Education for Sustainable Development

"Motivated by society's challenges and inspired by the power of our global community, we are shaping a fairer, brighter and carbon neutral future."

University Vision - Strategy 2030

Education for sustainable development (ESD) "aims at developing competencies that empower individuals to reflect on their own actions, taking into account their current and future social, cultural, economic and environmental impacts, from a local and global perspective" (UNESCO 2017).

At the University of Hull, we are committed to delivering programmes that are informed by excellent research and which equip our graduates with the skills for lifelong careers and the drive to shape a just and sustainable future.

At the University, the principles of education for sustainable development are embedded within the Strategic Plan (Strategy 2030) and the Education Strategy, and primarily realised through the implementation of *Transforming Programmes* (the university-wide curriculum review 2019-2024) and the University Competence Framework.

Strategy 2030

"Our mission is to advance education, scholarship, knowledge and understanding through teaching and research, for the benefit of individuals and society at large.

To help achieve this, we have developed an ambitious strategy, which has at its heart the two themes of Environmental Sustainability and Social Justice."

In the context of our vision and mission, education is embedded throughout the strategy, and captured in the overarching indicator of success that:

"Our innovative education, research and knowledge exchange leads change that addresses global and local challenges and generates fair and sustainable solutions"

Education Strategy

Strategy 2030 is underpinned by the Education Strategy, which recognises "that students are agents of change for a fairer, brighter, carbon neutral future"

The Education Strategy contains the key objective "to integrate the University of Hull's Vision into the student experience" through 4 activities:

- Integrating all elements of the vision throughout the student journey
- Creating new, innovative interdisciplinary courses
- Providing extra- and co-curricular experiences
- Celebrating our areas of educational excellence in carbon-neutrality and climate change, sustainability, societal and health inequalities and social justice

The Education Strategy, is, in part, realised through a university-wide curriculum review project, *Transforming Programmes*, launched in 2019 and encompassing all undergraduate and taught postgraduate programmes. Underpinning *Transforming Programmes* is the concept of [Competence-Based Education](#), and our [University Competence Framework](#).

Transforming Programmes

At the heart of *Transforming Programmes* are several key principles related to sustainability and social justice. Transformed programmes should align with the university's research priorities & industry, government and third sector demands: low carbon, sustainable futures; global partnerships; strong & fair communities; healthy living & excellent palliative care; participation & democracy; equality, diversity & inclusion; creativity & problem solving. Programmes should:

- Be rigorous, academically excellent and at the heart of the student experience
- Be coherent and based on discipline-specific competencies
- Represent a decolonised curriculum with a global outlook
- Be inclusive and supportive of diversity in their design, delivery and assessment
- Foster sustainability as practices and a mindset
- Instil values of social responsibility and entrepreneurship
- Focus on programme-level assessment strategies which are inclusive and relevant to the world of work.
- Allow graduates to articulate the competencies they have acquired and how they are relevant in the job market

The University Competence Framework and Education for Sustainable Development

Competence-based education focuses on what students can do, rather than what they know (Huxley-Binns, Lawrence & Scott 2023). It supports students to become confident in their ability to navigate uncertainty through complex problem solving, flexibility, teamwork, compassionate leadership and ethical reasoning (Huxley-Binns, Scott & Ewen 2024).

