Decolonising Computing

Insights into mapping of UK activity within Higher Education

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School of Computing and Communications
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Session outline

1) Overview of what decolonising computing means to the research team

2) Share initial findings of HE desk based audit of decolonising computing activities
Decolonial commitments

**Epistemological**

What – Embrace the ‘decolonial turn’

How – delinking or decentring from West/North centrism as the site of knowledge production

**Ethical political**

What – embrace the ‘decolonial option’ by preferencing those on the margins

How – seek to address the legacy systematic effects of colonialism
Adopting a decolonial computing perspective

1) Consider your geo-political orientation when designing, building, researching or theorising about computing phenomena.

2) Embrace the decolonial option as attempting to think through what it might mean to design and build computing systems with and for those situated at the peripheries of the world system. Informed by the epistemologies located at such sites with a view to undermining the asymmetry of local-global power relationships.

(Sayeed: 2016)
Artificial Intelligence coded bias

Your photo doesn’t meet all the rules and is unlikely to be suitable for a new passport.

Your photo: It looks like your mouth is open

Passport photo:

X The photo you want to upload does not meet our criteria because:
- Subject eyes are closed

Please refer to the technical requirements. You have 9 attempts left.

Check the photo requirements.

Read more about common photo problems and how to resolve them.

After your tenth attempt you will need to start again and re-enter the CAPTCHA security check.

Reference number: 20161206-81
Lost in AI translation: growing reliance on language apps jeopardizes some asylum applications

Translators say the US immigration system relies on AI-powered translations, without grasping the limits of the tools.

Illustration: Nicole Rifkin/The Guardian
Racial Homogeneity

Figure 1. Unicode 7.0 versions of (a) Man with turban, (b) Man with gua pi mao, (c) Western man.
Postcolonial Computing Circuits

From the core (demand and design) to the periphery (supply, sourcing and construction) to the core (consumption) to the periphery (disposal)
LLM content moderation

- Nairobi workers for Sama asked to review text and image within OpenAI ChatGPT
- Graphic scenes of violence, self-harm, murder, rape, necrophilia, child abuse, bestiality and incest
- Suffered psychosocial trauma, low pay ($1.46–$3.74/hr) and abrupt dismissal

‘It’s destroyed me completely’: Kenyan moderators decry toll of training of AI models

Employees describe the psychological trauma of reading and viewing graphic content, low pay and abrupt dismissals

Article link
Refugees help power machine learning at big tech
click work for Silicon Valley

Kenya’s Dadaab refugee camp

- AI systems fuelled by millions of underpaid workers
- Repetitive tasks under precarious labour conditions
- Sites like Clickworker, Amazon Mechanical Turk allow microtasks to be posted
Decolonising Audit – where

Where did we look:
1. Russell Group e.g. Kings College London
2. Athena Swan (Silver) e.g. University of Warwick
3. Other HEI e.g. Nottingham Trent
4. Key word search “decolonising STEM/computing”
Decolonising Audit – how & who

*How* the audit was conducted:
- Desk based - external public facing web pages
- Standardised template completion

*Who* did the audit:
- 3 x project team members
- 3 x student researchers
## Findings
### Decolonising Activities

| 1. Collaboration | Between students/staff and other internal services e.g. library.  
|                  | With external services e.g. museums, authorities, professional computer associations  
|                  | With other HEI's in Europe, Africa and Oceania |
| 2. Scholarship   | Papers written and articles published |
| 3. Resources     | Blog, video, toolkit, web page, guides, poetry |
| 4. Events        | Talks, discussions |
**Findings cont.**

*Decolonising Activities*

<table>
<thead>
<tr>
<th><strong>5. Awards</strong></th>
<th>STEM Learning Award, Benchmark Standard, best practice</th>
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<tbody>
<tr>
<td><strong>6. Hub/Physical space</strong></td>
<td>Studio, computing education research centre, centre for academic inclusion in science and engineering</td>
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<tr>
<td><strong>7. Curriculum Development</strong></td>
<td>Module, lecture</td>
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<tr>
<td><strong>8. Strategy</strong></td>
<td>Annual EDI Report</td>
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1. Collaboration

- Library and Student Union asking students to suggest new titles for the collection (Swansea)
- Students sit on Senior boards, Senate and Council (Bath)
- Students and staff research leading to a manifesto (Kent)
- ‘Transforming Access and Student Outcomes’ in HE, (Leicester and Kent) partnering to research impact of curriculum reform on race equality gaps
2. Scholarship

- University of Edinburgh – Article published on ‘Techno-solutionism and Neocolonial Narratives in ICT (and other engineering) Curriculum’ in CEUR-WS
  - techno-optimism and techno-solutionism hides to the students that most of “technological progress” is highly dependent on colonial-era exploitation of the Global South
  - curriculum is mostly influenced by the requirements of profit-driven industries rather than societal needs.

