

STEM Decolonisation in Practice: Student and Staff Collaboration

Zoe Tompkins
School of Computing &
Communications
The Open University
United Kingdom
zoe.tompkins@open.ac.uk

Amaninder Singh
School of Computing &
Communications
The Open University
United Kingdom
amaninder.singh@open.ac.uk

Kate Feliciello
School of Computing &
Communications
The Open University
United Kingdom
kate.feliciello@open.ac.uk

ABSTRACT

The title of the proposed workshop is “STEM Decolonisation in Practice: Student and Staff Collaboration” and the overall aim is to share findings of an audit of UK Higher Education Institutions that are undertaking decolonising activity within STEM. Through engaging external colleagues in the review of the audit findings we hope to both inform teaching practice and to guide the generation of case studies which showcase decolonial best practice activity within the sector. This workshop will be the third in a planned series.

The 2022 UK QAA Computing Subject Benchmark recommends mapping of equitable practices and processes which acknowledge and address how divisions of labour and hierarchies of colonial value are replicated and reinforced within computing [1]. In parallel the awarding gap focus by the UK’s Office for Students [2] on degree outcomes achieved by students from ethnic backgrounds compared to students who are not from ethnic backgrounds, gives further leverage to decolonising the curriculum. These are the key drivers for change by helping to recognise, understand and challenge the ways in which our world is shaped by colonialism. As decolonising work is set to question and ultimately transform what we know to be true, then we need to start that transformation now; we need to be thinking differently about ‘facts’.

A collaborative team of Open University computing lecturers and student researchers have completed desk research to identify decolonising STEM activities within UK HEI’s by looking at public facing websites across all Russell Group and Gold and Silver Athena Swan Universities for evidence, and so to chart or map the terrain. A short survey with computing practitioners who attended the UK and Ireland Computing Education Research (UKICER) of the ACM Special Interest Group in Computing Science Education at Swansea University in September 2023 [3] have added personal insights to the decolonising activities underway and the challenges faced in this transformative space.

CCS CONCEPTS

• Human centred computing • Collaborative and social computing • Collaborative and social computing theory, concepts and paradigms

KEYWORDS

Decolonising, STEM, Student and Staff Collaboration.

1 Workshop Content

The 90-minute workshop will begin with an introduction as to the project team’s interpretation of what it means to decolonise computing, and then provide a brief overview of the audit findings based on initial thematic analysis. Participants will then be placed in small groups to review current decolonisation activities within one theme and within a discreet HEI, with the aim to critique their applicability to the teaching and learning within the discipline at their own place of work. The groups will be self organising allowing for a variety of roles within STEM and from a cross selection of education providers, and therefore will be dependent on the participants who attend the workshop. Each group will be asked to consider one named HEI, who has been identified as undertaking decolonising activity within the theme of student and staff collaboration. As a group they will be using the following 4 questions as the basis of their discussion:

1. Which of the decolonising activities within the theme of student and staff collaboration are applicable to my role at my institution?
2. How can I make a change: today, next month, next year, longer term?
3. What do I need to make this successful?
4. What are the challenges I might face?

Following the group discussion participants will be individually asked to complete an anonymous online form to capture their thoughts. The collective responses will then be analysed to inform case study production with an overall future aim to produce an educator tool kit for engagement in decolonising the curriculum.

2 Workshop Practical Requirements

A room with a projector and internet connected PC is required to deliver the workshop. Participants will require group discussion tables for the activities. Each participant will also need to access the HEI external website via an internet enabled device. Facilitators will provide a QR code and the URL web address of the HEI for ease. Participants will also be asked to complete an online form capturing the output of their group discussions and individual reflections.

3 Workshop Series

This third workshop is part of a series based on different activity themes as identified by the audit analysis and has been successfully delivered by the project team as follows:

Workshop 1: 'Reviewing and Diversifying Reading Lists', eSTEEem 2024 Conference at The Open University, 10th April 2024.

Workshop 2: 'Resource Bank Curation'
Decolonising Academic Practice at Birmingham City University, 19th June 2024.

4 Participant takeaways

The learning outcomes for participants will be:

- A clearer understanding of the current decolonisation activities taking place within UK HEIs
- An opportunity to collaboratively critically review the decolonising practice of student and staff collaboration at one HEI
- To define activities to develop own decolonisation practice in the short, medium and longer term
- To consider the challenges in curriculum transformation when applying a decolonising lens

REFERENCES

- [1] QAA Computing, 2022. Subject Benchmark Statement. DOI: https://www.qaa.ac.uk/docs/qaa/sbs/sbs-computing-22.pdf?sfvrsn=ebb3dc81_4.
- [2] Office for Students, 2023. A new approach to regulating access and participation in English higher education, Consultation outcomes. https://www.officeforstudents.org.uk/media/546d1a52-5ba7-4d70-8ce7-c7a936aa3997/ofs2018_53.pdf.
- [3] UKICER 2023. <https://www.ukicer.com/2023/index.html>.