University of Worcester

Guidance on Embedding Graduate Attributes in the Curriculum

1 Context

1.1 *'Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include, but go beyond, the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents for social good in an unknown future.'*
(Bowden, 2000)

1.2 In developing the Learning and Teaching Strategy 2020-2025, a set of five University of Worcester graduate attributes were approved and it was agreed these should be embedded in the curriculum.

Social responsibility
Graduates who are globally and socially responsible, culturally aware and understand the ethical impact of decisions.

Reflective and resilient lifelong learning
Graduates who are resilient and aspirational, intellectually curious and critically reflective lifelong learners.

Problem solving
Graduates who can employ analytical, creative and evaluative skills to investigate problems and propose viable solutions.

Teamwork and effective communication
Graduates who can work in teams and communicate effectively to a range of audiences.

Digital citizenship
Graduates who have high degrees of digital capability to actively and responsibly create, communicate and collaborate online.

Annexe A of this paper indicates how each of these might relate to the curriculum.

1.3 This paper sets out a simple framework for achieving this, whilst also recognising that this is not a one-off exercise but part of the ongoing review and reflection on course curricula and student learning experiences. The framework is deliberately flexible and focused on course teams' reflection and planning of a cohesive curriculum that develops student capabilities and attributes.

2   Rationale for developing University graduate attributes

2.1   A rationale for developing graduate attributes can be set out in relation to how it benefits staff and students -

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Provides staff with:

- A University-wide framework and common language for discussing personal and professional skills development with students
- A framework for planning and reflecting on the alignment of learning, teaching and assessment with the attributes we want to develop in our graduates
- A means of articulating University values in relation to the education of our students
- A clear statement of the added value of University learning and experience for students' longer term development and future employability.

Provides students with:

- A tangible, outcomes-focused model to benchmark their own skills development against and identify potential development needs
- A framework and vocabulary for articulating the value of their University experiences to prospective employers and others
- A framework which can help structure self-reflection and self-assessment of progress
- A means of understanding how learning experiences contribute to the development of skills and competencies required to achieve career and life-wide learning goals.

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2.2   Graduate attributes can be developed through both the academic, course related curriculum and extra-curricular activities provided by the course, School or University, and also developed through reflection on wider learning that is contingent on being at university.

2.3   At the University of Worcester it is expected that all courses will take steps to embed the University graduate attributes in the curriculum and learning experiences of students. Whilst all courses are expected to reflect all five attributes, there is no standard way of doing this, and specific courses will give more or less emphasis to different attributes – it is important that students develop the attributes within a disciplinary context.

2.4   In determining the five attributes, and working with student representatives on this, the University has taken the view that the attributes reflect University core values and principles of higher education and that the development of such attributes will help students in maximising their full potential as 'agents for social good'. In short, explicit development of the five graduate attributes is likely to make students more successful academically and help them in progressing to higher level graduate employment, further study or other goals, whilst also enabling them to contribute to the global goals of sustainability.

2.5 Through the life-time of the Learning and Teaching Strategy 2020-25, embedding the University graduate attributes will be an explicit matter for discussion at Departmental Reviews. Departments will be expected to present to the Panel their current approach to developing graduate attributes, and their plans for further development.

3 Framework for embedding graduate attributes in the curriculum

3.1 The following diagram provides a generic cyclical process for considering how graduate attributes can be reflected in course curricula. The framework is structured around what course teams do normally – ie reflect on and evaluate their course for continuous enhancement through consideration of outcomes, student feedback and disciplinary and pedagogical developments to make adjustments to courses, introduce new modules or refresh existing modules.

