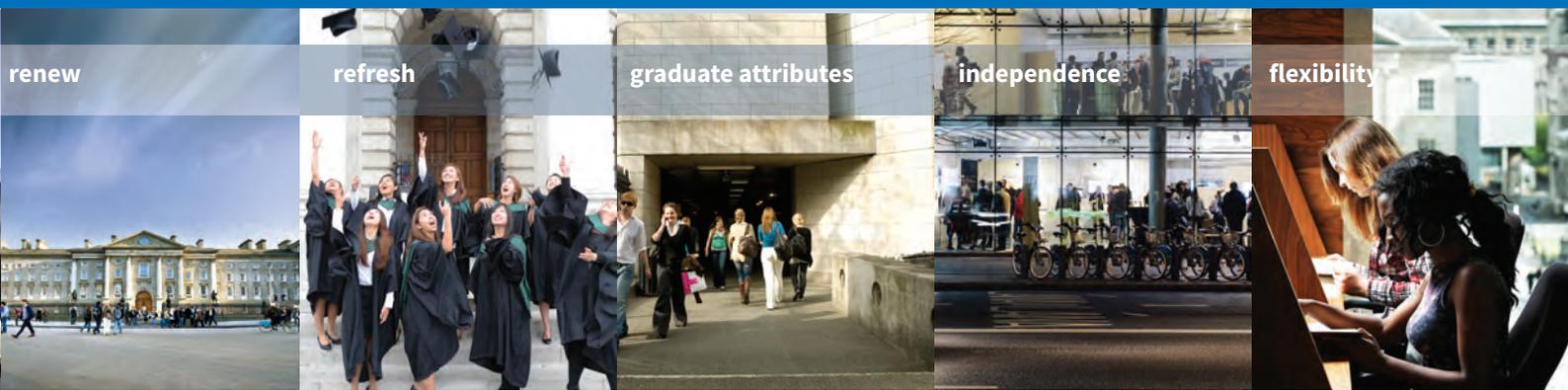




Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

The Trinity Education Project



Embedding the Trinity Graduate Attributes in the Curriculum

12 March 2018





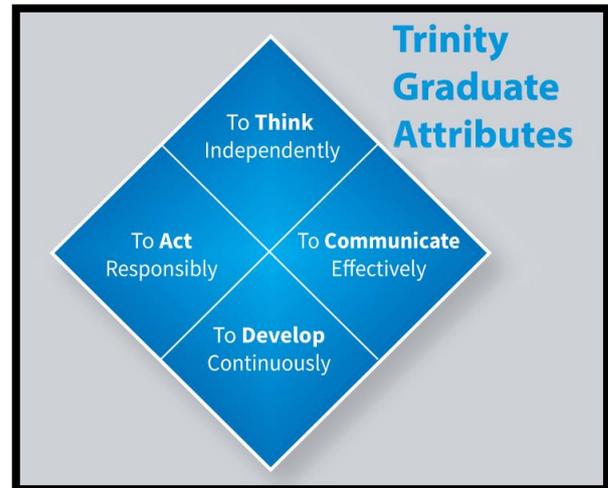
TRINITY EDUCATION PROJECT

Embedding Trinity Graduate Attributes in the Curriculum

The first part of this resource provides advice and guidelines on mapping the development of the Trinity Graduate Attributes in your programme/subject. The second part provides guidance on embedding the graduate attributes in the learning outcomes.

Introduction Trinity Graduate Attributes

A key aspect of the renewal of the Trinity undergraduate curriculum has been the identification of the [Trinity Graduate Attributes](#). The four Trinity Graduate Attributes represent the qualities, skills and behaviours that every undergraduate will have the opportunity to develop as part of their programme of study. In relation to the development of graduate attributes within the curriculum, the literature supports an approach which ensures that they are explicitly articulated, aligned and embedded in the curriculum and contextualized and assessed within the discipline¹.



The introduction of the Trinity Graduate Attributes provides an opportunity to reflect on and enhance established learning outcomes at programme and module level in order to ensure that they capture explicitly the knowledge, skills and competencies, which a Trinity student in a particular programme of study develops over the course of their studies. The four Trinity Graduate Attributes are: to think independently, to communicate effectively, to develop continuously and to act responsibly. While a number of descriptors are provided under each attribute, these are not exhaustive lists.

Key Points to Remember About Trinity Graduate Attributes

- Achievement of some aspects of the graduate attributes sits at programme level: these are often the products of years rather than weeks of learning (such as developing a global perspective, or being capable of adapting to change).
- Graduate attributes can be developed not only in the traditional credit-bearing curriculum, but also in the non-credit bearing co- and extra-curricula over the whole of the University experience (such as summer work placements, internships, volunteering).
- While the achievement of some aspects of the graduate attributes can be directly assessed, it is also possible to develop aspects of graduate attributes through assessment (such as developing ethical awareness through reflection on critical incidents).
- Programme/subject-level outcomes express the graduate attributes within the given disciplinary context, taking into account, where appropriate, professional body requirements.

