benefits, beliefs, legacy etc.

The Ancient Kingdom of Benin (now part of current day Nigeria) - bronzes, ordered, structured society. Street lighting, two storey dwellings, armies, class system. Celebrated bronzes - sculpture and arts.

Civilisations - Nubian Pharaohs, Ma'at, Kemetic yoga. Queen Nzinga - fierce warrior. Mansa Musa and the kingdom of Mali - generosity with gold, crashing the gold standard whilst on pilgrimage to Mecca, he was an African Muslim. Literacy and books at Timbuktu university. Famous for translating and ornate decorations.

...more resources...



Stop Motion; Cocoa Boy,
Cocoa Girl – magazine:
https://www.cocoagirl.com/

https://imaginemestories.co m/

 https://www.wonderbooks.o rg.uk/books/

https://www.bbc.co.uk/teach/cl ass-clips-video/history-ks3-gcse-the-story-of-blackmigrants-in-england-in-tudorimes/zf8nqp3



Further resources to use with pupils...

National Geographic: Indus Archaeology

https://www.youtube.com/watch?v=XIf98WPhR1k

Vedic Age:

https://www.youtube.com/watch?v=RCzulW kGMk

Ashoka:

https://www.youtube.com/watch?v=xH63aG1af5E

KS2 – the kingdom of Benin:

https://www.bbc.co.uk/bitesize/topics/zpvckqt/articles/z3n7mp3

Free resources: The Black Curriculum including short animations:

https://theblackcurriculum.com/downloads

KS2 Indus civilisation:

https://www.bbc.co.uk/bitesize/topics/zxn3r82/articles/z8b987h

History KS2 Baghdad in 900AD:

https://www.bbc.co.uk/teach/class-clips-video/history-ks2-baghdad-in-900ad/zjfxpg8

History KS2 Lost Lands:

https://www.bbc.co.uk/teach/class-clips-video/history-ks2-lost-lands/zfp6gwx

Bitesize – Harriet Tubman: https://www.bbc.co.uk/programmes/p015gp0z

https://www.bbc.co.uk/cbbc/search?q=black+history+month+animations&page=1



OFFICIAL TRAILER

Challenging gender stereotyping...



https://www.youtube.com/watch?v=qv8VZVP5csA

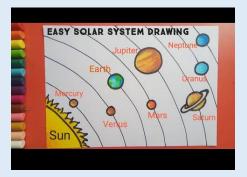
Using scientists to teach

- For connection to the real world
- To humanize the scientific endeavour
- To understand the need of the time historically
- To use cross-curricular links with history, geography, technology, PHSE, RS
- To develop scientific understanding
- To appreciate the development of scientific enquiry skills and the nature of experimentation, and how this has developed over time

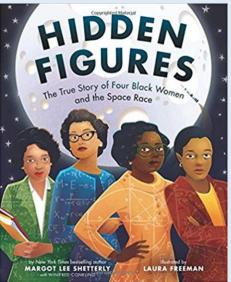
My examples to students

- Hypatia c. 355–415 CE
- Cai Lun 105 CE
- Islamic Golden Age (8th 13th century): Ibn al-Haytham (Alhazen) c.965
- Renaissance science: 'pale stale male'
- 'Hidden Figures'
- Appropriation of females' works (Alice Ball, Rosalind Franklin, Lise Meitner, Eunice Foote, Nettie Stevens, Jocelyn Bell Burnell)









Katherine Johnson

Activities for children:

- Children can research more about Katherine Johnson
- Children can research a space flight that Katherine Johnson was involved in
- Children can draw the spacecrafts used
- Children can research other scientists form NASA
- Children can draw the solar system and extend their knowledge.

Tu Youyou

Tu's parents stressed the importance of education, however, she had to take a two year break from her studies when she was 16 years old due to her contracting tuberculosis. This inspired her to study medicine.

China was asked by North Vietnam to help them battle malaria. Which was effecting their soldiers. The parasite that caused malaria had become resistant to the treatment. Project 523 was then launched. When she was 39 years old Tu was made head of the project.

Tu tested the new medicine on herself before then using it to treat infected patients. It then took twenty years for it to be recognised by the World health organisation as the best treatment for malaria.

Tu travelled in order to find how malaria effected the body. Her team were able to find a substance called wormwood which had been used in order to treat fevers. They isolated a compound within wormwood and she tested ways to boil it without damaging the compound, she eventually found a way of doing this and tested it on mice and monkeys. The wormwood had an 100% success rate.

Tu received the Nobel prize for her work in 2015

treated. this field of work.



Activities:

- Science: The children could look at different diseases, such as malaria and how they are
- They could then research into Tu Youyou's life in order to find what inspired her to work in
- Geography: the children could look into China and how the disease effects different areas and where it comes from.
- English: The children could write a story about her journey through the rainforest to research malaria.
- Art: the children can look at a Nobel prize and try designing their own Nobel prize.

Reference: The Nobel Prize Organisation, (2022), Tu Youyou, Available at: https://www.nobelprize.org/womenwhochangedscience/stories/tu-youyou

SEND in science

- Adaptation of classroom/labs
- Risk assessments and roles
- Plan- Do- Review
- Neurodiversity
- SEND categories of need
 - Cognition and leanring
 - SEMH
 - Communication and interaction
 - Sensory &/or physical
- Hypersensitivity to chemicals

6-university QAA project

Inclusive Education Framework

♥®★★ UNIVERSITY | TEACHING OF HULL | EXCELLENCE ACADEMY

Structures and Processes Relevant targets, data availability & reporting processes Quality assurance, policies & codes of practice Equal access to digital & physical infrastructure

Curriculum

Addressing hidden curriculum of knowledge & skills Decolonised, diversified and personalised learning Authentic and inclusive language, activities & resources

Assessment and Feedback Coherent assessment design & manageable student workload Clear & transparent competency based marking practices Constructive feedback to support student learning

Community and Belonging

Effective personal supervision & supportive culture Building inclusive communities of staff and students Empowering students to drive inclusive cultures

Pathways to Success Clear academic expectations guidance & support Actively supporting success, aspiration and self-belief Equal access to external networks & opportunities Empathic Leadership

Empowerment of Staff

Student-Staff Partnership

Clear and Consistent Communication

Any questions?