3.2 Larger course teams (or academic departments) may wish to identify 'champions' for each graduate attribute who could take on responsibility for thinking about, inspiring and leading developments across courses – especially where modules are shared. Smaller teams will benefit from thinking about the graduate attributes holistically, working with students to consider a SWOT analysis for example. As indicated above this is not a one-off exercise, but departments and teams may want to consider the when and how of using this framework to structure action for embedding the attributes in the curriculum.
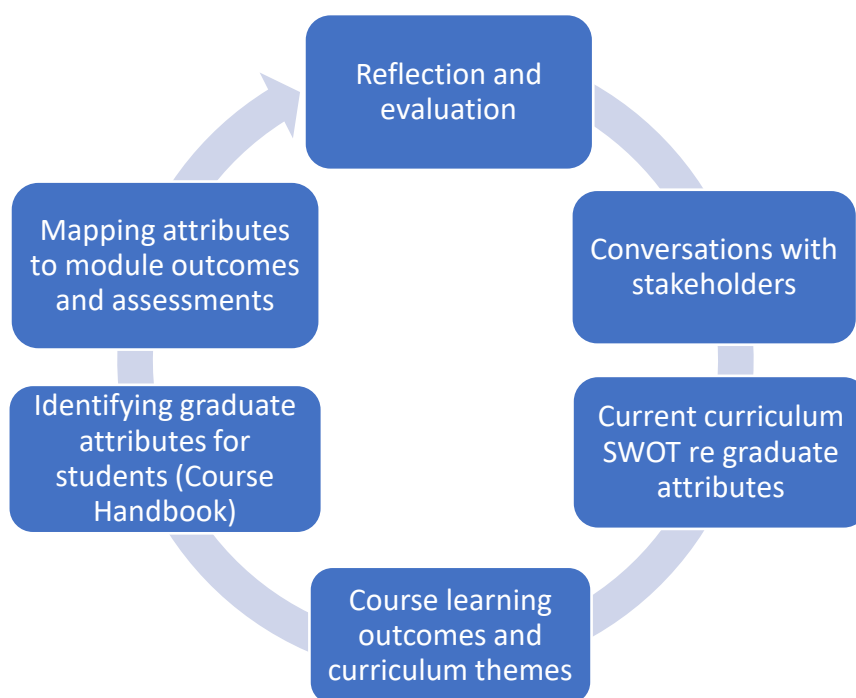
Step 1: Conversations with stakeholders

Curriculum design is a dynamic process of ongoing reflection, evaluation and co-creation with key stakeholders, including current students and graduates, employers, placement providers and staff from professional support services. Conversations about how graduate attributes are currently built into the curriculum and learning experiences of students and how they can be further developed represents a good starting point.

This might involve some specific discussions, using checklists about matters such as digital capabilities, education for sustainable development, employability and enterprise for example.

Step 2: SWOT analysis
It is highly likely that most courses already do a lot to develop the five graduate attributes, so a SWOT analysis may help identify where there are current strengths and where there are opportunities for development.

A SWOT analysis can support thinking about the skills and capabilities needed for successful study and for employability and more broadly 'global citizenship'. It should also help consideration about how values – inclusion, accessibility, internationalisation – are embedded and supported in the curriculum.

Think of the curriculum not just in terms of the knowledge and understanding students will be developing, but the skills and capabilities they will develop through learning experiences and activities.

Step 3: Course learning outcomes
Most course level learning outcomes will have something to say about graduate attributes, possibly regarding employment related and transferable skills outcomes. Reflecting on the graduate attributes is the opportunity to review those outcomes in the light of the SWOT analysis, and make the graduate attributes meaningful in the context of the discipline and the course. Think about how students develop these attributes and how they are assessed. Consider how they relate to the key themes of the course curriculum.

It is important that the whole course team agrees how the graduate attributes are contextualised in the course, and any course level learning outcomes – because this provides the framework for setting module learning outcomes and assessments. Going forward the course approval/review process will expect to see the graduate attributes reflected in the course learning outcomes.