¹ Hughes, C. and Barrie, S. (2010). Influences on the assessment of graduate attributes in higher education. *Assessment and Evaluation in Higher Education*, 35.3, pp. 325-334.



TRINITY EDUCATION PROJECT

Embedding Trinity Graduate Attributes in the Curriculum

PART 1: Mapping, Articulating and Developing Trinity Graduate Attributes

With a view to ensuring the development and articulation of Trinity Graduate Attributes within the undergraduate curriculum, it is suggested that programme/subject staff take a staged approach. As you review your curricula, the first stage, to which the tool accompanying these guidelines pertains, involves taking a high-level, programme/subject view of the current level of achievement of the four main graduate attributes and how/whether these are assessed.

Following stages will involve discussing, within programme/subject teams the results of the high-level mapping exercise to determine whether changes are needed to module/programme learning outcomes, teaching strategies or assessment practices to ensure graduate attributes are appropriately embedded with the given programme/subject.

The Graduate Attribute Mapping Tool²

The accompanying mapping tool is designed to allow basic module information to be collated as a first step towards embedding the development and articulation of Trinity Graduate Attributes within the curriculum. This first step focuses on evidence gathering.

The tool allows you to record the current level of development/attainment of each graduate attribute in each module. It also allows you to record whether and how each graduate attribute is assessed in each module.

The tool has built-in colour coding such that when levels and assessment methods have been included for each attribute for each module, the completed map will give an at-a-glance impression of whether and how graduate attributes are currently embedded in your curriculum.

Using the Tool

Step 1: Preparing the map for your context

The first step involves ensuring that the module code/title³ for each module you wish to map is included in column B in line with the appropriate year level. If you need to include more rows, simply highlight the row below where you wish the new row to appear, right click and select 'insert'. If you wish to delete a row, simply highlight the row, right click and select 'delete'.

Step 2: Populating the map

The next step involves recording the level of attainment of each graduate attribute, and the associated method of assessment, for each module. Reflecting on the questions provided in Appendix A may be helpful in identifying which graduate attributes are embedded in each module.

The following are the explanations for each of the attainment levels and assessment methods from which you will need to choose in each module. Please ensure that a choice of level and assessment method is made for each module.

² The Graduate Attribute Mapping Tool was developed following a review of existing tools, including Diamonds' (1998) Curriculum Competency Mapping Form and O'Neill & Noonan's (2013) [Programme Outcomes Mapping Matrix](#). The latter was particularly useful in identifying levels of attainment and their graphic representation.

³ Insert current module code; where such is unavailable insert module title and year level



TRINITY EDUCATION PROJECT

Embedding Trinity Graduate Attributes in the Curriculum

Levels of attainment:

Level of attainment	Definition
Introduced	To indicate that students are introduced to this attribute by this module
Enhanced:	To indicate that the development of the attribute is further enhanced by this module
Attained:	To indicate that the student has demonstrated attainment of this attribute by the end of this module
Not embedded in this module:	To indicate that the attribute is not addressed by this module

Assessment methods

Assessment Method	Definition
Formatively assessed:	Learning that contributes to this attribute is assessed through formative assessment. This is assessment that is used to give feedback on teaching and student learning in order to impact positively on student learning. It may or may not be aligned with marks, but if marks are used, they are likely to be low stakes.
Summatively assessed:	Learning that contributes to this attribute is assessed through summative assessment. This is assessment that measures the level of attainment by a student of specific learning outcomes within or across the modules which make up a programme of study.
Mix of formative and summative assessment:	Learning that contributes to this attribute is assessed through a mix of summative and formative assessment.
Not assessed in this module:	Learning that contributes to this attribute is not assessed in this module.

Using the Graduate Attribute Map to Inform Discussion

As mentioned previously, populating this mapping tool is the first stage in a longer-term, iterative process to ensure that the graduate attributes are embedded in your curriculum. When the map is complete, the intention is that it can be used as a tool to inform local discussions regarding programme/subject-level planning and curriculum enhancement. Initial questions that may be helpful to ask include:

- Do current module and programme learning outcomes reflect the development/attainment of graduate attributes recorded in your map?
- Are there ways in which you might further embed/articulate the attainment of graduate attributes within your modules/programme?
- Are there any graduate attributes that are not being attained within the programme? If so, are students given the opportunity to attain these graduate attributes through Trinity electives/approved modules, or in the non-credit bearing co- and extra-curricula?
- How are you communicating to students which graduate attributes are being developed/assessed over the programme/subject?



TRINITY EDUCATION PROJECT
Embedding Trinity Graduate Attributes in the Curriculum

PART II: Ensuring Programme and Module Learning Outcomes Embed Graduate Attributes

[Learning outcomes](#) articulate the knowledge, skills and competencies that students are expected to have achieved through successful completion of the module (module learning outcomes) or programme (programme learning outcomes). Ideally, learning outcomes, at both module and programme level, provide a link between the graduate attributes to which students aspire and the teaching, learning and assessment they experience in their programmes/subjects.

