

Guide

How to engage with a graduate outcomes' agenda: A guide for tertiary education institutions

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HOW TO ENGAGE WITH A GRADUATE OUTCOMES' AGENDA: A GUIDE FOR TERTIARY EDUCATION INSTITUTIONS

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Three online toolkits have been developed to complement this work – accessible via the above url:



Toolkit for Heads of Departments and Programme Directors



Toolkit for Lecturers



Toolkit for Institutions



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Introduction

In this Guide we are advocating strong engagement with graduate outcomes (GOs). Why? A very instrumental response would be because, under the New Zealand Qualifications Framework (NZQF), institutions will have to. However, our motivation is because engagement with GOs constitutes good practice in teaching, rather than for compliance reasons. Indeed, it is this good practice that lies behind the rationale for the NZQF to include graduate outcomes.

This Guide is designed to provide practical advice for institutions wishing to better engage with a graduate outcomes agenda. In this Guide, we draw on our findings from a large, multi-institutional project exploring engagement with a graduate outcomes agenda across higher education institutions in Aotearoa, New Zealand (Spronken-Smith *et al.*, 2013a). Our guide is structured around five key questions:

- What are graduate outcomes?
- Why should institutions engage with graduate outcomes?
- What is good practice for engagement with graduate outcomes?

- How are institutions currently engaging with a graduate outcomes agenda?
- How can institutions better engage with a graduate outcomes agenda?

In discussing these questions we use our findings as well as past research on graduate outcomes. Our project consisted of three phases:

1. A stocktake across the higher education sector involving a survey and interviews with academic leaders of teaching and learning. Fourteen (out of 29) institutions completed the survey and 10 interviews with leaders of teaching and learning centres (or similar academic positions)



were conducted. The survey and interviews investigated, at an institutional level, the planning for GOs, systems for embedding GOs in curricula, delivery of GOs, assessment of GOs, evaluation of GOs, and professional development support for embedding GOs.

2. The collection of eight cases of good practice of embedding GOs in degree programmes across four institutions:
 - AUT University – Physiotherapy and Tourism Studies
 - Christchurch Polytechnic Institute of Technology – Applied Science and Broadcasting Communications
 - University of Otago – Music and Oral Health
 - Victoria University of Wellington – Design Innovation and Marketing.

For each case, data were collected using surveys and interviews or focus groups with students and staff. The focus of data gathering was how programmes were planning for GOs, explicit links between GOs and learning outcomes, explicit links between GOs and assessment, staff awareness of GOs, student awareness of GOs, and monitoring of GOs. Case-study data were analysed to provide some background on the curriculum-renewal process, how GOs were translated into the curriculum, and staff and student experiences of GOs.

3. A synthesis of findings across the stocktake and case study data. First, we used some principles of Maturity Modelling (Marshall and Mitchell, 2003) to elucidate engagement of institutions with a GO agenda, and of our cases for embedding GOs. Second, we did a thematic analysis to draw out the main enablers for engagement with GOs. Third, we extracted indicators of the impact of engagement with a GO agenda on students and staff, as well as explaining the benefits to both groups of such engagement.

In the following sections we address each question in turn, beginning with some key points and then, following a discussion, providing some questions for readers to consider. Readers are also advised to access the digital resources we have provided to accompany this guide (Spronken-Smith *et al.*, 2013b-d). These resources are designed for institutions (senior managers), heads of department and programme coordinators, and lecturers. They can be accessed from the Ako Aotearoa website via: www.akoatearoa.ac.nz/graduate-outcomes.

What are graduate outcomes?

Key Points:

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

Graduate outcomes (GOs) are an umbrella term we use to cover a range of outcomes related to the knowledge, skills and values that are acquired through higher education. Graduate outcomes encompass both graduate attributes (GAs) and graduate profiles (GPs). In this Guide we use the term 'graduate attribute' (GA) to refer to a single attribute, while we call a set of graduate attributes a 'graduate profile' (GP), and this profile may be at the institutional level (GPI) or specific to the programme (GPP). The relations between these terms are shown in Figure 1.

The term 'graduate attributes' is in common usage in the literature and throughout universities. We draw on the definition provided by Bowden *et al.* (2000):

*[g]raduate attributes are the qualities, skills and understandings a university community **agrees** its students would desirably develop during their time at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen (p. 3, bold text our emphasis).*

They went on to say that:

*[t]hese 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 of social good** in an **unknown future** (p. 1, bold text our emphasis):*

Using this definition, Hager *et al.* (2002) and Barrie (2006) made a specific distinction between generic and discipline-specific skills. According to Barrie (2006, p. 217) generic GAs are “the skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of

contexts and are acquired as a result of completing any undergraduate degree.” Barrie argued that “they should represent the core achievements of a university education. Later, he and colleagues extended this definition adopting earlier notions:

*Graduate attributes are an orienting statement of education outcomes used to inform curriculum design and the provision of learning experiences at a university... They are descriptions of the core abilities and values a university community agrees all its graduates should develop as a result of successfully completing their university studies (Barrie *et al.*, 2009, p. 1).*

