

Guidelines for Teaching at Otago

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1. Introduction

This document is designed to engage staff with the goals and strategies of the Otago Teaching and Learning Action Plan. The information provided here is intended as a guide only, rather than being prescriptive. It is recognised that parts of this document will not be relevant to all disciplines. Practitioners are encouraged to make use of the parts that are relevant to their discipline. We welcome feedback on the document and the addition of new ideas so that it becomes a living document – periodically updated, with new editions available online. We are particularly interested in case studies of good teaching practice that can be shared amongst Otago staff.

In the next section we present the *Otago Graduate Profile* – that is the core list of attributes that Otago students should have developed by the time of graduation. Following this, in section 3 are some principles of quality teaching, to highlight for staff fundamental aspects of good teaching practice. In section 4, indicators of quality teaching are presented for individual, departmental or programme, and institutional levels. These indicators could be used as a checklist to determine the strength of the teaching culture at the appropriate level. Section 5 provides guidance to help enact the goals and strategies of the *Otago Teaching and Learning Action Plan*. Section 6 gives practical advice regarding teaching activities that could help foster various graduate attributes. Finally, section 7 lists sources of support for teachers and is followed by a glossary of definitions and acronyms in common usage at Otago.

We hope that you find this a useful guide and wish you all the best with your teaching at Otago.

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2. The University of Otago Graduate Profile

All University of Otago graduates will possess a deep, coherent and extensive knowledge of at least one discipline, coupled with knowledge of the fundamental contribution of research to this discipline. In addition, all Otago graduates will possess, to varying degrees, the following sets of attributes.

These attributes involve substantial affective elements:

- · GLOBAL PERSPECTIVE: Appreciation of global perspectives in the chosen discipline(s) and the nature of global citizenship
- INTERDISCIPLINARY PERSPECTIVE: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst disciplines
- LIFELONG LEARNING: Commitment to the on-going acquisition of new knowledge and new skills, and an ability to apply these to an ever- changing environment
- SCHOLARSHIP: Commitment to the fundamental importance of the acquisition and development of knowledge and understanding

These attributes include those most often sought by employers:

- · COMMUNICATION: Ability to communicate information, arguments and analyses effectively, both orally and in writing
- CRITICALTHINKING: Ability to analyse issues logically, to challenge conventional assumptions, to consider different options and viewpoints, make informed decisions and act with flexibility, adaptability and creativity
- CULTURAL UNDERSTANDING: Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner.
- ETHICS: Knowledge of ethics and ethical standards and an ability to apply these with a sense of responsibility within the workplace and community
- ENVIRONMENTAL LITERACY: Basic understanding of the principles that govern natural systems, the effects of human activity on these systems, and the cultures and economies that interact with those systems
- INFORMATION LITERACY: Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity
- RESEARCH: Ability to conduct research by recognising when information is needed, and locating, retrieving, evaluating and using it effectively
- SELF-MOTIVATION: Capacity for self-directed activity and the ability to work independently
- TEAMWORK: Ability to work effectively as both a team leader and a team member

3. Principles of Quality Teaching

In this section some fundamentals that underpin quality teaching are outlined.

Encouraging students to take a 'deep approach' to learning

There is strong evidence to suggest that how you teach, and your expectations about learning, will influence how students respond and the approaches they take to their study (Säljö, 1979).

Ideally, we would like students to take a 'deep approach' to their learning: an approach in which they seek to extract meaning and to gain understanding so they can apply what they learn. Furthermore, we would hope that students will reinterpret knowledge to better understand the wider meaning of their learning, so that they may ultimately find that they themselves have changed in profound ways.

When students see learning as simple knowledge-gathering, or as a process of thoughtless memorisation of facts and reproduction of information, their learning is more likely to be less effective. If they experience teaching and courses that are piecemeal, overloaded with content, and assessed for independent facts, then these more 'surface' type approaches to learning can be the consequence. To encourage students to take a deep approach to their learning, we should teach in a way to bring out the structure of the topic, build on what students already know, help students confront their misconceptions. We should assess for structure and connectivity of ideas and concepts, rather than for independent facts (Biggs and Tang, 2007).

Encouraging a focus on learning

For quality learning experiences, students should be actively engaged in the topic. Research into how teachers view teaching has revealed a continuum from a 'teacher-centred approach' to a 'student-centred approach' (e.g. Prosser and Trigwell, 1999). In a teacher-centred approach, the focus of teaching is on what the *teacher* would like to teach, often with little regard for what students need to be learning. In a student-centred approach, the focus is on *student learning*. We would hope that most university teachers adopt a student-centred approach to teaching, as research has confirmed that this is far more likely to get students engaged in their learning.