- Imperial College, London:
  - “Decolonization in a higher education STEMM institution – is ‘epistemic fragility’ a barrier?” Research carried out with teaching teams and although it is important area, many barriers still exist
  - “A novel data solution to inform curriculum decolonisation: the case of the Imperial College London Masters of Public Health” Examination of reading lists away from global north

- Cambridge University
  - Perceptions of decolonisation of teaching and learning – a small study with a range of lecturers to look at how decolonisation practices could be used in the classroom
3. Resources

University of Bristol

- Newsletter ‘Decolonising the Bristol curriculum’ available internally – last published Nov 2023
- A podcast and interview series on ‘Decolonising the Curriculum’ initiated in 2021 but not continued

Liverpool School of Tropical Medicine (LSTM)

- Curation of images to tackle outdated or negative portrayals of minoritised groups
- Blog – Working towards decolonising language e.g. how to refer to global colleagues
- Exploring what restorative action looks for students
3. Resources cont.

- Digital journal (archive) voices and experiences of indigenous perspectives (Kings College, London, LSTM)
- Review and diversify reading lists (Kings College, London)
- Sourcing representative images, alternative publishers and formats, best practice at other institutions (Bath)
- Decolonising the curriculum toolkit (Leicester), How do I get started? (The Times HE)
- Inclusive teaching and learning toolkit (Imperial College, London)
4. Events

University of Edinburgh

- Decolonising the curriculum- the Podcast series involving academics from Engineering and Technology
  - These podcasts are available till 2021 but seem to have been discontinued

- Session on ‘Decolonising your dissertation’ in the Dissertation and Thesis Festival in Nov 2023
  - Talks about how citations can be used as a practical tool for including marginalised voices
  - Explores critical and practical approaches to library research

- Diversifying Toolkit for Staff- Online Launch event in May 2023
  - How to use more diverse resources in teaching
4. Events cont.

Oxford University

- Working on Human Centred Computing Theme at Oxford from 2018 resulting in Unbiased (Emancipating Users against Algorithmic biases for a trusted digital economy)
  - Setup Ethical Hackathon – a design challenge that highlights ethical issues alongside technical ones.
  - Responsible research & innovation (RRI) focussed Youth Juries and Hackathons to promote improved design e.g. case studies on algorithmic bias, search engine bias etc.
4. Events cont.

Kings College, London
Demystifying Decolonisation

Imperial College, London
Focus on examining geographic bias in our curricula
University of Sussex

Decolonising the Curriculum at Sussex - a half-day online symposium

Register now: Decolonising the Curriculum at Sussex - a half-day online symposium

By: Sean Armstrong

Last updated: Thursday, 10 June 2021

Decolonising the Curriculum at Sussex: Cross-disciplinary Perspectives & Decolonial Futures, A Half-Day Online Symposium | 30 June | 9.30 am - 1.00 pm

Students and staff are invited to attend a half-day online symposium on Wednesday 30 June. 9.30 am to 1.00 pm to explore concrete examples of decolonising the curriculum at Sussex. This symposium aims to spark an inclusive and longer-term conversation around possibilities for decolonising the curriculum across disciplinary contexts at the University. Register for the symposium now.

Decolonising the curriculum in context

For universities around the world, decolonising the curriculum has increasingly emerged as central to addressing race-based inequities in student attainment and outcomes, while at the same time, delivering a truly global and culturally enriching educational experience that benefits all students. Across higher education institutions, however, decolonising the curriculum has yet to achieve consensus, with its plurality of approaches and the pace of change serving as sites of contestation between staff and students.