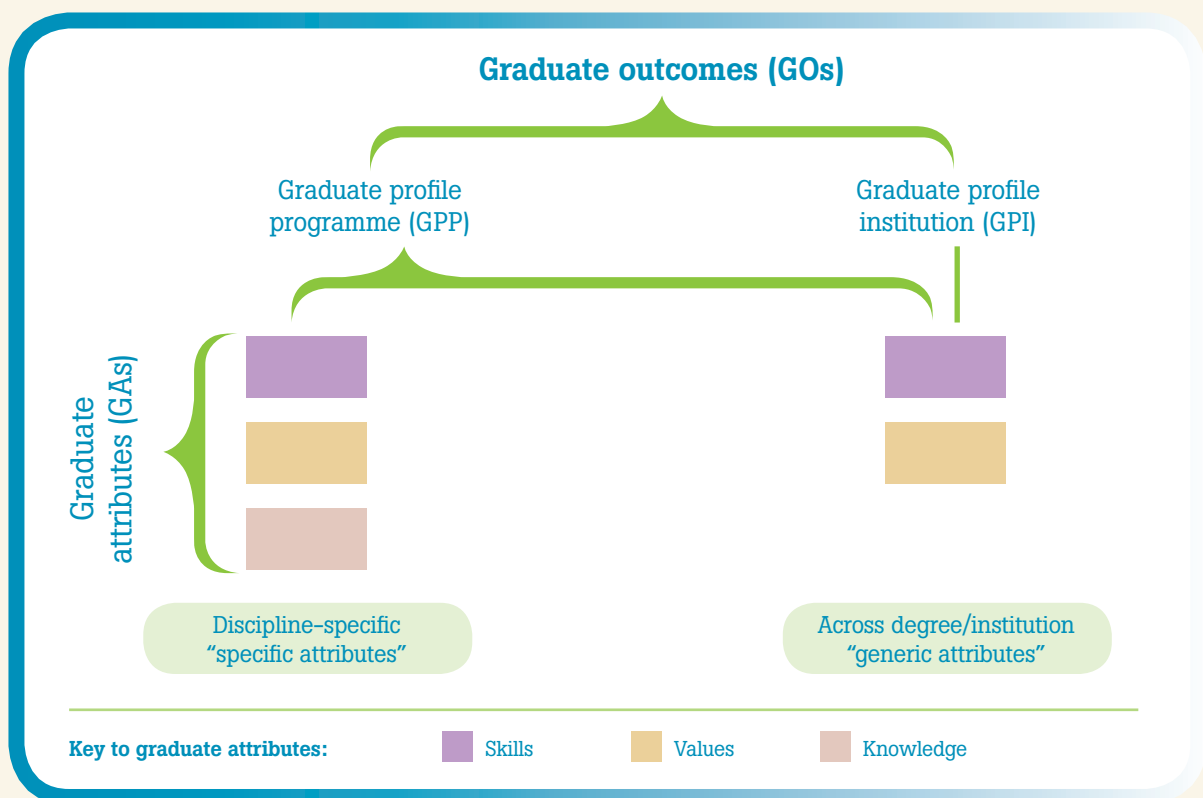


Figure 1: Definitions of graduate outcomes, profiles and attributes that we adopt in this report (Spronken-Smith *et al.*, 2013a)

The number and nature of GAs will vary between institutions and programmes.

Importantly, GOs should not be thought of as an atomised list of attributes, but rather in a more holistic sense, and often the term ‘graduateness’ is used (Walsh and Kotzee, 2010). So despite the rather atomised portrayal in Figure 1, really we hope that both staff and students would perceive GOs as interrelated and holistic (Hager, 2006). Moreover, Barrie (2006) identified four different ways in which lecturers understand GAs. Two of the conceptions were additive in that university study adds to the students’ existing skill base:

- A *precursory* conception assumes that students already possess the required generic attributes for successful study (e.g. basic written English proficiency) before they enter university and there is no relationship between what the teachers do (or perceive they should do) and how these attributes are developed. Discipline knowledge is perceived to be separate from generic attributes.
- A *complementary* conception assumes that generic attributes are an outcome of a university education but they are separate and secondary to the acquisition of disciplinary knowledge (e.g. essay writing skills for constructing an argument that could complement technical science skills).

Barrie called the other two conceptions transformative:

- A *translation* conception assumes that generic attributes assist

the graduate to use or apply discipline knowledge and translate it in unfamiliar situations (e.g. communication of science results to a science audience using technical laboratory report writing skills).

- An *enabling* conception of GAs assumes a complex relation of abilities and aptitudes that enable scholarly learning and the creation of new knowledge.

Thus, lecturers have differing conceptions of GAs and the type of conception held will influence if and how they teach towards GAs. Barrie’s study focused on attributes at a general level and found little contextual influence.

Jones (2009a) explored the gap between how lecturers in five different disciplines conceived three key GAs (critical thinking, problem solving, and communication) and their teaching practices. She reported strong contextual influences associated with discipline epistemology in both the way GAs were developed and taught (Jones, 2009b). Each of these key attributes was interpreted and prioritised differently, but they were often assumed to be implicit in disciplinary ways of thinking and practising. For example, in History, criticality is valued, and students who are becoming historians learn to think critically in the course of that becoming, so generic attributes are considered quite separately. In one sense, this view aligns well with Barrie’s (2006) *complementary* conception of generic attributes. Yet, the students are learning to be critical through knowledge of the discipline.

It is apparent that GOs must be contextualised within the programme, so that the attributes are meaningful for staff teaching them and for students developing them. This notion is behind the NZQF. The requirements for this framework specify that *all degree programmes* must have graduate outcome statements that include:

- **Graduate profiles** that identify the expected learning outcomes of a qualification. This is captured in notions of what a learner will know and understand and be able to do when they achieve the qualification.
- **Education pathways** that identify other qualifications that a graduate could enrol in after completing this qualification. Where qualifications are standalone, and do not prepare graduates for further study, the outcome statement should make this clear.

- **Employment pathways** or contributions to the community that identify the areas in which a graduate may be qualified to work, or the contribution they may make to their community (NZQA, 2011, p. 7).

So, in NZQF terms, GOs include not just GPs but also education and employment pathways. Moreover, it is now a requirement for all degree-granting institutions in New Zealand to ensure that new programmes specify these three elements of GOs. But why and how did this come about? The next section of this Guide considers the recent history of, and motivations for, a GO agenda.

Questions to consider:

- What terminology for graduate outcomes is used in your institution?
- Are heads of department and programme directors aware of the different conceptions that lecturers hold of graduate attributes?
- How many of your qualifications have graduate outcome statements that conform to the NZQF requirements of including a graduate profile and educational and employment pathways?

Why should institutions engage with graduate outcomes?

Key Points:

- 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 NZQF. This framework requires all quality-assured qualifications to specify graduate outcomes that include a graduate profile, and education and employment pathways for graduates.
- The specification of graduate outcomes constitutes good teaching practice, with benefits for both students and staff when graduate outcomes are well embedded in curricula.
- In our study many students reported a lack of knowledge about graduate outcomes, yet they wanted to know about them to inform their choice of courses, their study and future opportunities.
- In our study staff reported that the curriculum renewal process for embedding graduate outcomes fosters collegiality, increases efficiency and importantly, often transforms their thinking about teaching to take a more student-centred approach.

In this section we first provide some recent history of how this agenda has been progressed overseas and then present some findings from our research regarding the benefit to both lecturers and students of engaging with such an agenda.

Recent history of the graduate outcomes' agenda

The modern meaning of the term 'graduate outcomes' has its roots in the evolution of higher education, and educational theory and practices that span more than a century. Concern with learning objectives began early in the last century in the United States with the work of John Dewey (Ewell, 2007). The work of Bloom and colleagues (1956) saw the start of specific descriptions of behaviours as educational objectives in the form of taxonomies. Originally, these objectives were used to describe the outcomes desired by a teacher from a particular teaching episode. The emergence of the behavioural movement saw an increasing focus on what the student could do. From the 1970s, educational research, which had been dominated by behaviourism and cognition, started to broaden in scope to include more social and experiential perspectives. A focus on students' competencies began in teacher education in the 1960s/70s (Bowden & Marton, 1998) but only became influential in the tertiary sector in the 1990s. In this decade the foundations were laid worldwide for the introduction of degree and curriculum frameworks that supported the explicit identification of graduate outcomes.