Ensuring equitable learning environments

Equitable learning environments are created by considering the needs of all students when designing papers (Tertiary Education Commission 2004); this includes appropriate delivery approaches, access to course resources and embedding support structures. Rather than singling out students with particular needs (such as, for example, students with impairments), inclusive teaching/learning environments are characterised by an assumption that all students are different and have different learning approaches and needs. This 'default setting' of assuming diversity rather than homogeneity, is sometimes referred to as adopting a 'universal design' approach (Mcguire et al., 2006). A universal design to course development is good design for all; it benefits all students (O'Leary and Gordon, 2009). Although this is not always easy to achieve, we consider it an aspirational goal to work towards. The University's Vice Chancellor's Advisory Group agreed in 2010 to the establishment of a working party investigating how the Tertiary Education Committee's 'Kia Ōrite' Code of Practice, for an inclusive education environment for students with impairments, could be implemented. This may give the necessary impetus to working towards this aspirational goal.

Using 'alignment' as a key principle when designing programmes and curricula

When designing a course or programme the key is to strive for 'alignment' between the desired learning outcomes, the type of teaching and the assessment regime (Biggs and Tang, 2007). At a programme level, consideration should be given to the desired *Otago Graduate Profile* (a set of attributes or outcomes students should have met by the time of graduation – see section 2), so that learning experiences and assessment can be carefully designed to enable students to realise this profile. This requires conversations amongst staff teaching in the programme, so that there is careful mapping between the graduate attributes and what knowledge, skills and attitudes are taught in each course. Similarly, at the course level, the desired learning outcomes should be considered first and then learning experiences and assessment practices designed accordingly.

This approach to course and programme design may well challenge current conventions of timetabling and space, since the focus shifts from trying to fill timeslots and rooms allocated to a course, to deciding what is the most appropriate way for students to learn first, then subsequently sorting out timetable and space requirements.

Assessing appropriately

When striving for alignment in teaching, and when wanting to encourage a deep approach to learning, a teacher must use an appropriate assessment regime. Much student learning is driven by the assessment regime and ideally the assessment tasks should be meaningful and relevant. The following list provides some guidelines for better assessment in higher education:

- Deploy a wide range of assessment methods.
- Never assess without giving comments to students about how they might improve.
- Learn from your students' mistakes. Use assessment to discover their misunderstandings and then modify your teaching to address them.
- Try to get students participating in the assessment process through discussions of appropriate methods and how these relate to course outcomes; joint staff-student design of assessment questions and negotiation of criteria for success and failure; self and peer assessment activities; and offering students responsible choice among different methods.
- Think about the relation between formative and summative assessment.
- · Use multiple-choice and other 'objective' tests very cautiously, preferably in combination with other methods.
- · In subjects involving quantitative manipulations, always include questions requiring explanations in prose.
- Focus on validity (is what you are measuring important?) before reliability (is your test consistent?).
- Do everything in your power to lessen the anxiety raised by assessments
- Never set an assignment or examination question you are not ready to answer yourself. Practise writing model answers and use them to help students appreciate what you want.
- When assessing group work always assess the group product as well as the contribution by individuals to the group process.
- Be suspicious of the objectivity and accuracy of all measures of student ability, and be conscious that human judgement is the most important element in every indicator of achievement.

(adapted from Ramsden, 2003, p204-205)

As thought is given to the assessment regime be sure to consult the University of Otago Senate Policy on Assessment of Student Performance (www.otago.ac.nz/administration/policies/otago006217.html), since this provides valuable guidelines for policy and practice at Otago. There are also a range of assessment templates available on the HEDC website to adapt in your teaching (http://hedc.otago.ac.nz/hedc/asd/Digital-Resources-for-your-Teaching.html). These provide possible marking criteria for oral presentations, literature reviews, reports, group work etc.

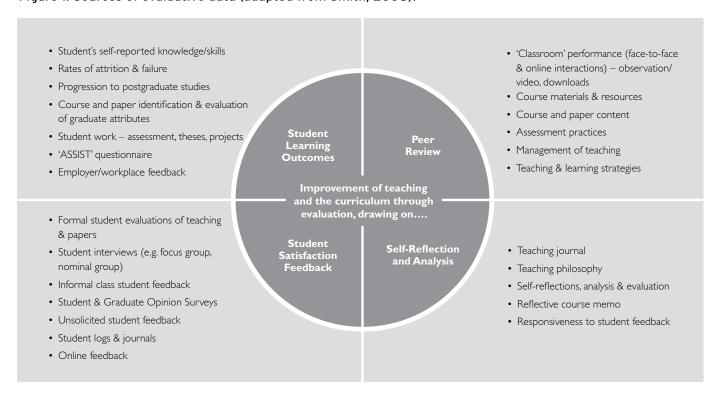
Evaluating practice to improve the student learning experience

A keystone of quality teaching is to evaluate student experiences of learning regularly. Develop an evaluation plan for your course – it is important to intentionally decide how and when to evaluate your teaching and papers. It is equally important to consider how data collected will be analysed, acted on and relayed back to the students. Data on learning experiences can be gathered from a wide variety of sources including student learning outcomes, peer review, student evaluation feedback and self-reflection (Figure 1).

