

Toolkit to Assist Heads of Department and Programme Directors to Engage with Graduate Outcomes

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Introduction

This toolkit should be read in conjunction with our Guide, <u>How to engage with a graduate outcomes agenda: A guide for tertiary education institutions</u> (Spronken-Smith et al., 2013a; see also full report in Spronken-Smith et al., 2013b). The Guide gives definitions of graduate outcomes (GOs), as well as reasons why Heads of Departments and Programme Directors should be engaged with such a GO agenda. It provides a list of indicators of good practice for engagement with GOs, and a set of enablers for promoting engagement with GOs. In addition, some strategies to better embed GOs in institutions, programmes and teaching are provided.

In this toolkit we first recap from the Guide some important points, pertinent for Heads of Department and Programme Directors with oversight for teaching and learning in degree programmes. Then we address key steps that these leaders should take when instigating curriculum renewal for better engagement with GOs.

Recap of Key Points in the Guide

Graduate outcomes: Definitions

Graduate outcomes (GOs) encompass graduate profiles (GPs), which may be at the institutional (GPI) and/or programme (GPP) levels (see Figure 1). The GPs consist of sets of graduate attributes (GAs) that typically include knowledge, skills and values. Graduate outcomes that are required by the New Zealand Qualifications Framework (NZQF) must include a GP as well as educational and employment pathways for graduates (NZQA, 2011; 2013). Graduate outcomes should not be viewed in an atomised way, but rather as interrelated and holistic. To promote engagement with a graduate outcomes agenda, lecturers should hold a 'translation' or 'enabling' conception of graduate attributes (Barrie, 2006), which means they will purposefully try to foster them in their students.

Why should institutions engage with graduate outcomes?

While a focus on learning objectives began early last century in the United States, the global groundswell of neo-liberalism and related political/economic agendas with a concern for quality in the 1990s led to a focus on educational outcomes beyond the classroom. Since the early 1990s the consideration of graduate outcomes has gained momentum throughout higher education systems in the United Kingdom, Europe, the United States and Australia.

In Aotearoa New Zealand the move to legislate the specification of graduate outcomes has been more recent, with the enactment in 2011 of the New Zealand Qualifications Framework. This framework requires all quality-assured qualifications to specify graduate outcomes that include a graduate profile, and education and employment pathways for graduates.

As well as the specification of graduate outcomes constituting good teaching practice, there is a body of evidence that there are benefits for both students and staff when graduate outcomes are well embedded in curricula. Staff report that the curriculum renewal process fosters collegiality, increases efficiency and importantly, often transforms their thinking about teaching to take a more student-centred approach. Many students report a lack of knowledge about graduate outcomes, and yet they want to know about them to inform their choice of courses, their study and future opportunities.



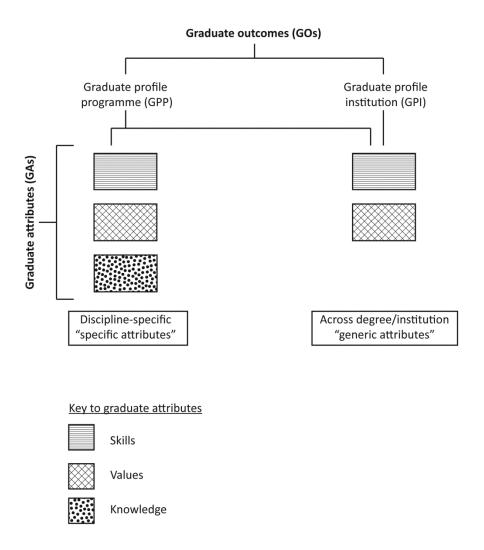


Figure 1: Definitions of graduate outcomes, profiles and attributes that we adopt in this report (Spronken-Smith *et al.*, 2013b)

Note: 'Graduate outcomes' (GOs) is used as an umbrella term to encompass graduate profiles (GPs), which in turn encompass sets of graduate attributes (GAs), consisting of knowledge, skills and values. The number and nature of GAs will vary between institutions and programmes.

What are programme-level indicators of engagement with graduate outcomes?

There are six indicators for engagement with graduate outcomes at the programme level:

- **Planning for graduate outcomes.** Developing contexualised graduate profiles for programmes (*i.e.* GPPs) and using stakeholders in this process (*e.g.* students, lecturers, employers, alumni). If there is a GPI, there is the need to articulate how the GPP links to it.
- Explicit links between graduate attributes and learning outcomes. Typically this would mean having curriculum maps that make these links explicit. Note that not all courses should address every graduate attribute; but across the programme most graduate attributes should be evident in learning outcomes (some may involve extra-curricular activities).