In the 1990s, the global groundswell of neo-liberalism and related political/economic agendas, particularly with a concern for quality, took the focus on educational outcomes beyond the classroom and programme to the institution and the external environment, thus creating the conditions for significant change. During this time, in

Europe there were issues about the comparability of education systems. But underlying these initiatives was a more general concern about national prosperity and development (see Barrie, 2006; Bologna Declaration, 1999). To address these concerns, in 1999 European education ministers met in Bologna, Italy, with a key outcome being a declaration that aimed to establish a European Higher Education area by the year 2010 by means of 'harmonization' (Dale, 2008) of the disparate systems of higher education in the region. Part of the 'Bologna Process', as it became known, was to promote cooperation in ensuring quality via the development of comparable criteria and assessment methodologies for collegiate learning. Out of the Bologna Process came a joint quality initiative that led to the generation of the so-called 'Dublin descriptors', which were a framework of comparable and compatible qualifications for higher education systems (Kehm, 2010).

Following on from the Bologna Process was the 'Tuning Project' (González & Wagenaar, 2003), which, in line with the harmonisation theme of Bologna, was to 'tune' structures in Europe with the aim of aligning curricular structures, programmes and teaching and to integrate quality standards into these. Each course, degree or programme had a set of learning outcomes specified and there was a planned shift from teacher-centred to student-centred approaches. It was in this tuning process that the details of how graduates might be equipped for work was able to be mapped out through learning outcomes and curricular

experiences. The Tuning Project was initiated in Europe and then late in 2008 the Lumina Foundation began 'Tuning USA' – working with institutions in three states (Indiana, Minnesota and Utah) to draft learning outcomes and map these into the curriculum (see Adelman, 2008a & b; Adelman et al., 2011). The Bologna Process strongly influenced these developments. Commenting on what could be learned from the process in the USA, Adelman (2008a, p. 24) wrote:

The primary story of all our work on the Bologna Process is about providing students with clear indications of what their paths through higher education look like, what levels of knowledge and skills will qualify them for degrees, and what their degrees mean.

As part of the drive to develop 'human capital' to meet the needs of the new 'knowledge economy', another important driver at all levels of the tertiary sector has been employability (Bridgstock, 2009; Curtis & McKenzie, 2001). As the Bologna Process was getting underway in the Northern Hemisphere, there was a concern by employers and researchers worldwide that the post-secondary sector was not producing graduates who were equipped for work. Higher education was perceived to be failing to meet the demands of employers, governments and the economic conditions (Bennett et al., 1999). Thus there was an increasing emphasis on the need for graduates who were

able to think and learn, and who were flexible and adaptable (Fallows & Steven, 2000; Bennett et al., 1999). Employers' views of the desirable qualities of graduates were evident in the literature (see Harvey & Green, 1993; HEC, 1992; Yorke & Harvey, 2005). Other influences that paralleled these global shifts included rapidly changing technologies and subsequent knowledge access and growth. Governments responded by changing the performance criteria for funding to base it on "demonstrable graduate outcomes" (Bridgstock, 2009) especially in the United Kingdom, Australia and Canada and in some sectors in Aotearoa, New Zealand.

Behind the GO agenda in Europe, the United States and Australia is a great deal of funding, commitment and general agreement that GOs are important but in Aotearoa, New Zealand the move to embed graduate outcomes in curricula has been relatively recent. In 2008 the New Zealand Qualifications Authority (NZQA) began a 'Targeted Review of Qualifications at Levels 1–6' in order to "ensure that New Zealand qualifications were useful and relevant to current and future learners, employers and other stakeholders" (NZQA, 2013). The result was the development of a NZQF. The Education Act was amended in August 2011. The amendments required all quality-assured qualifications in New Zealand to be listed on the NZQF and gave NZQA the power to make rules covering all qualifications listed – both university and non-university. Transition arrangements mean that by the end of 2015 all qualifications listed on the

NZQF must meet the relevant new listing requirements, which include specifying graduate outcomes.

Thus there is a legislated requirement for degree-granting institutions in Aotearoa, New Zealand to specify GOs that include GPs, and educational and employment pathways. While NZQA administers quality assurance for all non-university tertiary education organisations, Universities New Zealand is responsible for quality assuring all universities, and approves qualifications developed by them. The Committee on University Academic Programmes (CUAP) oversees approval and reviews of new programmes. They must now ensure that university qualifications specify GOs in the format required for NZQF.

Benefits to staff and students of engagement with graduate outcomes

As discussed above, the roots of the GO agenda came from a concern for student learning, but in more recent years the agenda has been dominated by quality assurance and enhancement concerns. Our interest in promoting a GO agenda is not to simply follow the trends apparent overseas, but rather because engagement with a GO agenda can promote a focus on student learning and often a rethink of how programmes are delivered. Moreover, our research showed that through engagement with a GO agenda there can be substantial benefits to both staff and students. These benefits are outlined here.

Students were strongly in favour of knowing about GOs – they saw them as very important, even if they did not have a clear understanding of what they were. Across the programmes we studied, students interpreted the use of GOs in a range of ways. A dominant theme was that of employability – GOs were seen as a means to achieve employment goals. Another very instrumental view, voiced by a small number of students, was that GOs provided a means for them to ensure they were getting “what they paid for”. However, many students had a broader view of GOs, seeing them as more than preparation for a specific job. Many students also found GOs to provide a holistic picture of what they were achieving from their education and some used GOs to plan their studies and to understand their degree. These differences in the perceptions of GOs appear to be related to orientations to higher education (Spronken-Smith, Buissink-Smith, Grigg and Bond, 2009). Spronken-Smith *et al.* (2009) found four orientations regarding the purpose of higher education: (a) gaining a qualification for a specific job; (b) preparation for a job; (c) developing life skills and learning how to think; and (d) education for its own sake: growing as an individual. It is likely that students holding a more instrumental view of GOs think that the purpose of higher education is gaining a credential, whilst those holding more holistic conceptions of GOs are likely to see the purpose of higher education in more liberal terms, enveloping personal growth.

