

8. Detailed step by step guide for course curriculum mapping to embed graduate attributes

Overview

At the University level, definitions of graduate attributes are generic and general ideas only. They become meaningful as they are translated into specific course outcomes. From previous experience at UNE we have found that course or majors teams, are best equipped to interpret the generic definitions in terms that are

- meaningful to you,
- your field of study and
- your students' needs in future careers.

The definitions are therefore **interpreted and extended** for your context, at the appropriate level of study and associated with relevant and achievable outcomes (assessable). This is done as a course team curriculum mapping exercise, the benefits of which are:

- consensus on definitions of attributes and definitions of levels of attainment or standards and the provision of a consistent approach for students
- incremental development for students
- systematic planning of where teaching and assessment of attributes and discipline content and skills fit into units and across a course
- clear expectations about student capabilities from year to year because of the documented development sequence and standards
- elimination of duplication or covering of omissions
- a documented quality assurance program.

Graduate attributes are not separate to content. At unit level the attributes come through learning experiences and how students are asked to interact with the content. For example, it may be important for students to argue a case verbally so students are required to use oral presentations to present outcomes of their research and their stand on an issue. Both the content and the quality of the presentation are important so both will be an outcome and assessable. Assessment criteria are thus related to the stated learning outcomes.

The step by step guide which follows aligns with the process recommended by the Australian University Quality Agency (AUQA 2005). It will help streamline the mapping exercise and minimize workload. Facilitation for the process is provided by T&LC.

Please refer to the [definitions](#) in section 3 of the guidelines as part of the mapping process.

Mapping Steps

Step 1. Create a map of the existing course (Course coordinator and facilitator activity)

The course is nominated for review by the Dean, HOS, Academic Director and Course Coordinator. The course coordinator or a T&LC facilitator acts as chair for discussions. The facilitator provides support for recording outcomes, definitions, guiding the discussion and collating revisions.

The course coordinator provides digital copies of course learning outcomes (or professional competencies) and unit information for all core units (including service units). Electives are not normally mapped. [This step typically requires a one hour meeting for the course coordinator and the provision of data to the facilitator.]

1.1 If information is present

The facilitator uses the information sent by the course coordinator to create a map of the course in its current form using the templates provided. Three key aspects are collated:

1. Alignment of course learning outcomes (CLOs) with the UNE Graduate Attribute Policy (or accreditation competencies if applicable). Use [step1a template](#).
2. Unit information is used to map individual unit learning outcomes (ULOs), teaching and learning activities, assessment tasks and marking criteria to course learning outcomes. Use [step1b template](#). This task includes the use of a numbered rating for each learning outcome using Bloom's taxonomy in [The aligned curriculum](#) to determine the level of thinking skills required. This allows teaching staff to consider the level of thinking they are expecting of their students and to quickly see the collective experience for students across the course.
3. Collation of all units which contribute to each course learning outcome (CLO) across the study path. Use [step1c template](#).

If information is **not** present proceed to step 1.2

1.2: Define each attribute in terms of the course discipline and define standards of achievement for each attribute for each year or level. (Whole course team activity-typically 2-3 hrs)

Team (including contract markers/tutors, coordinators of service units if possible) discussion is likely to cover:

- how each UNE attribute fits with the aim of the course as defined by the teaching staff, graduate employment needs (knowledge, skills, code of conduct) and its level of importance
- where teaching activities already assist in developing these attributes
- how each unit in the course contributes to the overall course outcomes and attributes
- whether assessment tasks and marking criteria allow students to demonstrate their learning of the stated outcomes at increasingly higher levels. Definitions of the standard of achievement (higher order thinking) expected as students progress through each year of the course (i.e. three levels) may need to be developed. Use Bloom's taxonomy found in [The aligned curriculum](#) as an aid.
- special requirements of the course which need to be added or which require further refinement in definition
- professional skills if the course is accredited can be mapped to the UNE attributes.

Provide the results of this definition discussion and along with unit information to the facilitator as in step one.

Step 2. Review and revise map of the existing course (Whole team activity-typically 3 hrs)

The facilitator meets with the whole course team (course coordinator organises the team meeting). Using the three maps (tables) prepared, the following tasks are completed and documented:

1. Create, confirm or revise course learning outcomes after comparison with new [Graduate Attribute Policy](#)
2. Consider how the unit learning outcomes currently relate to course learning outcomes and promote higher order thinking skills as students progress. Are there any gaps or overlaps?
3. Consider if the design of assessment and learning experiences are authentic and sequentially develop graduate attributes and higher order thinking across the course. Does assessment cover the stated learning outcomes and only the learning outcomes?