- Explicit links between graduate attributes and assessment. Again this involves having curriculum maps that make these links explicit. Whilst most graduate attributes will be assessable, other more affective attributes¹ may not be readily assessed.
- Staff awareness of graduate outcomes. All teaching staff should know what the GPP is for their programme and how graduate attributes are embedded in courses. Moreover, they should know about educational and employment pathways for students.
- Student awareness of graduate outcomes. All students should know what the GPP is for their programme and how graduate attributes are progressively developed. Only providing written information about the GPP is unlikely to raise student awareness of the GPP; other methods should be used. Students should also be aware of educational and employment pathways.
- Monitoring of attainment of graduate outcomes. There should be mechanisms in place to
 monitor student attainment of the GPP. This might involve periodic review, programmelevel surveys, alumni surveys and employer feedback on graduates. Data gathered through
 monitoring should be fed back to programme coordinators in an evaluation cycle so that
 practice continues to improve.

How would you rate your institution using these indicators?

Even in programmes with graduate outcomes well embedded we found student awareness of graduate outcomes was often lacking. Moreover monitoring of graduate outcomes was often quite poor.

What can enable engagement with graduate outcomes?

Five enablers for engagement with GOs were identified in our research:

- A) External drivers forces to which institutions were required to respond or that they perceived they were responding, or should respond
- B) Structural and procedural enablers those that facilitated or engaged staff and communities within the institution to become aware of or work towards change in practice in regard to GOs
- C) Developmental enablers those that assisted staff/groups/departments to introduce and develop GOs and embed them in curricula, or undertake some curriculum development
- D) Achievement enablers those that were concerned with how students are assisted to achieve a GP
- E) Contextual enablers generic institutional and/or individual cultural/affective qualities that crossed the four forms described above and made them more or less effective.

A framework showing the relation between the enablers is given in Figure 1 and a range of strategies for each enabler at the programme level is given in Table 1. External drivers are powerful enablers and should be utilised where possible. Whilst structural enablers are often apparent in institutions, what are often missing are procedural enablers, and yet these are crucial to embedding GOs in curricula. Moreover, there should be strong links between the structural and procedural enablers and the developmental enablers. To promote engagement with GOs, consideration must be given to each enabler and how this can be enacted at all levels throughout the institution. More thought needs to be given to achievement enablers, as these were less well developed within institutions.

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¹ Affective attributes include values and attitudes.

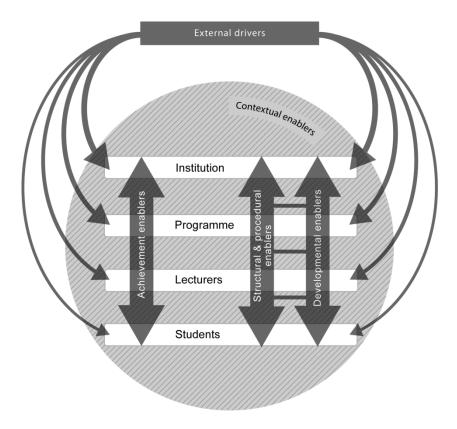


Figure 2: Conceptual framework of enablers for engagement with a graduate outcome agenda (Spronken-Smith *et al.,* 2013b)



Table 1: Strategies to promote embedding GOs in curricula at the programme level (Spronken-Smith *et al.*, **2013b).** Note that these strategies for each enabler are discussed in detail in the next section.