Step 4: Identifying graduate attributes for students (course handbook)
There are undoubtedly significant advantages in articulating how a course supports the development of graduate attributes (below) and for this reason all courses are asked to set out in the course handbook how the course develops each of the five graduate attributes. The University has chosen to do this in the course handbook rather than in the programme specification because the view is that the handbook is written directly for students and allows for a developmental approach (as handbooks can be updated annually).

A standard framework is provided for doing this (but courses are free to adapt this as they see fit) at Annexe B.

It is expected that the graduate attributes statement in the course handbook will be developed and considered as part of the course planning and approval process and/or as part of the departmental review process.

Step 5: Mapping attributes to module outcomes and assessments
How do each of the graduate attributes influence the modules that students take? Is there planned progression in the development of the attributes? Are they assessed?

Should there be explicit module level learning outcomes related to some of the attributes?

Making the graduate attributes explicit at module level will help students reflect on their own learning. This can be done through making aspects of the graduate attributes clear as part of learning outcomes, but only where they are directly assessed. Where they are not directly assessed, but are a significant part of the learning strategy (eg in terms of knowledge/understanding, skills development, etc) for the module, it is suggested this is made explicit in the section on indicative content.

Approval/Review Table

Item	Notes
Version Number	1.0
Date of Approval	2nd June 2021
Approved by	Learning, Teaching & Student Experience Committee
Effective from	2nd June 2021
Policy Officer	Director of Quality and Educational Development
Department	Directorate Quality and Educational Development
Review date	June 2024
Last reviewed	N/A
Equality Impact Assessment (EIA)	N/A
Accessibility Checked	12th July 2021

Annexe A

Attribute	Examples of how this relates to the curriculum
Social Responsibility	Education for sustainable development (UN) Collection of resources for implementing education for sustainability Decolonisation Internationalisation Understanding inequality and diversity and inclusion and applying such principles Ethical principles Intercultural skills
Reflective and resilient lifelong learning	Building resilience in terms of confidence, personal orientations and skills development Embedding student wellbeing and understanding mental health into the curriculum Reflective skills Critical thinking skills
Problem solving	Analytical, creative and evaluative skills Research and enquiry skills Decision-making and options appraisal
Teamwork and effective communication	Personal responsibility, organisational planning and negotiation and influencing skills Collaboration Communicating in different modes (text, visual, digital) and to different audiences
Digital citizenship	Digital identity and wellbeing Digital communication, collaboration and participation Digital creation, problem-solving and innovation Building Digital Capabilities What is the digital capabilities framework? The 6 elements defined

Annexe B

Suggested model for inclusion of section in course handbook on graduate attributes

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University Graduate Attributes

The University has a set of five graduate attributes – high level skills, qualities and understandings – that we aim to develop in all of our students. Here we set out what this means in the context of your course and how we support you in developing and demonstrating these attributes.

Social responsibility
Graduates who are globally and socially responsible, culturally aware and understand the ethical impact of decisions

Reflective and resilient lifelong learning
Graduates who are resilient and aspirational, intellectually curious and critically reflective lifelong learners

Problem solving
Graduates who can employ analytical, creative and evaluative skills to investigate problems and propose viable solutions

Teamwork and effective communication
Graduates who can work in teams and communicate effectively to a range of audiences

Digital citizenship
Graduates who have high degrees of digital capability to actively and responsibly create, communicate and collaborate online.

For each of the graduate attributes, explain:

- *what the graduate attribute means in the context of the course/discipline*
- *how the learning opportunities through the different levels of the course support student's development of this attribute*
- *how the development of the attribute is supported via practical learning activities and assessment (this may include reference to specific modules)*
- *how the learning opportunities for the attribute relate to employability/further study*
- *opportunities for extending learning related to the graduate attribute, eg through optional placements/work experience, additional qualifications, Worcester Scheme etc.*

How it all comes together
Explain, where relevant, how the development and achievements of the graduate attributes come together – eg in the PAT system, in specific modules, in the use of a portfolio or similar, in the development of a CV and the writing of a reference.

Updated: February 2024