At the University of Otago there are two main questionnaire tools to gauge student experiences of teaching: individual teacher evaluation questionnaires and course evaluation questionnaires. The individual teacher evaluations contain a core set of five questions with another five additional questions chosen from a set catalogue, while the course evaluations are customised questionnaires enabling selection of up to 30 questions from a wide-ranging catalogue of questions. Generally teachers are encouraged to accumulate a portfolio of student evaluations that covers all their main teaching responsibilities over a three year period. However, the most important evaluation is to reflect continually on how the course is going and to gather evidence in as many forms as possible.

In addition, identify the scope of any assistance HEDC can provide in terms of other types of evaluation. For example, HEDC can come into the course to gain more in-depth feedback from the class, or they can conduct a peer review, if no colleagues are available. They can also provide assistance on how to interpret questionnaire data in the particular teaching context.

Figure 1: Sources of evaluative data (adapted from Smith, 2008).



4. Indicators of Quality Teaching

In this section a set of indicators is presented to provide guidance on aspects of quality teaching at individual (4.1), departmental (4.2), programme (4.3) and institutional (4.4) levels.

4.1 Indicators for individuals

Indicators of a strong teaching culture at the individual level include:

- Teaching documents that show planning and preparation for teaching, e.g. explicating clear course expectations and learning goals; assessment aligned with intended learning outcomes.
- Good teaching practices, demonstrated through attention to clear explanations, use of a range of examples, a concern for student engagement in learning, close links between teaching and disciplinary research, professional modelling.
- Good assessment practices, demonstrated through a focus on intended learning outcomes, relevant assessment tasks, a range of assessment items that respond to intended course outcomes, high quality, regular feedback.
- Regular, systematic teaching and course evaluation and action related to the outcomes, e.g. regular evaluation of teaching and curriculum practices; use of a range of evaluation data from peer review, student and course evaluations, personal reflection (see Figure 1); use of classroom assessment techniques to monitor students' understanding of difficult concepts; communication to students on how their feedback/needs have been addressed.
- Contribution to the departmental teaching culture, e.g. active participation on departmental committees and working parties related to teaching and curriculum; the provision of workshops and seminars on teaching and curriculum; the mentorship of new teachers; engagement with departmental and programme review processes.
- Engagement in professional development, e.g. attendance at workshops on teaching and learning topics, familiarisation with literature on teaching and learning, qualifications in teaching.
- Contribution to the scholarship of teaching through the conduct of research into teaching, publications, participation in the teaching development of others including mentoring, providing workshops and seminars and presenting at conferences.

4.2 Indicators for departments

Effective teaching is more likely to occur in a departmental culture that values and supports good teaching. Indicators of a supportive departmental culture include:

- A current teaching and learning plan aligned with the University's Teaching and Learning Action Plan and which includes clarification of graduate outcomes.
- Clear policies and procedures that are concerned with every aspect of teaching and course design, including explicit alignment among design, teaching methods and assessment. Examples include a departmental assessment policy, and course advising that promotes appropriate learning pathways.
- A departmental-based evaluation system in which regular, planned and systematic evaluation of programmes is undertaken. Processes are transparent, individuals and groups participate actively and the atmosphere is encouraging, supportive, forward-looking and developmental. Very importantly, actions are planned and implemented in response. Students are involved in appropriate ways and are informed of processes and outcomes.
- A curriculum committee that oversees curriculum development and teaching quality. This may be comprised of year coordinators, who oversee course offerings for that level and who ensure a suitable mix of knowledge and skills as well as satisfactory timing of assessments throughout the semesters.
- A programme of teaching and learning seminars/interactions on good teaching and course design, e.g. a journal club that includes research into teaching, teaching retreats, talking about teaching seminars, teaching showcases.
- Explicit and intentional leadership in teaching including the mentoring of new teaching staff, support for staff development and qualifications in teaching.