4. Are any refinements required for the criteria for the three levels of attainment for each attribute?
5. Does the course cover all professional skills required by your graduates?

Following the team session unit coordinators individually revise and submit to the facilitator the following information if changes were required:

1. updated syllabus
2. five or six succinct statements conveying what the successful student in this unit can do, indicating which course learning outcome each relates to and what level of thinking is required of students. Use [step1b template](#), and the sections on Learning Outcomes and Bloom's taxonomy in [The aligned curriculum](#).
3. Give brief details of changes to assessment tasks; indicate weighting, assessment criteria and the learning outcomes each task assesses. See the assessment section in [The aligned curriculum](#).
4. Briefly describe the learning experiences students will engage in to achieve the unit outcomes. See [The aligned curriculum](#) for examples.
5. Submit the updated unit information by the agreed deadline electronically to the course coordinator and facilitator to allow creation of renewed course map.

Course coordinator and HOS will discuss and negotiate any refined learning outcomes with service unit providers.

Step 3: Confirm or refine renewed course or major. (Course team activity of 1 hour)

Course team reviews renewed course map circulated electronically and:

1. confirms or refines revised unit information ensuring that course learning outcomes are achievable, measurable and developed incrementally.
2. decides if any further changes are required and send results to facilitator.

Facilitator completes the final map and returns a hard copy and electronic copy to the course coordinator for a record and for inclusion in the Course and Unit Catalogue.

Step 4.1: Course coordinator and unit coordinators attend to Major Amendment Approval process if necessary, and prepare any changes to publication material for the course or major. (Course coordinator or delegate activity)

For prospective students and for marketing purposes, course coordinators are encouraged to use the heading 'Career opportunities' in the course catalogue, to list high priority graduate attributes and professional skills of graduates of their course. Note though that the headings in the [course catalogue](#) are different to those on the course approval form. A good exemplar is provided by the [Bachelor of Professional Nursing](#). The Faculty Academic Manager often attends to this task so ensure appropriate information is provided.

Changes to graduate attributes will be recorded in 2009 **course** approval forms in section 1.8 and in section 3.2 if particular graduate skills require emphasis for promotional purposes. In addition, changes will be recorded in sections 5.1 and 5.2 where the course-defined list should be included and aligned with professional requirements where applicable.

Step 4.2: Unit coordinators make changes agreed in step 2 to unit information (learning outcomes, activities, assessment) (individual activity)

Changes to graduate attributes, teaching activities and assessment will be recorded in sections 22, 24, 27, and 28 of 2009 new and amended **unit** approval forms.

Once approval processes are completed the results are officially recorded in the Course and Unit Repository (CAUR) for publication in the Course and Unit Catalogue on the web.

Step 5: Add Student self-reflection guide (personal development planner) to unit information

It is acknowledged that students should be active partners in the teaching and learning process to achieve graduate attributes and other learning outcomes. Evidence for this exists in the widespread uptake of student ePortfolios (both undergraduate and postgraduate) in the UK, Europe, the US and Australian universities. The ALTC research project into the international and Australian ePortfolio status indicates this is an important issue for the near future.

Students can demonstrate their achievement of graduate attributes through:

1. formal assessment results
2. guided self-reflection of learning experiences and action planning
3. presentation of evidence via a personal ePortfolio.

The **main** purpose of the self-reflection guide is to assist the learning process. It should not represent a formal file that students produce and take with them but rather a collection of reflections that students can use to identify strengths and weaknesses and to build a CV. Students contribute to, or take responsibility for their own learning through the reflection process. Self-reflection encourages self-directed and independent learning necessary for lifelong learning. The ‘pay-off’ for student participation is that they will be able to use their recordings of actions and achievements to demonstrate that they have the work skills desired by prospective employers. Several courses at UNE are moving towards the use of ePortfolios as part of formal assessment (e.g. medicine and education).

A simple generic self-reflection guide has been devised for inclusion in all units. Unit coordinators can use the generic guide or customise the checklist to match the graduate outcomes and employability skills included in their unit. An online version allows students to save their responses for future reference and it can be added as a link in online units. The self-reflection guide will contribute to students’ understanding of the connection between UNE’s attributes and their future work readiness. The Careers Matrix used by Careers and Counselling can be used by students in their final year to summarise and collate the yearly recordings and reflections. The Guide will eventually be replaced by a UNE ePortfolio.

[Student self-reflection guide](#)