WORKSHOP REPORT

Designing Assessment to Promote Students' Wellbeing

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1. Workshop Report

An in-person workshop on "Designing Assessment to Promote Students' Wellbeing", organised by Noel-Ann Bradshaw and Tony Mann of the University of Greenwich, was held on 10 July 2024 at the University of Greenwich in London, as part of the Higher Education Teaching and Learning Workshop Series 2023/24 jointly offered by the Institute of Mathematics and its Applications (IMA), Royal Statistical Society (RSS) and London Mathematical Society (LMS) (IMA, 2024). The workshop was attended by 39 participants from 16 different universities in the UK and Ireland. This was a follow-up to a workshop held in July 2023 which had provoked discussion about how assessment can affect student's wellbeing and mental health (IMA, 2023): this new workshop set out to explore ways in which assessment design can help mitigate any damaging impact higher education assessment in mathematics can have on students, and to encourage debate around this important topic.

It began with a talk by Gwen Thomas (University of Greenwich) on *Supporting Neurodivergent Students for more effective learning and assessment*. The presentation included a number of activities which vividly illustrated to the audience how different people respond to study situations in different ways. This was followed by a presentation by Noel-Ann Bradshaw (University of Greenwich) on *Perspectives on mathematical assessment from a mature student & Senior Manager*, in which the speaker discussed her own experience as a student. Then Robyn Goldsmith (Lancaster University) spoke on *Building a Student-led Mental Health Community*, covering her experience with a student society she founded to support students' mental health. The morning presentations provided the context and set the tone for the afternoon sessions in which several academics presented examples of their practice.

After lunch, Sue Pawley (Open University), in a talk entitled *Rapid query responses, online mocks & other ways to reduce assessment anxiety*, presented work she had done with Cath Brown on helping students prepare for assessments, and Brendan Masterson, Alison Megeney, and Nick Sharples (Middlesex University), talking about *Authentic, no-exam assessment for student wellbeing*, told us about their innovative approach to assessment. Wodu Majin (University of Sheffield) in a presentation *Easing the burden on memory: Mind map assessments in mathematics* described an unusual assessment she had used to help students structure their understanding of a branch of mathematics, and Tony Mann spoke on *Managing group assessments to minimise the impact on students' wellbeing*, discussing aspects of his practice intended to make groupwork less stressful for students.

The final session of the day consisted of small group discussions, allowing participants to share their experience. The conversations showed how passionately the participants care about their students' wellbeing and how the topic of the workshop resonated with many in the UK maths higher education community. In particular the discussion and feedback from participants indicated a strong feeling that there is a need to reduce the use of time-constrained exams and for degree programmes to offer more opportunities for reflective writing.

The organisers hope that the workshop will help inspire the development of new approaches to assessment in mathematics that will benefit future students. It was especially gratifying for the organisers that the post-workshop survey of participants showed that many of those present indicated that they will be considering adjusting their practice to address some of the issues discussed.

2. Speakers and Abstracts

Gwen Thomas (University of Greenwich): *Supporting Neurodivergent Students for more effective learning and assessment*.

Abstract: A brief look at (and experience of) the challenges that some students face in the learning and assessment environment, and some of the reasonable adjustments that can make a difference.

Noel-Ann Bradshaw (University of Greenwich): *Perspectives on mathematical assessment from a mature student & Senior Manager*.

Abstract: This talk will share a unique perspective as someone who struggled with their mental health during their UG mathematics degree as a mature student and now, 20 years later, has shared responsibility for the outworking of the University assessment policy for STEM subjects at Faculty level.

Robyn Goldsmith (Lancaster University): *Building a Student-led Mental Health Community*.

Abstract: The student-led Mind Society at the University of Greenwich was dedicated to creating an open and safe space for students to talk about mental health. As the founder of the Mind Society when I was an undergraduate studying mathematics, I will bring the student perspective of assessment and wellbeing, sharing experiences of three years of building community, raising awareness of student mental health and abolishing stigma.

Sue Pawley (Open): *Rapid query responses, online mocks & other ways to reduce assessment anxiety*.

Abstract: Students often find completing assessments very stressful but are reticent to seek help and advice. In this presentation I will talk about several support initiatives at The Open University that aim to help reduce student assessment anxiety.

Brendan Masterson, Alison Megeney, Nick Sharples (Middlesex University): *Authentic, no-exam assessment for student wellbeing*.

Abstract: There is compelling evidence that high-stakes exams are detrimental to student wellbeing and further that these effects are not uniform across demographics. The Middlesex maths team will share their experiences of replacing all exams on specialist maths modules with authentic coursework assessments for a better and fairer student experience.

Wodu Majin (University of Sheffield): *Easing the burden on memory: Mind map assessments in mathematics*.

Abstract: In this presentation, I will describe an assignment in which students produced mind maps in a module that heavily featured numerical methods. This assignment emphasised aspects of mathematics that traditional assessments might not directly address. I will reflect on the implementation of the assignment, student engagement with it, and possible psychological benefits of this type of assessment.

Tony Mann (University of Greenwich): *Managing group assessments to minimise the impact on students' wellbeing*.

Abstract: Graduate employers want university mathematics degrees to develop skills in working with people, but groupwork can be very stressful for students. I will present examples from my experience and discuss how I have adapted my practice, including ideas from many colleagues, to try to make student groupwork as valuable as possible while seeking to reduce any pressure it places on students' mental or physical health.

3. Acknowledgements

We are grateful to the IMA, LMS, and RSS for their support of this workshop, to the University of Greenwich for hosting, to the workshop speakers for their presentations and for granting permission to publish their abstracts here, and to all the participants whose contributions to the workshop discussions made this such a productive event.

4. References

IMA, 2023. Assessment in Mathematics and its Effect on Student Wellbeing. Available at: https://ima.org.uk/22451/assessment-in-mathematics-and-its-effect-on-student-wellbeing/ [Accessed 25 July 2024].

IMA, 2024. Designing Assessment to Promote Students Wellbeing. Available at: https://ima.org.uk/24833/designing-assessment-to-promote-students-wellbeing/ [Accessed 23 February 2025].