Partnerships in Learning & Teaching (PLanT) Projects Application Form 2022-2023

Reference Number (CQSD use only):07/2022

Lead student contact details

Name: (student details removed)
School: Mathematical, Physical, and Computational Sciences (Meteorology)
Degree programme: MSC Applied Meteorology and Climate with Management
Year group: 2022/2023
Email:

Lead staff member contact details

Name: Prof. Joy Singarayer
School: Mathematical, Physical, and Computational Sciences (Meteorology)
Email: j.s.singarayer@reading.ac.uk

How did you hear about the PLanT scheme? (tick all that apply)

I have applied previously		Email from CQSD	
Staff portal		Word of mouth (staff)	x
Student Rep training session		Word of mouth (student)	
PLanT webpage		Other (please specify):	

Project title

Exploring and evaluating the decolonisation of mathematics and meteorology modules

Project team

Project team name: Team EMMD
Other members of the team (including students and staff) Include name, year group and degree programme of student partners

Dr Nick Biggs (Mathematics)
(student name removed), MSc Applied Meteorology
(student names removed), MSc Applied Meteorology and Climate with Management

Project description (maximum 700 words in total)

Describe the proposed project including the following:

Project outline and rationale

SMPCS has recently been involved in activities to understand the experiences of minoritized ethnicity students and impact on the awarding gap (e.g., SESTEM project; https://research.reading.ac.uk/sestem/). Decolonising the curriculum is an important aspect for consideration. However, in STEM subjects there is often a perception that either this is not relevant or is difficult to achieve, because of the focus on technical knowledge. This project will bring staff and students together to work in partnership to reflect on the current curriculum in selected STEM modules and consider priorities for decolonization and identifying examples of good practice.

We focus on two very different modules taking place in spring term 2022-23:

- MTMG16 – MSc module in Climate Change. High proportion of international students. Issues of climate justice, governance, global perspectives are little explored.
- MA1CA – Part 1 Calculus module. Core module taken in multiple programmes across SMPCS. Potential for broad positive impacts on progression and experience.

Activities involved:

- Initial staff-student session to agree priorities/scope for activities. decolonisation resources will be provided beforehand to support awareness building
- Students and lecturing staff will maintain journals to be completed after module sessions to reflect on their experiences of T&L activities
- Mid-module workshop to enable staff-student feedback to feed into modifications of module activities and capture their impact
- Post-exams workshop to evaluate and co-design module developments towards decolonisation, which will be implemented in 2023-24
- Staff and students work in partnership to produce a summary report with recommendations for module adaptations that engage with decolonising STEM
- Present findings at workshops to support broader engagement across SMPCS with decolonising the curriculum

The project aligns primarily with Principle 1 (Community) of the University's 2020-26 strategy in enhancing inclusion and celebrating diversity and strengthening student voice in decision-making. It aligns with Principle 2 (Excellence), in contributing to creating environments where all students can excel. The project also aligns with the SMPCS STEAP 2022-23 focus on beginning to decolonise our curriculum.

Impact and sustainability Objectives

- To understand ways of decolonising STEM module content and delivery approaches to positively impact student experience and student attainment
- To co-develop approaches and priorities for decolonising STEM modules in Mathematics (MA1CA) and Climate Science (MTMG16)
- To embed the approaches more broadly across SMPCS via resources that we will produce to support decolonising the STEM curriculum

Outputs/deliverables

- A summary report of the findings from the journals and workshops, with recommendations for module design

- Dissemination of findings at SMPCS T&L workshop

Outcomes

- The dissemination of the project (report and presentation) will be used to initiate conversations within SMPCS workshops to feed into broader developments across our programmes
- Embedding engagement with curriculum decolonisation within SMPCS. E.g., we expect that the modules directly involved in the project (MTMG16 and MA1CA) will further develop their content for 2023-24 following the recommendations from the report.

When do you anticipate that you will be able to demonstrate this impact?

- By Autumn 2023 we will be able to demonstrate impact on the modules involved in the project
- By Autumn 2024, implementation of recommendations in modules across SMPCS

Outline plans for project-related activities to continue beyond this PLanT project and/or for project outcomes to be realised in a sustainable way.

- The report will feed into the Portfolio Review in 2023-24 to engage staff in decolonisation of modules at an opportune time
- The SMPCS Race Equity Group will actively capture student opinion on the developments in our T&L programmes e.g., using SSPG

Evaluation and dissemination Measures

of success

- An agreed list of recommendations for good practice is co-produced by students and staff
- Implementation of improvements to module content and activities of MTMG16 and MA1CA in 2023-24 academic year
- Positive comments in feedback given in student surveys for MTMG16 and MA1CA regarding decolonising the curriculum
- Engagement of other module conveners with decolonising activities following report and workshops. Success measured by results from staff survey in 2024 outlining module developments and reflection activities.

Disseminating project outcomes

- Joint staff-student production of summary report and good practice guide (Summer 2023)
- Joint staff-student presentation at PLanT showcase events
- Joint presentation at SMPCS T&L workshop on decolonisation in STEM (Autumn 2023)
- Present findings at SSPG and disseminate report through SMPCS Race Equity Group communications to staff and students
- Present findings at the Horizons in STEM Higher Education UK conference (Swansea, summer 2023)

Word count: 700

Project start date: 9th January 2023
Project end date: 30th June 2023

Budget details

Brief outline of project activities	Activity start date and end date	Approximate costs associated with the activity. (**Note**: All claims and/or expenses need to be arranged before 30th June 2023)

Team welcome and student-staff priorities planning for journals Students and staff write ejournals following T&L sessions of their modules. Workshops to evaluate and co-develop module developments towards decolonisation. Summary report and learning reflections for dissemination in SMPCS	Week 1 of Spring term 2023 (starting 9th Jan), 1 hr Week 2 – 11 Spring term 2023. Expectation is no more than 10 minutes per T&L session 1. Week 5 Spring term (starting 6th Feb), 1 hr midmodule evaluation 2. Post exam workshop, week commencing 12th June 2023, 1.5 hr Staff contribute writing of main report, lead students review/edit and add student perspective introductory statement	Catering – snacks and drinks [£25] Student payments for journal creation [2hr total x 10 students x £8.73ph = £175] Student 'focus group participant' payment [10*£8.73 = £87.30] Student 'focus group participant' payment [10*1.5*£8.73 = £130.95] Lead students (one per module) time to contribute to report in 'project support' role [2hr * 2 students * £13.20 = £52.80]

Total funding applied for £ 471.05

Signature of lead student	**Signature of lead staff member**
	
Date 14/11/2022	**Date 13/11/2022**

Applicants must convert the completed application into one pdf file and submit this electronically to Martin Wise (**m.wise@reading.ac.uk**) by 17:00 on the day of the submission deadline.