Enablers	Programme – what helps embed GOs at programme level?
External – forces to which institutions were required to respond or perceived they were responding, or should respond	 Mandate from accreditation processes and professional bodies and trade organisations Stakeholder involvement in developing GOs (employers, alumni, students) Using alumni to help with programme quality
Structural and procedural – those that facilitated or engaged staff and communities within the institution to become aware of, or work towards, change in practice in regard to GOs	 Supportive middle managers responsible for teaching and learning Promoting a team focus to curriculum development Having designated authority to implement policy Having people familiar with regulatory and structural aspects of qualifications Developing programme GPs – GOs need to be contextualised Requiring clear links between the programme GP and the institutional GP (if there is one) Requiring strong links between GOs, learning outcomes and assessment (curriculum mapping)
Developmental – those that assisted staff/groups/departments to introduce and develop GOs and embed them in curricula, or undertake some curriculum development	 Translation or enabling beliefs about the role of GOs and teaching and learning Champions Recognition and support for the role of the discipline in developing/embedding GOs Recognising and supporting staff ownership of their programme Engaging all staff in curriculum renewal Valuing programme staff input Provision of academic development support for the process and particularly for developing learning outcomes Provision of teaching resources and planning tools such as curriculum mapping Instigating formal and informal conversations about teaching and curriculum Having good communication of the process and outcomes Emphasising that improved efficiency will result
Achievement – those that were concerned with how students are assisted to achieve a GP	 Having clear educational and employment pathways Using contemporary/flexible delivery methods Ensuring curricula focus on students Having strong links between GOs, learning outcomes and assessment Scaffolding of skills – to gradually develop GOs Including high impact educational experiences (e.g. service learning, inquiry; see Kuh, 2008) Requiring ePortolios or similar Involvement of students in developing GPs
Contextual – generic institutional and/or individual cultural/affective qualities that crossed other enablers and made them more or less effective	 High staff morale Good communication A departmental culture that focuses on teaching Creating time and space for discussions for curriculum renewal Having an alertness to the context of lecturers



Key Steps for Heads of Department and Programme Directors to Engage with Graduate Outcomes

The key steps we identified on the pathway to a high level of engagement with GOs are:

- 1. Deciding who is going to be responsible for driving curriculum renewal around GOs
- 2. Developing contextualised graduate profiles for your programmes
- 3. Gaining leverage from enablers of engagement with GOs
 - a. Drawing on external drivers
 - b. Creating the context for curriculum renewal
 - c. Ensuring enabling structures and processes are in place (note that curriculum mapping is a key procedural enabler)
 - d. Ensuring developmental enablers are in operation
 - e. Activating achievement enablers
- 4. Monitoring progress of embedding GOs and using feedback to improve the learning experiences for students.

Each step is considered in turn below.

1. Deciding who is responsible for driving curriculum renewal

Key points:

- Leadership for curriculum renewal for a GO agenda should come from the Head of Department and Programme Directors.
- A working group should be formed to oversee curriculum renewal. In order to foster ownership of the curriculum renewal, this group should include as many teaching staff as possible and practical, as well as student representation, and ideally, an academic staff developer.
- The working group should ensure that there are opportunities for department-wide conversations about curriculum renewal.

It is important that any departmental or programme-wide curriculum renewal processes are instigated from the top with strong support from the Head of Department and Programme Directors. Often working groups are delegated the responsibility for oversight of curriculum renewal, and ideally some senior members of the department should sit on this group. If your institution has an academic staff development unit, then an academic staff developer should also be on the group, since they can play a key role in facilitating conversations and providing guidance on best practice. Try to get representation from across the department/programme including lecturers and students. Ideally, all teaching staff would be involved in the group, since it is important for staff to have collective ownership of any changes to the curriculum. If this is not possible, it is very important that the working group regularly reports to full staff meetings and instigates opportunities for department-wide conversations about curriculum renewal.

2. Developing contextualised graduate profiles for your programmes

Key points:

 Graduate profiles must be contextualised for your programmes and should consider the attributes desired by any external agencies as well as any generic and programme-specific attributes.



- Graduate outcomes for NZQF must include a graduate profile, and educational and employment pathways.
- Involve as many stakeholders as possible in conversations regarding the desired graduate attributes. Stakeholders include students, lecturers, alumni and employers.

A critical, and somewhat time-consuming, step in curriculum renewal is developing a contextualised graduate profile (*i.e.* a GPP) for each degree programme offered. Such profiles are required under the New Zealand Qualifications Framework (NZQF) and indeed, as well as programmes having a GPP, educational and employment pathways must also be articulated. The contexualised graduate profiles should take account of any institutional graduate attributes (if there are any) as well as external accreditation or professional body requirements and discipline-specific knowledge, skills and values.

In this process it is vital to include as many stakeholders as possible including lecturers, students, alumni and employers. Academic staff developers have particular expertise in facilitating conversations around desired graduate outcomes and, being independent of the department, they can often mediate between staff members should any disputes occur (and they usually do!).