In programmes where GOs were well embedded and explicitly taught, students had a high level of awareness of them. Moreover, students were aware that GOs were being progressively developed throughout their study, as they were being trained to be professionals. In contrast, in programmes where GOs were just starting to be considered, or where GOs were well embedded but perhaps not explicitly taught, students were less aware of them and were not familiar with the language of graduate profiles or graduate attributes. Yet they wanted to know about GOs in order to make sense of their study, their degree programme and future opportunities. However, through our research, which forced students to think about GOs, often for the first time, two things became apparent. First, many students could articulate what they were gaining from their education – perhaps not in the institutional or programme jargon of GOs, but certainly they were cognisant of many attributes that were being fostered. Second, the very act of having to think about GOs was seen as beneficial and developmental. Many found it a surprise to be able to generate a set of relevant GOs and for some that act of thinking about GOs was transformative. This is nicely illustrated by a Tourism Studies student, who, through the process of reflecting on GOs, transformed her thinking about the purpose of a university degree – she spontaneously retracted her earlier comment that her studies would be a “waste of time” if she did not get a specific job within the tourism industry after graduation, since she now realised

she was gaining a far more holistic education.

Our Music case was the only example of a Humanities or Arts degree. Unlike the other cases where there was a strong vocational driver and a more obvious profession for graduates, in Music there was no single professional endpoint. Thus students were studying Music for a range of reasons – and mainly for personal interest, rather than professional reasons. When performance was a goal, passion was the driver. This meant that a variety of outcomes was possible and, as a result, students were responsible for constructing their own graduate identity.

Staff related many possible uses of GOs including:

- providing a vision for the outcome of the programme
- providing a more holistic approach to programme development and delivery
- communicating with students and employers
- marketing the programme
- quality assurance.

The consideration of GOs was seen to be very beneficial for staff and often this came as a surprise. For some sceptics, curriculum renewal around GOs was initially seen to be very bureaucratic, but through the process lecturers came to see it as a useful one. There was recognition that although it took a lot of work to embed GOs, the process was worth it as it led to increased efficiency.

When starting out on embedding GOs, there can be initial conflict amongst staff. This is a likely part of the process, where, often for the first time, staff have to think about what they are trying to achieve in their teaching. With the differing conceptions of GOs (see Barrie, 2006) described above, it is not surprising there can be conflict over how to embed them in a programme. However, despite potential conflict, most staff in our cases reported the process of embedding GOs as a positive one, and one that fostered collegiality within their department.

It is very apparent that the act of thinking about GOs can transform lecturers' beliefs about teaching. Moreover, through deep engagement with the GO agenda, lecturers could transform their thinking about GOs themselves. Often they came to see them as more than an atomised list of qualities, such as a "way of thinking and practising" (see Hounsell & McCune, 2002). There was also a strong feedback loop reinforcing the need for GOs through seeing the positive changes in students that resulted when GOs were explicitly taught and assessed.

Questions to consider:

- Are staff in your institution aware of the drivers for engagement with graduate outcomes?
- In particular, do staff and relevant Boards and Programme Committees know about the recent requirement for graduate outcomes to be specified using the NZQF terminology?
- Are staff aware of the benefits to both staff and students of engagement with a graduate outcome agenda?
- If awareness of these issues is low, how might this be improved?

What is good practice for engagement with graduate outcomes?

Key Points:

- A range of indicators have been identified for determining good practice regarding engagement with graduate outcomes.
- The indicators are for institutional leaders, programme coordinators, lecturers and students.

If institutions need to engage with a graduate outcomes agenda, what constitutes good practice? What are the indicators of strong engagement with GOs? We had four levels of indicators: institutional; programme; lecturers; and students. The indicators for each level are given below.

Institutional-level indicators for engagement with GOs are those concerned with embedding GOs within the institution:

- Planning for GOs. This involves having high-level strategies for GOs, such as in institutional teaching and learning plans.
- Systems to embed GOs. Considerations here include appointments, committees, roles and responsibilities (of staff and committees) for initiatives including GOs, and institutional processes such as those for course and programme approval.
- Delivery of GOs. Encouragement of lecturers to explicitly teach towards achievement of GOs.
- Assessment of GOs. Encouragement of lecturers to assess development of GOs.



- Evaluation of attainment of GOs. Ensuring that monitoring of attainment of GOs occurs across the institution. This may include institutional or programme-level surveys, alumni surveys, periodic review, and employer feedback on graduates.
- Professional development support for GOs. Providing academic staff development support to assist lecturers to engage with a GO agenda.

Programme-level indicators for engagement with GOs are those concerned with embedding GAs in curricula:

- Planning for GAs. Developing contextualised graduate profiles for programmes (*i.e.* GPPs) and using stakeholders in this process (*e.g.* students, teachers, employers, alumni). If there is a GPI, there is the need to articulate how the GPP links to it.
- Explicit links between GAs and learning outcomes. Typically this would mean having curriculum maps that make these links explicit. Note that not all courses should address every GA; but across the programme most GAs should be evident in learning outcomes (some may be gained through extra-curricular activities).
- Explicit links between GAs and assessment. Again this involves having curriculum maps that make these links explicit. Whilst most GAs will be assessable, other more affective attributes may not be readily assessed.

- Staff awareness of GAs. All teaching staff should know what the GPP is for their programme and how GAs are embedded in courses.
- Student awareness of GAs. All students should know what the GPP is for their programme and how GAs are progressively developed. Only providing written information about the GPP is unlikely to raise student awareness of the GPP; other methods should be used.
- Monitoring of attainment of GAs. There should be mechanisms in place to monitor student attainment of GAs. This might involve periodic review, programme-level 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.

Lecturer-level indicators for engagement with GOs are those concerned with teaching towards GAs:

- A sound understanding of the graduate profile for their programme. We hope that this understanding is not simply an atomised list of attributes, but rather a more holistic sense of 'graduateness'.
- Holding a 'translation' or an 'enabling' conception (Barrie, 2006) of graduate attributes, so that lecturers feel some responsibility to foster attributes in their students.

- Having clear links between the graduate profile and the learning outcomes and assessment in their courses.
- Assisting students to track their progress towards attaining the graduate profile. This could be through student advising, the keeping of learning journals, or ePortfolios.
- Ensuring that students know about the employment options resulting from their degree.
- Ensuring that students are aware of further educational pathways.

Student-level indicators of engagement are those concerned with achieving GOs:

- Students being aware of a graduate profile for their programme. However, ideally their understanding of the graduate profile should not simply entail an atomised list of attributes, but rather a more holistic sense of 'graduateness'.
- Students seeing strong links between the graduate profile and the learning outcomes and assessment in their courses.
- Students tracking their progress towards attaining the graduate profile.
- Students knowing a range of employment options resulting from their degree.
- Students being aware of further educational pathways.

Questions to consider:

- Are any of these indicators used in evaluative processes in your institution?
- What feedback is currently gained regarding the embedding of graduate outcomes in curricula and the achievement of these outcomes?
- Is such feedback used to improve practice in an evaluation cycle?

