Integration of SDGs in

☐ Institutional governance/strategic level
☐ SDGs in research
☐ SDGs in campus operations
☒ SDGs in curriculum development
☐ SDGs in student engagement activities
☐ SDGs into community activities
☐ SDGs at a whole-institution level

Focus on

☒ Goal 1 - No poverty
☒ Goal 2 - Zero hunger
☒ Goal 3 - Good health and wellbeing
☒ Goal 4 - Quality education
☒ Goal 5 - Gender equality
☒ Goal 6 - Clean water and sanitation
☒ Goal 7 - Affordable and clean energy
☒ Goal 8 - Decent work and economic growth
☒ Goal 9 - Industry, innovation and infrastructure
☒ Goal 10 - Reduced inequalities
☒ Goal 11 - Sustainable cities and communities
☒ Goal 12 - Responsible consumption and production
☒ Goal 13 - Climate action
☒ Goal 14 - Life below water
☒ Goal 15 - Life on land
☒ Goal 16 - Peace, justice and strong institutions
☒ Goal 17 - Partnerships for the goals

Global Sustainable Development Degree

We recently launched a new MA.Sc in Global Sustainable Development. The degree supports a new generation of transdisciplinary postgraduate scholar-practitioners: intellectual thought-leaders for deep transformation around all SDGs, with a uniquely developed capacity for critical analysis, ethical self-reflection, and an imaginative, problem-based, response-focused thinking. Dr Mandy Sadan, Director of Graduate Studies reflects that:

> "Whether the change you make is small-scale and local or on a global stage, it can start with the rigorous critical enquiries you will develop as a part of the GSD community".

Term 1 Core Modules build deep intellectual engagement. Through learning and assessment within "Leading Transformations in the Anthropocene" learners reflect on *Partnerships for the goals,* building personal manifestoes to become a 'work in progress', codified statement of their formal philosophical reflection, critical evaluation of positionality, and evidence-based knowledge of participatory, transformative mechanisms. "Creating Knowledge for Change" pushes students beyond mono- and interdisciplinary experience to become transdisciplinary thinkers: they reconcile ontological and epistemological tensions in moving beyond the silos that limit positive change, and develop Master's level competencies in issue-based, response-focused knowledge creation. "Global Challenges and Transdisciplinary Responses" reaches outside of the standard scope of sustainable development. Students consider, for example, the background role of entropy in relation to numerous goals (1,2,3,6,7,8,9,10,11,12) and management of *Reduced inequalities (4), including gender (5), during* potential social collapse, as well as biospherical integrity (13,14,15).

Through critical sustainable development praxis modules, students learn knowledge around the creation, analysis and implementation of "Sustainable Development Policy", and "Design Thinking for Social Impact" (16). This practically focused grounding is contextualised through further interdisciplinary thematic Optional modules, such as "Socially Engaged Performance: Interventions and Provocations", "Urban Resilience, Disaster and Data" and "Education for Sustainable Development", cover related goals (4,9,10,11).

Finally, learners complete a 3-month capstone experience that maps, critically, to one or more of the SDGs. The Research optional is realised through either a traditional thesis, journal article or policy briefing document. The Work-Based module promotes self-reflective, action-based learning on the role of personal and organisational agency in change and transformation. The Project-base capstone requires a synthesis of learning through a student-defined project, with our default option inviting to contribute towards delivery of University Climate Emergency carbon targets (Image 2).

BENEFITS

1. Moving students beyond disciplinary and interdisciplinary approaches to transdisciplinary, problem-based and response-focused thinking for sustainable transformations.
2. Realising the philosophical heart of Higher Education learning, despite the significance and gravity of practical application.
3. Equipping future intellectual leaders with the skills to practice deep, personal self-reflection, increasing their ability to make effective, positive contributions to sustainable development throughout their careers/lives and within their fields of expertise.

BARRIERS

1. Building authentic shared agendas, through the development of genuine interpersonal relationships has been key to our project: and this is as true when working with learners, as when designing our program (Image 1). Given the important role of process and governance arrangements these can often be challenging to generate. However, where sincerely invested staff are given the opportunity and time for socially and intellectually embedded networking with colleagues across the university, islands of collaboration quickly emerge. Processes that are more formal can then build on this background co-creation of shared values, mission and investment.

2. Missing data on the estimated distribution of notional student working time in existing modules made it challenging to design an intellectually coherent degree that is also practically achievable: re scheduling of expected reading, class time and assessment submission in different departments. We pioneered a tool for the recoding and analysis of expected student working time within modules, which allows whole degree analysis. This exercise embeds the values of sustainability in the delivery of more sustainable learning.

3. Transdisciplinary work involves transcending foundational disciplinary ontologies. This will remain a fundamental component of research–led teaching for both the staff and students involved. However, starting such a project with genuinely inter- and transdisciplinary staff, authentically invested in problem-based, response-focused research and teaching, has greatly aided the development of this program. Moreover, proactive and creative methods were deployed to promote genuinely participatory design mechanisms. For example, the first degree design workshop held in the department asked individuals to draw – a task which generally levels academics to a similarly exploratory standard of competency, but offers an alternative and unexpected opportunity, little otherwise considered in the academy – representations of their ideal degree, using a shield template. Other activities involved providing mixed bags of intended learning objectives from the literature, benchmarks, scholarship and existing programs, and asking colleagues to rank and categorise. Where staff aspire to creative program design, beginning with innovative and alternative ways of imagining a degree are very coherent tools for the task.

Image 1: Head of School Faciliates a Reflective Conversation	Image 2: Student developed "Warwick Cup" reusable project. An example of applied learning, featured by student led Sustainability Journal Globus
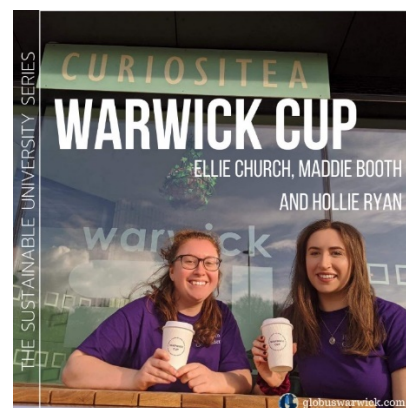
CONCLUSIONS

The Climate Emergency clock is well past midnight, while some social and economic inequalities are reducing, others continue to expand at a faster rate. Perhaps most concerning, and as posited elsewhere, many people, from all walks-of-life find it easier to imagine the end of the world than radical transformation of our socioeconomic structures.

Need for a new way of thinking, in research, teaching, economic activity and subcultural interaction is long overdue. Students are increasingly aware of this need and it is essential that academic educators and managers create a step change, abandoning incremental reform, and embrace the bold, alternative approaches essential for genuine transformation.

Progress in inter-disciplinary training has been inherently limited, and new precedents in combining Arts and Sciences awards, at both the undergraduate and postgraduate levels, offers significant liberation.

Recruiting new staff with genuine transdisciplinary experience and commitment can create highly positive disruption of siloed ontologies and ideologies. Those leading change must risk using their imagination, through new processes that engage both the hearts and intellects of their colleagues and students. University managers must prepare themselves for radical reform of degree structures, organisational accounting and assessment methods.