For early discussions about graduate outcomes, it is often good to start with a clean slate, and put to one side any existing graduate profiles or requirements from external agencies. Typical questions to frame conversations about graduate outcomes are:

- What knowledge must our graduates have of this field? In this discussion consideration should be given to threshold concepts² since these are known to be very important to student progression in a subject.
- What generic skills should they acquire (e.g. critical thinking, communication, information literacy, numeracy, problem solving, etc.)? Is there a set of institutional generic attributes we are required to foster in our graduates? Can we be specific about what each generic attribute looks like in our subject? For example, critical thinking in philosophy will be very different to critical thinking in chemistry.
- What subject-specific skills should they acquire?
- What values should we foster in our students? Are there any values that the institution would like to see fostered? What about external agencies and the discipline?

Once there is agreement on a core set of outcomes, consider how these match institutional and external expectations, as well as any existing profiles (if applicable). Do extra attributes need to be added into the profile or are some redundant? Gaining views of students, alumni and stakeholders on the developing graduate profile is really important to ensure relevance.

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² 'Threshold concepts' were coined by Meyer and Land (2005), who said that "in certain disciplines there are 'conceptual gateways' or 'portals' that lead to a previously inaccessible, and initially perhaps 'troublesome', way of thinking about something" (p. 373). Being troublesome they can be difficult to learn, but once grasped they are unlikely to be forgotten since they are irreversible and transformative as the concept is seen in a different way. A literature or internet search will likely uncover threshold concepts for particular disciplines, since this work has had wide appeal with lecturers.

3. Gaining leverage from enablers of engagement with GOs

Key points:

- There are five categories of enablers: external drivers, contextual, structural and procedural, developmental, and achievement. A range of strategies should be adopted to ensure that each of these is enabling the process of curriculum change to embed graduate outcomes.
- Curriculum mapping is a critical part of embedding GOs in curricula. Curriculum maps should show where in the programme each graduate attribute is taught and assessed.

As noted above there are five categories of enablers for engagement with graduate outcomes, with strategies shown in Table 1. Below, we consider each in turn, discussing possible strategies.

Drawing on external drivers

Take advantage of external drivers where possible, as these are powerful enablers for engagement with GOs. More vocationally oriented programmes will have a strong mandate from accreditation processes, professional bodies and trade organisations. Stakeholders such as employers and alumni can also be powerful external drivers of curriculum renewal.

Creating the context for curriculum renewal

It is clear that lecturers will devote more time and energy to teaching if they perceive that teaching is valued within the department or programme. Thus Heads of Department should endeavour to promote a culture that values teaching. Aspects of a vibrant teaching culture include a departmental focus on student learning, the promotion and recognition of courses that provide high-impact educational experiences (Kuh, 2008; see *Excerpt from High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter*]), giving GOs a high profile and clearly communicating this to staff and students, being aware and supportive of the context in which lecturers teach, and providing positive feedback to staff engaged in teaching towards GOs. Moreover, space should be made available to have department-wide discussions about GOs and how to embed them.

Ensuring enabling structures and processes are in place

These are very important in the embedding of GOs and these enablers should also have strong links to developmental enablers. The department and/or programme should have policies and plans that include GOs. Ideally, the department will have an overarching teaching and learning strategic plan, and in this should be a goal and strategies for embedding GOs across the curriculum. As well as policy, the department needs to have committee structures and procedures in place to ensure implementation of policy. To advance a GO agenda may mean changing the roles and/or procedures of existing departmental committees or it may mean the formation of a new committee or group. Ideally, as described above, a team-based approach to curriculum renewal should be promoted. It is important to have staff familiar with the regulatory and structural aspects of the qualifications involved in the group responsible for overseeing curriculum renewal.

Using curriculum mapping to embed graduate attributes

A key procedural enabler for embedding GOs in curricula is curriculum mapping, which must involve a whole-of-programme approach (Barrie *et al.*, 2009). This is a process whereby the desired graduate attributes for the qualification are linked to the learning outcomes and assessment in courses. Various tools are available to assist in this mapping exercise – including a <u>Blank Programme</u> <u>Map</u> and <u>blank Key learning objective map</u>. The hardest part of curriculum mapping is

often articulating learning outcomes that link to the graduate profile, and this is where the assistance of an academic developer can be very valuable. In another toolkit aimed at <u>lecturers</u> we provide links to tools that assist lecturers to write learning outcomes.

However, as Bath *et al.* (2004) caution, mapping is useful but is not the sole answer. They emphasise the need for lecturers to engage critically in planning, acting, reviewing and reflecting on how GAs are incorporated in the curriculum. Thus there needs to be monitoring of the attainment of GOs, with an evaluative cycle, so that the feedback gained is used to further improve the student experience. The monitoring stage is discussed in more detail in Step 5.