- Demonstrated links between teaching and disciplinary research, an explicit awareness of research-teaching links, articulation of the complementarity of research and teaching in policies reflected in demonstrable action.
- Departmental awards (public recognition) for excellence in teaching and supervision.
- · Benchmarking with another institution in a similar discipline area.
- Using external evaluators or moderators to quality-assure programmes and standards.
- Research and scholarship in teaching in the discipline, including support for research grant applications for teaching innovation and research into teaching, subscription to journals on teaching in the discipline and publications in teaching.

4.3 Indicators for programmes

Indicators of a strong teaching culture for a programme include:

- A clearly identified set of graduate outcomes in alignment with the University's graduate profile, as well as learning outcomes for each year of the programme.
- Clear policies and procedures that are concerned with every aspect of teaching and course design, including explicit alignment among design, teaching methods and assessment.
- An evaluation system for the Programme in which regular, planned and systematic evaluation of teaching and papers
 contributing to the programme is undertaken. Processes are transparent, individuals and groups participate actively and
 the atmosphere is encouraging, supportive, forward-looking and developmental. Very importantly, actions are planned and
 implemented in response. Students are involved in appropriate ways and they are regularly and routinely informed of
 processes and outcomes.
- · A Programme Curriculum Committee or Board of Studies that oversees curriculum development and teaching quality.
- Demonstrated links between teaching and disciplinary research; an explicit awareness of research-teaching links.
- Benchmarking with another institution that has a similar programme.

4.4 Indicators for an institution

Indicators of a strong teaching culture in an institution include:

- A clearly identified graduate profile, and internal processes that ensure graduate attributes are embedded in curricula, and assessed accordingly.
- Clear policies and procedures that are concerned with course design, teaching methods and assessment.
- An evaluation system for the University in which regular, planned and systematic evaluation of teaching, papers, and
 achievement of graduate outcomes is undertaken. Processes are transparent, individuals and groups participate actively
 and the atmosphere is encouraging, supportive, forward-looking and developmental. Very importantly, actions are planned
 and implemented in response. Students are involved in appropriate ways and they are regularly and routinely informed of
 processes and outcomes.
- A University Committee for Teaching and Learning that oversees curriculum development and curriculum and teaching quality.
- Promotion of strong links between teaching and disciplinary research.
- · Promotion of evidence-based teaching.
- · Appropriate recognition of excellent teaching.
- Benchmarking with other institutions.

5. Enacting the Strategic Goals in Your Teaching

In this section, guidance is provided about how to enact the goals and strategies of the *Otago Teaching and Learning Action Plan*. For each goal, background context is first provided and this is followed by a table that outlines implications for practice at individual, departmental or programme, and institutional levels. A range of professional development support is available to help you enact these goals and strategies, including staff from HEDC, ITS and the Library.

Goal 1: Create an exemplary teaching and learning environment

The provision of a supportive teaching and learning environment is critical to student success. Students come to Otago for the quality of education that is inextricably linked with the unique student lifestyle. At Otago students have the opportunities for personal growth and learning through both curricula and extra-curricula experiences. In order to provide an exemplary teaching and learning environment, it is critical to recruit knowledgeable academics with an enthusiasm for teaching. There has to be careful consideration of the diversity of students, with appropriate advising and support services. Where students are found to be lacking in preparation for particular papers there should be foundation and bridging papers available. Curricula have to be structured to recognise and embrace diversity. Teachers should endeavour to find out the background of their students – their demographics, experience, motivation and background knowledge – through a short questionnaire or writing task. Secondly, teachers should ascertain the expectations students have of their teaching, and relay expectations they have for students as learners in their class. Papers and programmes should be planned that respond to the diversity of learning strategies of students, while challenging them to expand their perceptions of learning. Course content should be continuously updated to ensure currency, drawing on the latest research. Ideally teachers should be collaborating and consulting when updating papers, so there is an element of peer review and a shared understanding of the knowledge and skills that are being taught across a programme.

In an exemplary teaching and learning environment, technology will be used wisely to support learning. This means adequately resourcing IT infrastructure and ensuring that teachers are equipped with the technical and pedagogical abilities to use such technology wisely. Given the rapid advances in technology, teachers will be encouraged to use new technologies in innovative ways.

As well as appropriate technological resources, the University community must have excellent access to world class information and knowledge resources. Capability must also be built within staff and students to ensure members of the University community can access and fully utilise these resources.

Students need to be provided with the best quality space – both physical and virtual – for teaching and study. At Otago the visionary 'Campus Master Plan, 2010' includes a range of innovative physical teaching and learning spaces, including a major focus on creating social learning spaces for students. The University must also provide a variety of social learning spaces in the virtual world for its distance and on-campus students. Such spaces will include those that afford wide opportunities for social interaction along with good links to the University's online facilities, and those closely aligned with specific papers and programmes.