The Sussex difference

Here at Sussex, the ambition is to be radically disruptive of this traditional divide between staff and students. The core aspiration of the event is to spark inclusive, cross-disciplinary conversations around how decolonising the curriculum can move from being contested to being integral both to Sussex’s pedagogic delivery and curriculum. Created by a staff-student team comprising Professor Claire Smith, Deputy Pro-Vice-Chancellor, Education and Innovation, Dr Eva Sansavoir, Academic Developer, School of Media, Arts and Humanities, the student-led group Decolonise Sussex and academic colleagues from across the University’s disciplinary spectrum, the event will take as its starting point two key questions:
5. Awards

University of Kent

Diversity Mark

Diversity Mark is an institution-wide award that is given to modules that can offer a diverse and inclusive range of resources for their students via their reading lists.

Diversity Mark

The award is given to those convenors that undergo a process of review and reflection with their students to ensure that they have considered authors and perspectives from divergent backgrounds, such as race, gender, sexuality, disability, internationalisation, and socio-economic contexts within their discipline. Diversity Mark aims to support staff in representing diverse perspectives and authors in their reading list, which in turn leads to a more inclusive learning experience for students.

Diversity Mark evolves year on year. In some instances a module has a purely
6. Hub/physical space

Exeter Decolonising Network

Collection of staff, students, and community members affiliated to the University of Exeter

- Reflections space
- Creativity space
- The Roots Resistance

"Our survival, our humanity, our worldview and language, our imagination and spirit, our very place in the world depends on our capacity to act for ourselves, to engage in the world and the actions of our colonizers, to face them head on."

— Linda Tuhiwai Smith
7. Curriculum Development

Discipline-specific resource lists

For subject specific resources click on the link to your School, where you will find a variety of guides and case studies around decolonisation. If you would like to add further titles, please email your recommendations to {schoolname}@ntu.ac.uk.

Please note, staff will need to sign in using their online NTU accounts to access these resources.

- Confetti
- Nottingham Business School
- Nottingham Law School
- School of Animal, Rural, Environmental Sciences
- School of Architecture, Design and the Built Environment
- Nottingham School of Art and Design
- School of Art and Humanities
- School of Science and Technology
- School of Social Sciences

Critical questions for discipline-specific resource lists

The Centre for Academic Development and Quality have designed a series of critical questions to be use alongside the resource lists to support the process of curricula decolonisation. Asking yourself these questions will help you engage effectively with the material.

Before engaging with the discipline-specific resource lists

- Have I made efforts towards understanding the global and local impact of colonisation and decolonisation, coloniality and decoloniality?
- What are my assumptions and biases about knowledge and power?
- Have I reflected on my positionality and power dynamics within my discipline, teaching and wider communities?
- What overall do I hope to gain by engaging with the discipline-specific resource lists?

Further critical questions to ask yourself:

- Have I further developed my own understanding?
- Have I explored new resources to include in my module/course reading lists?
- Am I exploring how I can bring the topic of coloniality and decoloniality into my teaching, discuss and content?
- Am I increasing my confidence in talking and teaching about coloniality and decoloniality within my discipline?

While engaging with the discipline-specific resource lists

- Have I found the disciplinespecific resource lists helpful for my understanding of coloniality and decoloniality?
- Have I found the resources to be accessible and engaging?
- How can I apply the knowledge gained from these resources to my teaching and research?
7. Curriculum Development

Decolonising the Curriculum Working Group. Staff and students are welcome to join this group.

Library Services support

Aston Students’ Union provides a forum

University Learning & Teaching Committee embeds monitoring of decolonising

College Learning & Teaching Committees

University Equality, Diversity & Inclusion Committee

Aston Voices Group

Associate Pro-Vice Chancellor for Diversity & Inclusion
8. Strategy

University of Bath

Access and Participation Plan 2024–2028, Intervention Strategy 3: Degree Awarding Gaps