How are institutions currently engaging with a graduate outcomes' agenda?

Key Points:

- Engagement with GOs is patchy across the polytechnic and university sector.
- In general, polytechnics were more engaged in this agenda than the universities. The main reasons for the stronger engagement in the polytechnics may have been due to the influence of the NZQA and the teaching-focused culture.
- Institutions with strong engagement with GOs demonstrated effective senior leadership in the area and the necessary enabling structures.
- Institutions with a less well-developed GO agenda tended to lack central leadership, focused resources, and appropriate supporting structures in the GO area. Instead, they often relied on individuals as champions.
- There is better engagement by higher education institutions with the planning, systems and delivery of GOs, but much weaker engagement with assessment and evaluation of GOs and professional development support for GOs.

Our study involved a survey of engagement with GOs across the higher education sector in Aotearoa, New Zealand. Our survey results from 14 institutions showed that engagement with a GO agenda was at best patchy across the university and polytechnic sector. By patchy, we mean that there are areas where GO engagement is strong, and other areas where there is less evidence of engagement. Figure 2 shows each institution's rating of how strongly they are engaged with the planning, systems, delivery, assessment, evaluation and professional development support for GOs. There is reasonable to strong engagement with the planning, systems

and delivery of a GO agenda, but much lower engagement with assessment and evaluation of GOs, and six institutions reported weak or very weak professional development support for GOs. From Figure 2 it is apparent that overall polytechnics are better engaged with GOs than are universities. Five of the seven polytechnics reported reasonable to very strong engagement with planning, systems, delivery and assessment of GOs. However, there were lower levels of engagement with evaluation of GOs and professional development support, with the exception of one polytechnic. For the universities, two reported stronger levels of engagement, particularly

with planning and systems, and one also reported strong engagement with delivery, assessment and evaluation. In contrast the five other universities reported mainly weak to reasonable engagement for all aspects.

Figure 3 (see page 18) shows a continuum of engagement with GOs from weak to strong together with key influencing factors. As a generalisation, universities tended to be located on the left-hand side of the continuum whilst the polytechnics tended to be located on the right. The main reasons for the stronger engagement

evident in the polytechnic sector were associated with external drivers (e.g. NZQA, professional bodies and accrediting bodies), a teaching-focused culture, strong leadership from the top and enabling structures. Conversely, institutions that were less engaged typically placed less emphasis on external drivers and were more focused on research. They tended to lack senior leadership in the GO agenda, instead relying on champions. In these institutions, the GO agenda was more poorly resourced and lacked authorised supporting structures.

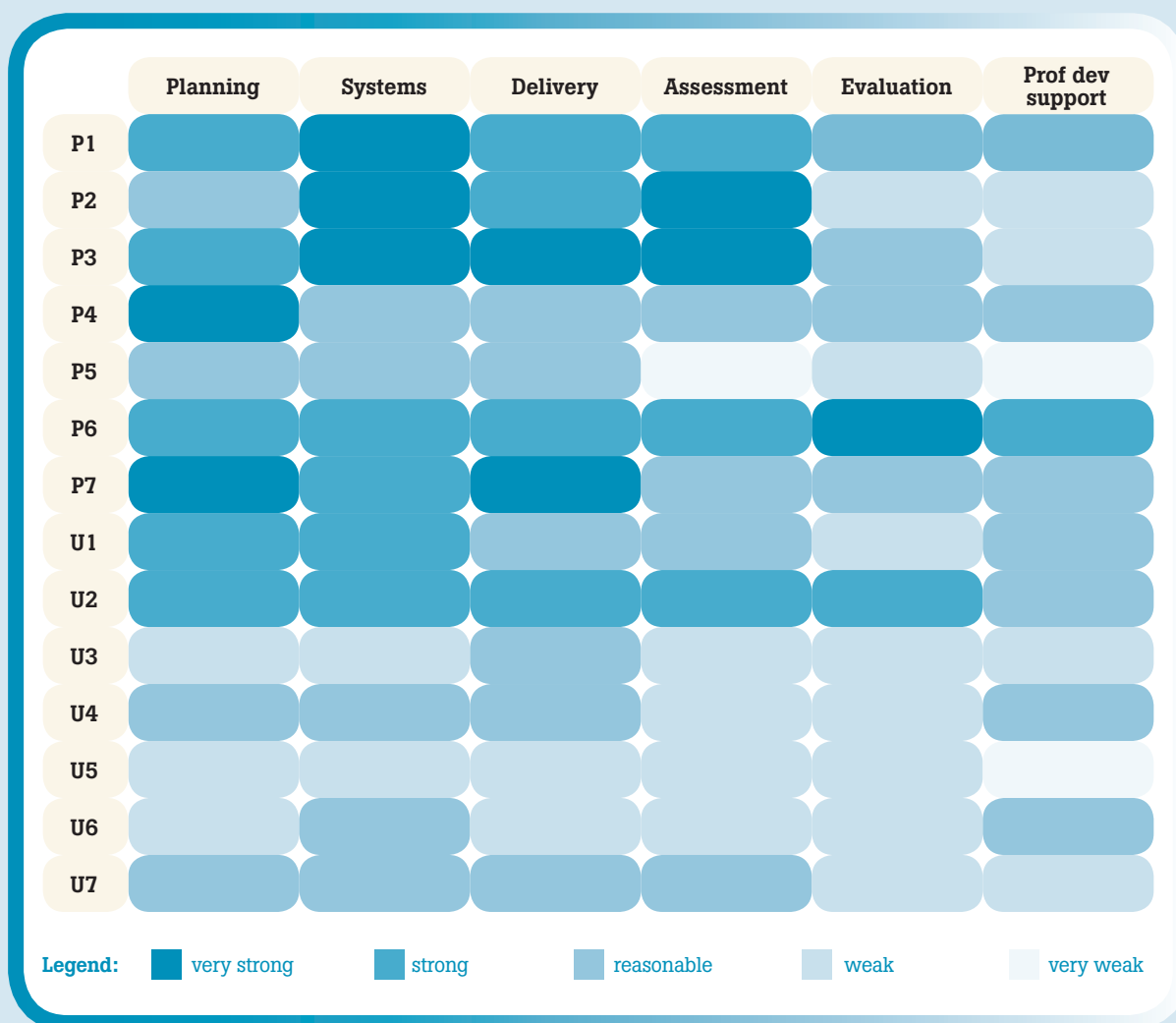


Figure 2: Institutional rating of engagement with graduate outcomes (Spronken-Smith *et al.*, 2013a)

Note: P is polytechnic, U is university, and Prof Dev is professional development.

