



## **Co-Creating Change: Problem-Solving Bridging Operations and Education in Whole-Institution SDG approach**



### **SDG focus**

- ☒ Goal 3 - Good health and wellbeing
- ☒ Goal 12 - Responsible consumption and production
- ☒ Goal 13 - Climate action

### **What did you do?**

To embed problem-solving and innovation into SDG-focused curricular and extracurricular activities, Kingston University has implemented inclusive, interdisciplinary hackathons. Delivered in-house or in collaboration with London-based universities, these events engage students in addressing real-world SDGs challenges with a focus on innovation. Live briefs are co-designed with academic and operational sustainability leads, the HackCentre coordinator, and module leaders. Students work in teams to develop and present solutions to internal/external stakeholders, including local councils, SMEs, and community organisations, fostering green skills, systems thinking, and communication, while expanding students' professional networks. Within modules such as Sustainability for Professional Practice, students from civil engineering, geography, and environmental sciences address

campus-based SDG challenges, while nursing students explore the impacts of climate change on public health. Building on this experience, Kingston University hosted the E-waste Ideathon in June 2024, involving 10 London universities and enabling students to co-create solutions with support from industry mentors and environmental organisations.



**Image:** Students presenting at an e-waste hackathon

### **What were the benefits and outcomes?**

1. Co-designed live briefs with external stakeholders ensure that student projects address authentic sustainability challenges, enhancing the practical value of their learning. These also contribute to stronger ties with local councils, SMEs, and community groups through co-creation and knowledge exchange.

"I am currently working on my dissertation, which focuses on e-waste management, and I believe that interviewing a few experts from the panel [e-waste ideathon] provided valuable insights for my research" User Experience Design student.

2. Students gain critical transferable skills, including systems thinking, communication, teamwork, and innovation — key for green careers and civic engagement.

Quotes taken from the Sustainability for Professional Practice module Evaluation Questionnaire:

"Communication skills development"; "Meeting new people"; "Real-life challenges as part of the assignment"; "Clear vocal lectures"; "Involvement of sustainability team"; "Varied experiences of teaching staff"; "Staff passion for the subject"; "Wide range of topics"; "Staff feedback and responses to queries"; "Signposting to useful resources"; "Good time to work in-class on group assignment"; "Sustainability - a useful career path"; "Teaching materials"; "Knowledge expansion to SDGs"

3. By involving both academic and operational teams, the approach bridges learning and institutional practice, reinforcing sustainability as a shared responsibility.

### **What barriers or challenges did you encounter in embedding sustainability into your learning and teaching practice and how did you overcome them?**

1. Sustainability was unevenly embedded across faculties and more prevalent at the postgraduate level. A university-wide curriculum review was conducted, and bespoke support was offered to course teams to embed sustainability holistically, using a shared language and interdisciplinary approaches.

2. A significant challenge in embedding sustainability into learning and teaching has been the lack of time and space for reflective thinking by academics within an already compact curriculum.

To address this, we have:

- Using live briefs and hackathons to integrate sustainability into assessment and project-based learning, making it part of the curriculum rather than an add-on.
- Creating cross-functional collaborations between academic and operational teams to share responsibility and reduce the burden on individual academics.

3. Many academic staff expressed difficulty in finding the time to meaningfully engage with ESD, especially when balancing heavy teaching loads, administrative responsibilities, and research commitments.

To address this, we have:

- Embedded sustainability into existing structures such as academic induction, course leader training, and early-career development programmes, rather than creating separate, additional requirements.
- Developed flexible, online resources—like the Education for Sustainable Futures module—that staff can engage with at their own pace.

### **What are your conclusions and recommendations for others?**

Embedding sustainability into learning and teaching requires more than content updates—it demands time for critical reflection, collaboration, and curriculum redesign. However, time constraints, rigid structures and lack of confidence often limit academics' ability to engage meaningfully with this agenda. Despite these challenges, integrating sustainability into existing programmes and using flexible, experiential formats like hackathons has proven effective in fostering engagement and impact.

Institutions should create dedicated time and structured spaces within academic calendars for staff to reflect, collaborate, and co-design sustainability-focused learning. This could include curriculum development retreats, interdisciplinary working groups, or protected time for engaging with professional development modules on sustainability. Such investment is essential to move from compliance to transformation in embedding sustainability across higher education.

**Web link to further information:**

[Sustainability governance | Kingston University London](#)