Having completed the Graduate Attribute Mapping Tool and discussed the results at local level, you may decide that you need to adjust existing learning outcomes or add/remove learning outcomes at programme/module level to ensure that the links between graduate attributes and teaching, learning and assessment are adequately reflected in the stated outcomes.

The key points to remember when writing learning outcomes have been detailed in the Trinity [Writing Learning Outcomes](#) guide. Briefly, learning outcomes are:

1. Essential areas of learning that result from a course of study
2. Expressed with a verb that indicates the behaviour expected from the course of study⁴
3. Written with a level of learning/the learner in mind⁵
4. Written in the future tense, and from the student's point of view, typically expressed as 'you will be able to'
5. Expressed with a level of clarity that allows their achievement to be assessed
6. Limited in number (maximum of six)

⁴ [Bloom's Taxonomy](#) and the [Solo Taxonomy](#) may be helpful in selecting appropriate verbs

⁵ The [Solo Taxonomy](#) may be helpful to consider in considering levels of learning



TRINITY EDUCATION PROJECT

Embedding Trinity Graduate Attributes in the Curriculum

The sample module descriptors from the [TEP Guidelines on Student Workload and Assessment](#) provide useful examples of how learning outcomes can link graduate attributes to teaching, learning and assessment. It is important to make explicit for students how the listed learning outcomes link to graduate attributes. The following example is illustrative:

Module Name	Research Ethics: Procedures and Practice
ECTS	10
Learning Outcomes	On successful completion of this module you will be able to: <ol style="list-style-type: none">1. Prepare a research ethics application for review2. Distinguish between procedural research ethics and ethics in practice3. Critically discuss the challenges associated with the enactment of principles of research ethics in practice4. Critique a variety of ethical frameworks that may be applied in ethically important moments in research scenarios5. Inform research practice through a critical awareness of the literature of research ethics
How is the achievement of these learning outcomes assessed?	Group preparation of ethics application (LO1) (summative assessment) Group presentation on translating procedural ethics into practice (LO3, LO4) (summative assessment) Reflection on ethically important moments in research (LO2, LO3, LO4) (formative assessment) Short literature review (LO5) (summative assessment)
Which graduate attributes are developed through these learning outcomes?	To think independently is developed through learning outcomes 3, 4 and 5. To communicate effectively is developed through learning outcomes 1, 3 and 4. To develop continuously is developed through learning outcomes 3, 4 and 5. To act responsibly is developed through learning outcomes 1-5.



TRINITY EDUCATION PROJECT
Embedding Trinity Graduate Attributes in the Curriculum

Appendix A

The following questions may be helpful to consider in determining whether and to what level each of the four Trinity Graduate Attributes have been embedded, in a discipline-appropriate way, in each module.

To Think Independently	To Communicate Effectively	To Develop Continuously	To Act Responsibly
<p>At what level does this module enable students to develop deep knowledge of an academic discipline? Is this assessed? How?</p>	<p>At what level does this module enable students to present work through a range of media? Is this assessed? How?</p>	<p>At what level does this module instil in students a passion to continue learning? Is this assessed? How?</p>	<p>At what level does this module enable students to act on a basis of knowledge and understanding? Is this assessed? How?</p>
<p>At what level does this module equip students to carry out independent research? Is this assessed? How?</p>	<p>At what level does this module enable students to build expertise in the communication tools of the discipline? Is this assessed? How?</p>	<p>At what level does this module enable students to build and maintain career readiness? Is this assessed? How?</p>	<p>At what level does this module develop students' self-motivation and ability to take responsibility? Is this assessed? How?</p>
<p>At what level does this module develop creative and/or critical thinking? Is this assessed? How?</p>	<p>At what level does this module enable students to connect with people? Is this assessed? How?</p>	<p>At what level does this module instil in students a commitment to personal development through reflection? Is this assessed? How?</p>	<p>At what level does this module develop students' knowledge of how to manage ambiguity? Is this assessed? How?</p>
<p>At what level does this module enable students to develop an appreciation for knowledge beyond their chosen field? Is this assessed? How?</p>	<p>At what level does this module enable students to develop an ability to listen, persuade and collaborate? Is this assessed? How?</p>	<p>At what level does this module develop students' confidence to take measured risks? Is this assessed? How?</p>	<p>At what level does this module enable students to become effective participants in teams? Is this assessed? How?</p>
<p>At what level does this module help students to develop an ability to analyse and synthesise evidence? Is this assessed? How?</p>	<p>At what level does this module develop students' digital and/or language skills? Is this assessed? How?</p>	<p>At what level does this module develop students' capability of adapting to change? Is this assessed? How?</p>	<p>At what level does this module develop a global perspective among students? Is this assessed? How?</p>
<p>Is this graduate attribute developed in any other way in this module?</p>	<p>Is this graduate attribute developed in any other way in this module?</p>	<p>Is this graduate attribute developed in any other way in this module?</p>	<p>At what level does this module develop an ethical awareness among students? Is this assessed? How?</p> <p>Is this graduate attribute developed in any other way in this module?</p>



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