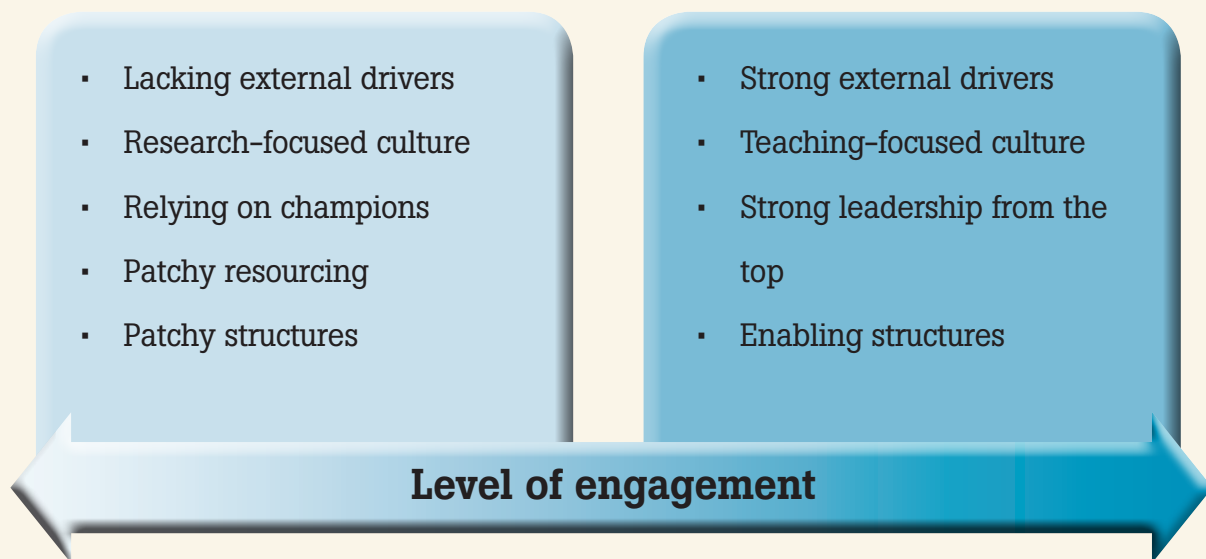


Figure 3: **Continuum of engagement with graduate outcomes**, from weaker engagement (in lighter shade) to stronger engagement (in darker shade) with influencing factors shown above the arrow (Spronken-Smith *et al.*, 2013a)

Questions to consider:

- How would your institution rate given the indicators?
- Are there programmes within your institution, where engagement is high, that can be used as exemplars for others?

How can institutions better engage with a graduate outcomes' agenda?

Key Points:

- There are five sets of enablers to engagement with GOs: external drivers, structural and procedural, developmental, achievement and contextual.
- External drivers are powerful enablers.
- Whilst structural enablers are often apparent in institutions, what are often missing are procedural enablers, yet these are crucial to embedding GOs in curricula.
- 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.

Given our results showed patchy engagement with a GO agenda, it is apparent that many institutions could better engage with GOs. But how do they go about this? In this section we provide an overview of enablers as well as a range of strategies. We have also developed resources to go alongside this Guide, so that readers should access these for the appropriate level: institutional (senior managers; Spronken-Smith *et al.*, 2013b); programme (heads of department and programme directors; Spronken-Smith *et al.*, 2013c); and lecturers (Spronken-Smith *et al.*, 2013b).

In our research we proposed a conceptual framework with five categories of enablers for engagement with a graduate outcome agenda (Figure 4):

- A. External drivers
- B. Structural and procedural enablers
- C. Developmental enablers
- D. Achievement enablers
- E. Contextual enablers.