<table>
<thead>
<tr>
<th>Associated UoB Risks (see Risk Register, Annex A for more details)</th>
<th>Student Group/ Objective</th>
<th>Activity</th>
<th>Outcomes</th>
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| **1 – Sense of Belonging**                                   | ABMO (OBJ3.2)            | Creating an inclusive and enriching university learning environment:  
- Structured and wide-ranging inductions  
- Personal tutoring  
- Dedicated Student Experience staff | Students have a sense of belonging with the course.  
Staff engage with students regularly in small groups and are able to understand their needs. | Increase in student satisfaction and sense of belonging, measured in unit evaluations, student surveys and internal data collection  
Increased on course attainment and degree attainment |
| **7 – Lack of appropriate support mechanisms**               | Disabilities (OBJ3.3)    | Creating inclusive and enriching teaching and learning:  
- Academic support delivered by individual departments.  
- **Decolonising** the curriculum  
- Curriculum Transformation implementation  
- Centre for Learning and Teaching talks, curriculum development and design, staff workshops | Staff across the university engage with and understand the challenges faced by WP students  
Focus on inclusion, equity and diversity embedded across all levels of leadership and governance and accessibility is a key priority across all areas of university life | Increase in student satisfaction and sense of belonging, measured through NSS scores and internal data collection  
Increased on course attainment and degree attainment |
## University of Bath

Access and Participation Plan 2024-2028, Intervention Strategy 3: Degree Awarding Gaps

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| 8 – Lack of role models | - Personal tutoring   
- Dedicated Student Experience staff 
- Unconscious bias training for staff 
All written examinations and other forms of summative assessments are marked anonymously, wherever practical. | Teaching staff are provided with opportunities to develop the skills tools and knowledge to deliver impactful teaching and learning. Courses that have undergone curriculum transformation and decolonising curriculum work are student centred and promote inclusivity and student success |

**University of Sussex**

Decolonisation statement for the library

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**Decolonisation Statement**

**Decolonisation and the University of Sussex Library**

The library’s activities are rooted in systems of inequality built upon the racist legacies of imperialism. Libraries are not neutral. By recognising white privilege and the existence of inequality we will ensure that our collections and our work are not controlled by a single point of view and are informed by evidence-based practice.

Decolonisation in the library seeks to redress the inherent imbalances and power-structures present in our work and collections. We recognise that these unequal power structures are embedded within wider institutional systems of whiteness and are committed to collaborating in a process of lasting change around this in line with the [University of Sussex Race Equality Charter Mission](#).

The library’s areas of activity in decolonising practices, collections and services are outlined below. We will promote decolonisation work throughout the library, ensuring that all staff have opportunity to learn and engage. However, dialogue on decolonisation will continue beyond this statement; our work is - and will be - an urgent and ongoing process.

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**University of York**

Statement of approach to decolonising and diversifying the curriculum

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**Introduction**

This is the University of York’s statement of approach to decolonising and diversifying the curriculum co-constructed by staff and students from the University. It has been created following a number of discussion events with staff and students and has been shaped by campaigns run by the University of York’s Students’ Unions, as well as other key University initiatives and events. This statement aims to reflect what is important to the University of York community and sets out a framework of key principles. We also hope to make explicit our understandings about decolonisation and diversification so that as an academic community we have a shared sense of ownership. Decolonising and diversifying the curriculum is an ongoing process and our approach and its impact will be regularly reflected on and reviewed.

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**The University of York: A University for Public Good**

In its vision for the University of York, a commitment to Equity, Diversity and Inclusion features as a key principle:

- **Freedom of inquiry and expression are central to intellectual advancement and to social and economic development. Upholding them is tantamount to ensuring that every single member of our communities — whatever their heritage, creed, or orientation — is treated with the respect we expect for ourselves. It is afforded the same opportunities, and feels at ease being in our midst.** University priorities - Mission and strategies

- A commitment to decolonising and diversifying the curriculum helps to realise this principle across our learning community.

Alongside this, the University’s [Together York Community Declaration](#), which has been developed collaboratively with staff and students to describe the foundation and ambitions of our learning.
Summary

1) Decolonisation in Computing is still a developing area of study
2) To start developing case studies based on our audit findings and surveys
3) To create workshops to gather a variety of stakeholder views: tuition delivery, academics and management
4) Continue to attend conferences to engage with computing educators
5) Building contacts to create a decolonisation network
6) Think about your positionality
References

- Jones, P. (2021) ‘Refugees help power machine learning advances at Microsoft, Facebook and Amazon’. Available at: https://restofworld.org/2021/refugees-machine-learning-big-tech/ (Date accessed: 21st March 2024)
- Tompkins, Zoe and Ramage, Magnus (2023). What does it mean to decolonise Computing and IT – Another dumb buzzword or re-envisaging all cultures and knowledge systems for how the world is framed? In: *Proceedings of the 11th International Technology, Education and Development Conference*, IATED pp. 4250–4261.
Thank you

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