The **University Competence Framework** (figure 1) prepares students for an uncertain future by developing abilities in three domains of **Knowledge Management**, **Disciplinary and Professional Experience**, and **Self-Awareness.** Informed by scholarship, the Competency Framework maps directly to the UNESCO key competencies for sustainability as described in the [AdvanceHE and QAA guidance on ESD](#) (figure 2).
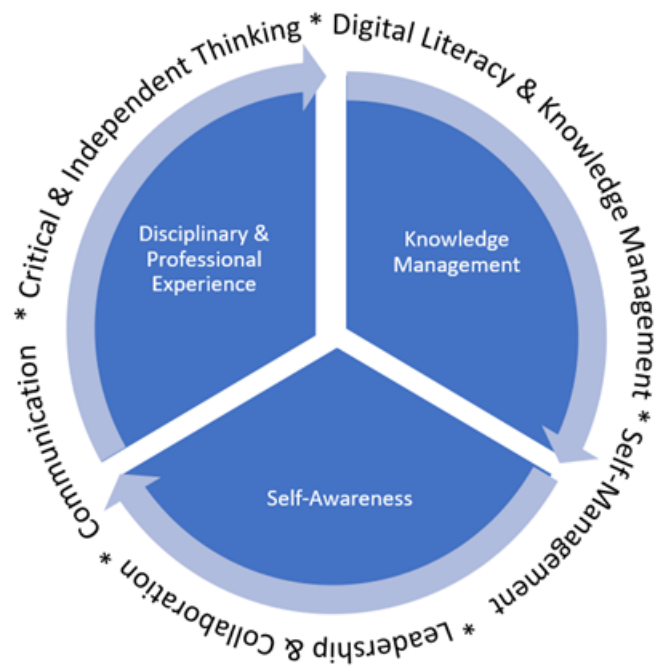
Figure 1: The University Competence Framework showing the 3 domains of competence. The external circle links the competencies to our Graduate Attributes
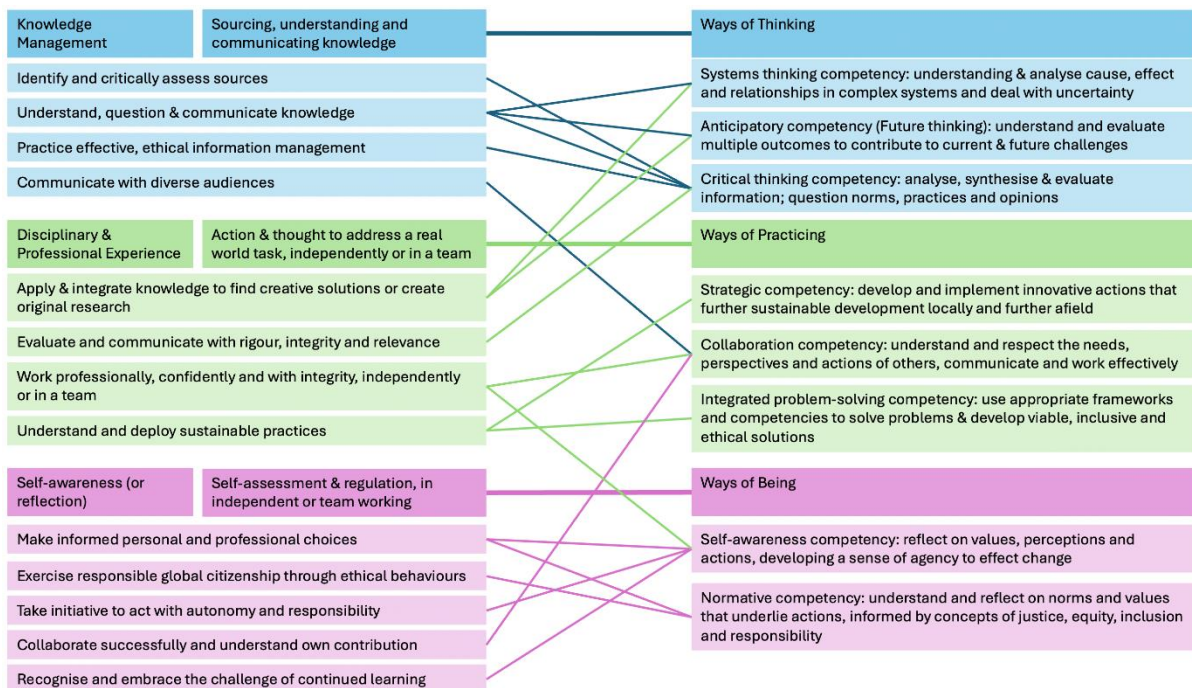

Figure 2: Competence Framework (left) mapped to UNESCO's key competencies for sustainability, from the AdvanceHE/QAA ESD guidance 2021 (right)

Implementation of the Competence Framework through Transforming Programmes

At programme-level, the University Competence Framework is adapted and expressed within the context of the discipline, to generate meaningful programme competencies (competence-focused programme learning outcomes). The [Teaching Excellence Academy](#) provide resources, guidance and workshops as part of an integrated programme of training and support to facilitate university-wide implementation.