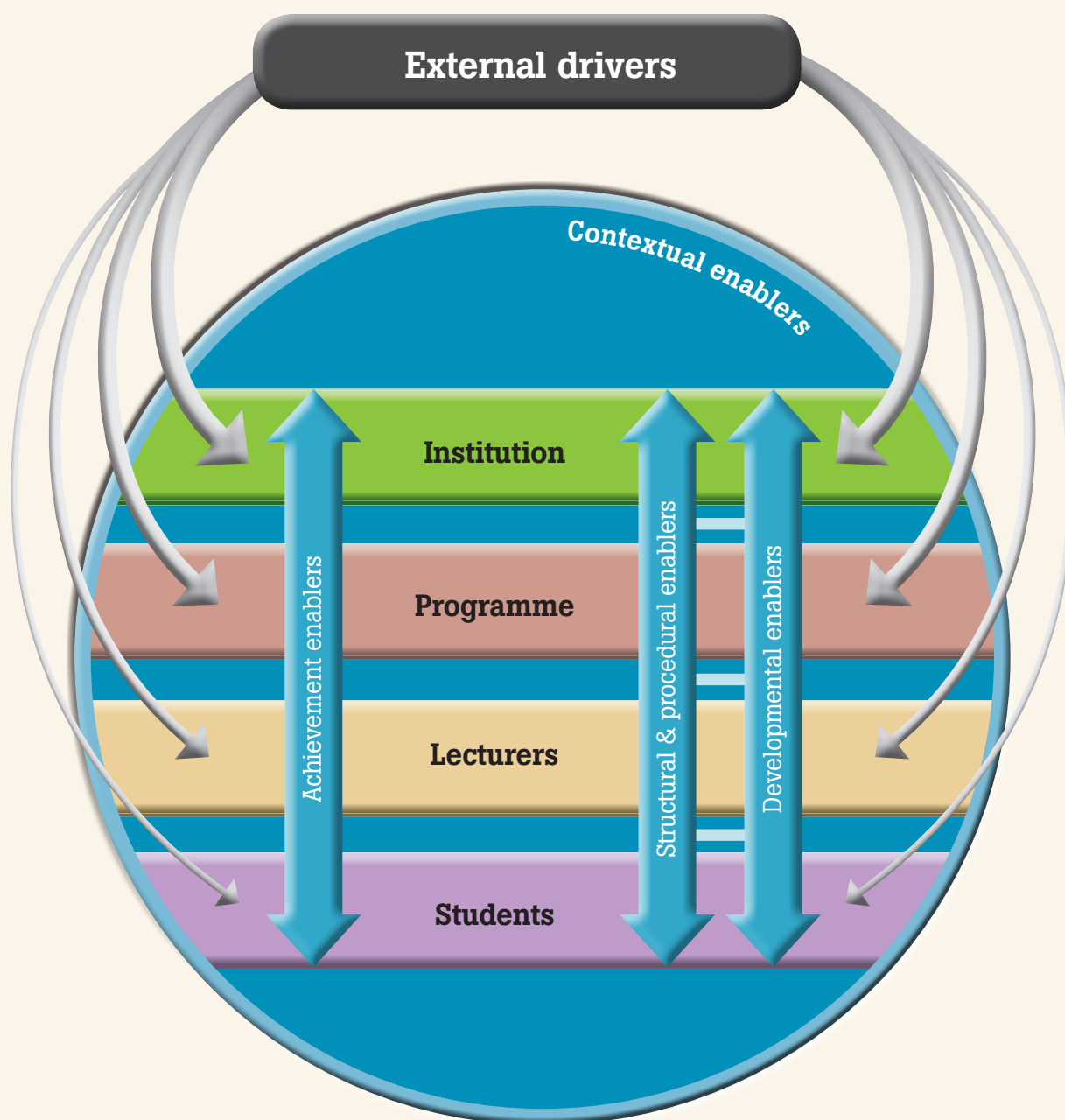


Figure 4: Conceptual framework of enablers for engagement with a graduate outcome agenda (Spronken-Smith *et al.*, 2013a)

External drivers (A) were those forces to which institutions were required to respond or that they perceived they were responding, or should respond. They included: statutory accreditation bodies such as the NZQA and CUAP; professional accreditation bodies and trades organisations such as the Physiotherapy Board or international business accreditation authorities;

potential students; the education market; and international educational trends.

Structural and procedural enablers (B) were those that facilitated or engaged staff and communities within the institution to become aware of, and work towards, embedding GOs. They appeared to have inter-related functions. Structural enablers were the tangible institutional arrangements

such as committees, key management positions, plans and policies that were set up to support educational processes and facilitate institutional change. Procedural enablers were the mandated activities that facilitated the implementation of plans and policies and provided feedback data. The effectiveness of the structural enablers lay in the way that they were related systemically to processes that enabled the implementation of the policy and practices that were espoused. So the appointments and committees became procedural enablers when roles included authority to implement and monitor formal and informal curriculum and quality-assurance functions.

Developmental enablers (C) were those that assisted staff/programme teams to introduce and develop GPs and embed them in curricula, or undertake some curriculum development. They included: having clarity about the institutional role; the beliefs/philosophies about GOs, and about teaching and learning; staff/academic development/ staff engagement; identification of ‘champions’; implementing institutional projects; and recognition of the time required for change.

Achievement enablers (D) were concerned with how students were assisted to achieve an existing GP. These included: clear educational/ employment pathways; contemporary, flexible delivery methods; and curriculum frameworks that focus on students.

Contextual enablers (E) were those generic institutional and/or individual cultural qualities that crossed the four forms described above and made them more or less effective. Unlike enablers A to D, which tended to be concrete, these were more ephemeral. They were about the emotional health of the institution: staff morale and confidence in themselves and their leadership. They included aspects such as creating space for staff to think, good communication, an institutional culture with a focus on teaching and learning, an institutional space that valued all its occupants, thoughtful practices, and the provision of positive feedback.

The relation between the different categories of enablers and between enablers and constraints was subtle. What was understood as an enabler in one institution was sometimes considered a constraint in another. Statutory accreditation through NZQA was a major driver in the polytechnics. One of the most cited external drivers across both sectors was professional accreditation bodies, and educational trends and responses to the educational market played a major role. In both sectors, external input was a strong driver for vocational programmes. Importantly, even if external processes had instigated the process of curriculum renewal, lecturers who may initially have seen the process as a form of compliance were transformed to see it as a way to improve student learning.

Of all the enablers (A to E), *the structural enablers (B)* were the most prolific across the participating institutions. Structural enablers such as leadership

and senior and middle management were evident in most institutions and the importance of the relationship between the senior and middle managers was another enabler (or constraint). Most institutions also had committee structures concerned with teaching and learning in place. However, the *procedural enablers* for established structures were often missing, thus rendering the structures ineffective. Yet our study suggests that these structural and procedural enablers are precursory for sustainable curriculum change to occur. For example, reporting processes may have been in place but the reports may not have been followed up at a developmental level. Moreover, the procedural enablers link the *structural* and *developmental* enablers. Thus, if *procedural enablers* were lacking, *developmental enablers* (C) were less likely to be effective, and the institutional focus on GOs was uncoordinated and patchy. Their presence (or absence) is also likely to affect the power of the more affective *contextual enablers* (E). The range of *developmental enablers* (C) was broad, and seen as a key factor in promoting and enabling engagement with GOs. It was noticeable that in comparison with enablers A to C, *achievement enablers* (D) were few in number and less well developed. Moreover, the balance between enablement and constraint was quite fine. Those achievement enablers that were mentioned were most evident in the polytechnic sector.

Table 1 provides a range of strategies for these enablers at the institutional, programme, lecturer and student levels. The importance of external drivers can be seen in Figure 4,

particularly with regard to their influence at the institutional and programme levels. Our study showed less use of external drivers at the lecturer and student levels, but some suggestions of how this could be incorporated are indicated in Table 1. One challenge for vocational programmes, with strong external drivers, is balancing the desired outcomes of external agencies together with those of the institution. If external drivers are not as strong, then internal drivers become much more important if a GO agenda is to be advanced. The two internal drivers are structural and procedural enablers and developmental enablers. As Figure 4 shows, these two enablers should link the institutional, programme and lecturer levels to embed GOs in curricula, and moreover, there should be internal links between the enablers themselves. The context is important at all levels, and institutions with a strong teaching-focused culture are better placed to embed GOs. The final part of the framework is the achievement enablers, and as Figure 4 shows, these cross all levels and help students to achieve GOs. In our study we noted a lack of consideration of achievement enablers, but again Table 1 provides a range of mechanisms to realise this enabler.

Questions to consider:

- Which enablers are active in your institution?
- Are there some enablers that could be enhanced? If so, how might this occur?

Conclusion

This Guide has provided some background on graduate outcomes and why institutions should engage with a graduate outcomes agenda. We have also outlined five key enablers for engagement with graduate outcomes:

- 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.

Moreover, we have proposed a framework to show how these enablers are related, as well as a range of strategies for each level: institutional, programme, lecturer and student.

We have developed a set of accompanying resources to provide more detail and some practical tools to assist senior managers (Spronken-Smith *et al.*, 2013b), heads of departments and programme coordinators (Spronken-Smith *et al.*, 2013c) and lecturers (Spronken-Smith *et al.*, 2013d) to engage with graduate outcomes.