Ensuring developmental enablers are in operation

Departments that have strongly embedded GOs report the importance of academic developers in achieving this high-level engagement. Undertaking major curriculum renewal can be very unsettling for academics, particularly if their conceptions about teaching are being challenged. Thus having academic developers to facilitate conversations about curriculum renewal becomes very important and they can help guide programme teams through the process. As well as facilitating conversations, academic developers can provide tools for curriculum mapping and work with groups of lecturers to develop learning outcomes for courses. Other developmental enablers include champions within the department (those lecturers who are enthusiastic and well informed about pedagogy); and the involvement of as many staff as possible in curriculum renewal so that staff have ownership of the programme. It is likely many staff will be sceptical about the benefits of curriculum renewal, but our research has shown benefits such as improved efficiency, greater collegiality and the adoption of more student-centred approaches. Another major developmental enabler is that of time. It is vital to allow two to three years for curriculum renewal to occur, particularly if programmes are undertaking major revisions to courses.

Activating achievement enablers

The achievement enablers were less evident in our research. These are the enablers that help students achieve the desired GOs. It is important, and indeed now required, to have educational and employment pathways clearly articulated for students. However, just having them in a handbook or on the website is unlikely to be enough. Rather, try to bring in alumni or employers to talk about potential jobs, or use graduate students to talk about future study options. Promote contemporary and flexible delivery methods and ensure curricula are focused on students. If the curriculum is designed around GOs, this is a great start. Ensure that there are strong links between GOs, learning outcomes and assessment and make these links explicit to students. Progressively scaffold the development of skills so that graduates become more competent through their study. Try to use high-impact educational experiences (see Kuh, 2008; see Excerpt from High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter), as well as signature pedagogies³, since these are likely to develop a range of desirable graduate attributes. Some departments help students to track their attainment of GOs through an ePortfolio framework or by personal advising and mentoring of students.

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³ Shulman (2005) created the term 'signature pedagogies', which he argued are characteristic or 'signature' ways of teaching that "organize the fundamental ways in which future practitioners are educated for their new professions" (Shulman, 2005, p. 52). He gave the example of medicine, with bedside teaching, or law with its Socratic method.

4. Monitoring of attainment of GOs

Key points:

- Monitoring is a critical part of the process of embedding GOs and should not be neglected.
 A range of strategies are available to evaluate attainment of GOs.
- Importantly, data gained through evaluation should be used to inform the on-going enhancement of curriculum initiatives.

It is apparent that while many departments and programmes plan for GOs and ensure that they are taught and assessed in their programmes, the monitoring of GOs is given less consideration. Yet, with any curriculum initiative, monitoring is critical to ensure that the desired change is in fact occurring. Thus monitoring of student development is critical to see if graduates are in fact achieving the desired graduate profile. Monitoring may be via periodic review, graduate opinion surveys, and alumni and employer surveys. As with any evaluative process, the results of the surveys should be fed back to staff and students, and used to improve the learning experiences for the students.

Conclusion

The process of embedding graduate outcomes in degree programmes is a major undertaking since it typically involves major curriculum renewal. This toolkit has outlined some considerations for Heads of Department or Programme Coordinators to assist them overseeing the process. The focus of curriculum renewal should be seen as a means to improve student learning, not driven by compliance. Any curriculum renewal processes to embed graduate outcomes should include:

- strong leadership at the departmental and programme levels
- the assistance of academic staff developers in facilitating conversations about graduate outcomes and teaching towards them
- ownership of the process by the teaching staff, i.e. as many teaching staff as possible should be directly involved in curriculum renewal
- the development of a contextualised graduate profile for the programme. Ideally students and other stakeholders should be involved in developing this profile
- a focus on generating learning outcomes and assessment well aligned with the graduate profile. Curriculum mapping tools provide a useful resource for this, especially under the guidance of an academic staff developer
- the collection of, and action on, evaluative data to inform the continual enhancement of the curriculum
- allowing at least a couple of years for curriculum renewal to occur.

Other toolkits are available to assist in the process of curriculum renewal: a toolkit for institutions (Spronken-Smith et al., 2013c) https://akoaotearoa/ako-aotearoa/ako-aotearoa/ako-aotearoa/nesources/pages/lecturers-toolkit-engaging-graduate-outcomes-introduction



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