As of May 2024, all taught programmes on the University of Hull campus had been revised to align to the core principles of *Transforming Programmes* and are underpinned by the Competence Framework and aligned to the principles of ESD. By 2026, all validated provision in partner colleges will also align to the core principles.

Environments and assessments that support ESD

The AdvanceHE & QAA guidance on ESD (2021) suggests that teaching, learning and assessment should:

> *"…provide learning experiences that transform the ways of thinking and practising, enabling students to become informed advocates of SD and to provide opportunity for practical interventions, including activism.*
>
> *Teaching and assessment practices that provide these transformational experiences for students require opportunities to hear alternative viewpoints, reflect on experiences, and address real-world challenges."*

Competencies are the culmination of the knowledge, understanding and skills of a specific discipline that enable a graduate to successfully address a given practice or task. As such, competencies are taught in practice and assessed in application. In our transformed programmes, teaching environments must be inclusive, following our [Inclusive Education Framework,](#) and include a wide range of different teaching practices.

In keeping with the QAA guidance on assessment (QAA 2018), the assessment of competence involves constructive alignment of teaching and assessment, and the use of authentic assessments involving 'real world' activities. *Transforming Programmes* supports the principle that assessments must be ***inclusive***, ***meaningful***, ***equitable*** and ***manageable***. It supports a decolonised curriculum, embeds sustainability and social justice in contexts appropriate to the discipline, and provides students with opportunities to tackle real-world problems and issues.

Guidance for staff and students

Guidance for staff and students on competence-based education and the implementation of the principles of T*ransforming Programmes* can be found at:

- [University Library Skills Guide on Knowledge Management](#)

- [Competence-based education QAA collaborative enhancement project website](#)
- [Inclusive Education Framework](#)
- [Teaching Essentials](#), hosted on the University VLE (internal only)
- [Transforming Programmes Support Hub](#) (internal only)
- A programme of workshops delivered by the Teaching Excellence Academy (internal only)
- Bespoke guidance and support to staff at our partner colleges

Wider guidance on embedding principles related to sustainability (including the Sustainable Development Goals) and education for sustainable development are available to staff via:

- [Teaching Essentials](#) (internal only).
- The *Postgraduate Certificate in Academic Practice* for staff new to teaching (internal only)

Further resources are in development following [pilot work mapping 7 programme clusters against both the ESD competencies and the UN Sustainable Development Goals](#). This includes:

- The development of a mapping tool to allow for immediate visualisation of both ESD competencies and the Sustainable Development Goals
- Teaching Excellence Academy curriculum development workshops
- Engagement with [Responsible Futures](#) to secure accredited status
- Guidance on, and a framework for [Competence-based Assessment](#)

Continuing Professional Development

The [Sustainable Skills Programme](#) provides a suite of courses designed to meet the needs of businesses. An accredited [Carbon Literacy Training](#) course is also available.

Living Lab

The University is committed to offering all appropriate areas of the estate for inclusion in a Living Lab.

The [Blue-Green Lab](#) is a Living Lab for Sustainable Drainage. The University uses Sustainable Drainage Systems (SuDS) to monitor and manage rainfall. Data, including flow, depth, soil moisture, weather, rainfall, temperature and are quality are monitored and data made available to University students and researchers to analyse. The SuDS scheme includes engagement with stakeholders, businesses and the wider community.

The campus is widely used for [biodiversity teaching activities](#), including surveying, monitoring, undergraduate and postgraduate research projects, practical conservation activities and in training future educators.

References

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