Table 1: Strategies to promote embedding GOs in curricula at a range of levels within a tertiary education institution (Spronken-Smith *et al.*, 2013a)

Enablers	Institutional – what helps embed GOs at the institutional level?	Programme – what helps embed GOs at the programme level?	Lecturer – what helps lecturers to embed GOs in their courses?	Students – what helps students to achieve GOs?
External – forces to which institutions were required to respond or that they perceived they were responding, or should respond	<p>The influence of statutory accreditation bodies (NZQA, CUAP)</p> <p>The need for institutional branding and responding to the educational market</p> <p>The need to keep abreast of international education trends</p>	<p>Mandate from accreditation processes and professional bodies and trade organisations</p> <p>Stakeholder involvement in developing GOs (employers, alumni, students)</p> <p>Using alumni to help with programme quality</p>	<p>Bringing in alumni or external practitioners</p> <p>Using examples from the 'real world'</p> <p>Professional or discipline trends and practices</p>	<p>Marketing strategies that inform students of expected outcomes and opportunities for graduates</p> <p>Having clear links between GOs and employability skills and attributes</p>
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	<p>Having strong proactive senior leadership for GO initiatives</p> <p>Appointing key senior managers supportive of GO initiatives</p> <p>Promoting a senior management team focus on GOs</p> <p>Requiring curriculum renewal with a focus on GOs</p> <p>Changing roles of committees to ensure oversight and promotion of GOs</p> <p>Instigating policies and plans that include GPs</p> <p>Giving staff designated authority to implement policy</p> <p>Allowing time for curriculum renewal</p> <p>Having oversight of monitoring process</p>	<p>Supportive middle managers responsible for teaching and learning</p> <p>Promoting a team focus to curriculum development</p> <p>Having designated authority to implement policy</p> <p>Having people familiar with regulatory and structural aspects of qualifications</p> <p>Developing programme GP – GOs need to be contextualised</p> <p>Requiring clear links between programme GP and institutional GP (if there is one)</p> <p>Requiring strong links between GOs, learning outcomes and assessment (curriculum mapping)</p>	<p>Access to information/people about regulatory and structural aspects of their programme</p> <p>Teaching awards/promotion criteria/annual reviews that recognise and reward efforts to embed GOs</p> <p>Guidelines for mapping the attributes to learning objectives and then to specific assessment and learning tasks</p>	<p>Clear articulation of learning outcomes and assessment with GOs</p> <p>Involvement of students in developing GPs</p> <p>Online and paper-based information aimed at students</p> <p>Structures and procedures in place to allow flexibility for study and programme completion</p>

Table 1: continued

Enablers	Institutional – what helps embed GOs at the institutional level?	Programme – what helps embed GOs at the programme level?	Lecturer – what helps lecturers to embed GOs in their courses?	Students – what helps students to achieve GOs?
Developmental – those that assisted staff/groups/ departments to introduce and develop GOs and embed them in curricula, or undertake some curriculum development	<ul style="list-style-type: none"> • Being clear about the institutional role and relation to the GP(s) • Translation or enabling beliefs about the role of GOs and teaching and learning • Providing academic development support through: <ul style="list-style-type: none"> ◦ facilitating curriculum meetings ◦ workshops on GOs ◦ providing exemplars of embedding of GOs ◦ providing tools to assist in curriculum renewal • Identifying champions • Implementing institutional projects • Recognising the time required for change 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Translation or enabling beliefs about the role of GOs and teaching and learning • Having collective ownership of the programme • Being committed to curriculum renewal • Recognition of the discipline • Access to teaching resources • Supportive teaching culture • Seeing curriculum change as a positive process 	<ul style="list-style-type: none"> • Students supported in the development of their expectations and outcomes (knowledge and skills) of programme • Teaching environment that encourages students' awareness of the benefits of the programme • Curriculum designed for contemporary/ flexible delivery methods that take account of busy lives • Teaching that is student-centred, focusing on learning • Specific GOs are explicit in every part of the curriculum • Curriculum includes high-impact experiences to help graduates foster GOs • Scaffolding of skills made explicit to students to help their awareness of development

Table 1: continued

Enablers	Institutional – what helps embed GOs at the institutional level?	Programme – what helps embed GOs at the programme level?	Lecturer – what helps lecturers to embed GOs in their courses?	Students – what helps students to achieve GOs?
Achievement – those that were concerned with how students are assisted to achieve a GP	<p>Providing an institutionally supported ePortfolio framework</p> <p>Providing advice and mentoring of students</p> <p>Providing signature learning experiences (Smith 2011; Spronken-Smith, 2013)</p>	<p>Having clear educational and employment pathways</p> <p>Using contemporary/flexible delivery methods</p> <p>Ensuring curricula focus on students</p> <p>Having strong links between GOs, learning outcomes and assessment</p> <p>Scaffolding of skills – to gradually develop GOs</p> <p>Including high impact educational experiences (e.g. service learning, inquiry – see Kuh, 2008)</p> <p>Requiring ePortfolios</p> <p>Involvement of students in developing GOs</p>	<p>Discussion of educational and employment pathways for graduates</p> <p>Clearly articulating links between GOs and learning outcomes and assessment</p> <p>Using signature pedagogies (see Shulman, 2005; Spronken-Smith, 2013) and high-impact educational experiences (Kuh, 2008)</p> <p>Using assignments which require reflection on learning and articulation of the knowledge, skills and values being developed</p>	<p>Clear and explicit educational and employment pathways</p> <p>Access to contemporary, flexible delivery methods</p> <p>Strong, explicit links between GOs, learning outcomes and assessment</p> <p>Experience of student-focused curricula: teaching assessment and evaluation</p> <p>Personal contact with relevant staff</p> <p>Encouraging extra-curricular activities</p>
Contextual – generic institutional and/or individual cultural/affective qualities that crossed the four forms described above and made them more or less effective	<p>A positive emotional health of the institution</p> <p>Good communication</p> <p>An institutional culture that focuses on student learning</p> <p>Giving GOs a high profile</p> <p>Having an alertness to the context of programmes and programme coordinators</p> <p>Creating space for discussions on GOs and how to embed them</p>	<p>High staff morale</p> <p>Good communication</p> <p>A departmental culture that focuses on teaching</p> <p>Creating time and space for discussions for curriculum renewal</p> <p>Having an alertness to the context of lecturers</p>	<p>Encouragement and support for a student-centred approach to teaching</p> <p>Working in an institution/department that values GOs</p> <p>Valuing staff and providing positive working context</p> <p>Providing positive feedback</p>	<p>Having visible GOs</p> <p>Having GOs that make sense</p> <p>Discussing the purpose of higher education</p> <p>A student-centred institutional/programme culture with a strong emphasis on pastoral care</p> <p>Personal contact with staff</p> <p>Explicit interest shown in graduate destinations</p>

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