eSTEeM Projects Summaries: Apr-Sep 23

Title: [Understanding the postgraduate research student experience in a culture of collaborative leadership](#)

Project team: Ann Grand, Victoria Pearson, Joanna Shelton, Iain Greenlees and Snezana Levic

Keywords: Academic leadership, postgraduate research students, collaboration

Description: An investigation into the collaborative leadership of postgraduate research students in AstrobiologyOU through a series of interviews and scenario workshops with both staff and students highlights the many benefits of the model, including flexibility, a well-balanced working environment for the student and access to people with a wide range of expertise. However, it also notes the challenges faced due to institutional systems and different disciplinary traditions and suggests that further improvements to these would enhance the learning experience of postgraduate students.

Reviewed by: SP

Title: [Modern Containerised Learning Interface and Deliver Infrastructure (MCLIDI)](#)

Project team: Mark Hall and Soraya Kouadri Mostéfaoui

Keywords: Teaching infrastructure, remote teaching labs

Description: Installing software to be used in learning activities can be very problematic for some students. This project successfully addressed that problem through the implementation of a Virtual Computing Environment and led to the establishment of the OU's Open Computing Lab.

Reviewed by: MHJ

Title: [Pair Programming as a tool to enhance teaching and learning of programming at a distance](#)

Project team: Adeola Adeliyi, Michel Wermelinger, Jon Rosewell and Karen Kear

Keywords: Pair programming, remote pair programming, extreme programming, teaching programming at a distance

Description: This project examined the student experience of remote pair programming (RPP) via observations, surveys and student journals and concludes that RPP can enhance the learning experience in part-time distance education and have a positive effect on technical and soft skills. However, consideration of the time availability and their leadership styles needs to be taken into account when pairing students and guidance given on how to best use existing communication tools.

Reviewed by: SP

Title: [Virtual internships in open and distance learning contexts: Improving access, participation, and success for underrepresented students](#)

Project team: Diane Butler, Andrew Potter, Catherine Comfort, Kristen Reid

Keywords: Employability skills, widening access and participation, post-pandemic working practices

Description: An evaluation of the STEM/FBL virtual internship scheme offered to underrepresented student groups. Finding that the scheme was successful for interns and supervisors, it provides a basis for larger scale schemes of this type.

Reviewed by: MHJ

Title: [Enabling distance design students' wellbeing](#)

Project team: Nicole Lotz and Muriel Sippel

Keywords: Mental Health, Design, E&I, Study Experience

Description: An in-depth investigation into the experiences of Design students with declared mental health disabilities. The analysis is based on barriers and enablers of wellbeing and identifies factors that are important in addressing awarding gaps. While set in the context of Design students, this study informs the wider debate about support for students with mental health disabilities.

Reviewed by: MHJ

Title: [Disability Champions Pilot Project](#)

Project team: Elouise Huxor, Theodora Philcox and Lisa Bowers

Keywords: Accessible, Associate Lecturer, Disability, Mental Health, Mentor, Peer-peer

Description: Three innovations were implemented on a Stage 1 Design module to help ALs in supporting students with disabilities: a peer-support forum, a VLE

resource of information, and a set of student personae. The last of these was found to be particularly useful in helping ALs to think about their approach to supporting students.

Reviewed by: MHJ

Title: [Online peer mentoring at scale: benefits and impacts from a student buddy perspective](#)

Project team: Julie Robson and Dr Christopher Hutton

Keywords: Volunteer peer mentor, distance education, online education, employability, skills, focus group, STEM

Description: The student buddy scheme now runs across many schools in STEM and other faculties. This project clearly demonstrates that the scheme is sustainable with several benefits and few challenges for the majority of buddies. The buddies experienced clear improvements in their interpersonal and communication skills, and consequently their employability skills, they enjoy the ability to help others and "give back". The scheme can also be shown to assist in continued student engagement in forums and has resulted in positive feedback from students.

Reviewed by: SP

Title: [Supporting the student's learning journey through the transition of mathematics and statistics from level 2 to level 3](#)

Project team: Alison Bromley, Rachel Hilliam, Gareth Williams, Gaynor Arrowsmith, Alex Siddons and Sue Pawley

Keywords: Revision, student success, preparation, transition

Description: A project that used Associate Lecturer experiences of teaching Stage 3 mathematics and statistics to develop resources to help students prepare for this level of study. The resulting 'revise and refresh' websites form an important part of the package of support for students.

Reviewed by: MHJ

Title: [Effective support for reflective writing in mathematics](#)

Project team: Cathy Smith, Charlotte Lighter, Jeffrey Goodwin and Rebecca Rosenberg

Keywords: Participation, Reflective writing, Student voice, Mathematics education, assessment

Description: A study of the support that students find effective in developing a key skill in mathematics education. Based on an in-depth investigation into the experiences of students who had demonstrated improvement in their work, this project played an important role in the design of new modules. This approach could usefully be adopted in other subject areas.

Reviewed by: MHJ

Title: [Understanding the Black, Asian and Minority Ethnic awarding gap at The Open University by means of Quantitative and Qualitative data analytics](#)

Project team: Miriam Fernandez, Martin Hlosta, Tracie Farrell, Vaclav Bayer and Fidele Mutwarasibo

Keywords: Students at-risk, OUAnalyse, predictive learning analytics, error analysis, interviews

Description: A review of assessment scores shows that there is an awarding gap between black and white students, with quantitative and qualitative analysis suggesting that the gaps are associated with many partial and accumulating gaps rather than by the existence of one single factor. It can be shown that using OUAnalyse to highlight students at risk can help to increase pass rates and students overall scores.

Reviewed by: SP