Table 1: Strategies to create an exemplary teaching and learning environment

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Implications for practice		
מובה	Individual	Departmental/programme	Institutional
Employing knowledgeable and enthusiastic teachers	 Generating and maintaining enthusiasm in your teaching 	 Recruiting staff with potential for teaching excellence 	• Marketing UO's vision (M&C)
Recognising diversity in students and the papers they take	 Determining the background of students in your classes Teaching with an understanding of the backgrounds of students Ensuring students are aware of the range of support services 	 Providing holistic advice regarding programme of study, the university environment and possible career pathways Ensuring students are aware of the range of support services 	 Utilising foundation and bridging papers (UO) Offering study and pastoral support for minority groups (UO) Holistic advising (CDC)
Dynamically developing and continuously updating subject areas to ensure they are current and relevant, informed by the latest research	 Keeping abreast of research developments in your field Consulting peers in the development and revision of course material 	Encouraging collaboration and consultation in the development and updating of course materials Ensuring workloads allow opportunities to revise and update course materials and content Using review processes to gather external feedback on offerings	Maintaining up-to-date information resources (Library)
Using technology wisely in teaching	Developing an online presence for your papers Undertaking professional development to learn the technological and pedagogical aspects of using technology in your teaching	Expecting papers to use institutionally -supported technologies (e.g. Blackboard) Encouraging innovation in the use of technology in teaching and learning	 Ensuring appropriate technology is available for teaching and learning (HEDC, ITS & Library) Providing professional development opportunities to enable teachers to keep abreast of developments in technology (HEDC, ITS & Library) Promoting effective and routine use of institutionally-supported technologies (HEDC) Piloting the use of new technologies to determine their potential for teaching and learning (HEDC) Adequately resourcing IT infrastructure and professional development in support of use of technology in teaching (UO)

Table 1: continued

Stratedy	Implications for practice		
רו מיניאל. -	Individual	Departmental/programme	Institutional
Providing high quality information resources and services to support scholarly research and academic skill development	resources to support student learning support scholarly research and academic skill development the Learning Management System where possible • Ensuring that supporting paper material is up-to-date	Embedding information and research skill development into undergraduate core papers maximising the use of the Learning Management System. Ensuring the teaching and assessment of information literacy skills is embedded throughout the degree programme	The Library, in partnership with the University community, will • Facilitate access to and preserve the information and knowledge resources needed by the university community • Identify and analyse user needs for resources and providing information resources that meet user needs providing information resources in the most appropriate format for each resource • Maximise generic teaching to support undergraduate orientation and course assessment using the Learning Management System • Strategically target embedding information skill development into research papers, honours and graduate studies programmes to foster a collaborative research culture.
Developing engaging teaching and learning spaces	Using space creatively to cater for different learning styles and to promote student engagement in learning	 Promoting a range of teaching and learning spaces to cater for a range of teaching approaches Ensuring social spaces are available for student learning 	 Providing sufficient resourcing to allow high quality teaching and learning spaces (UO) Promoting a vision for the use of space that is informed by sound pedagogical principles (Campus Master Plan)

Goal 2: Engage students with rich and diverse educational opportunities

In recent years there has been growing awareness of the importance of engaging students in their higher education. George Kuh, a prominent American Higher Educationalist, says that

the engagement premise is deceptively simple, even self-evident: The more students study a subject, the more they learn about it. Likewise the more students practice and get feedback on their writing, analysing, or problem-solving, the more adept they become.... Students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development (Kuh, 2003, 25).

But what makes a teaching approach engaging? Certainly a key element is getting students *active* in their learning. Gibbs (1988) commented that active learning is about learning by doing and as Healey and Roberts (2004) suggest, it involves a student-centred approach. Moreover, they go on to say that there is considerable evidence to support the effectiveness of well-designed active learning. But, as Ramsden (2003, 113) cautions, "student activity does not itself imply that learning will take place" since the learning must involve both doing and thinking. In this section we consider different ways to engage students in their learning.

Kuh (2008) analysed nine years of data from the National Survey of Student Engagement (NSSE) to determine high impact educational practices. This survey is sent annually to randomly selected first and final year students at 1200 higher education institutions in the US. From this extensive dataset, Kuh and colleagues generated a list of 10 high-impact educational practices. These practices take many different forms, depending on learner characteristics and on institutional priorities and contexts. The high-impact educational practices are:

First-Year Seminars and Experiences – Bringing small groups of students together with academics on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with the academics' own research.

Common Intellectual Experiences – Over time the idea of a curriculum has evolved into a variety of forms. These forms may include a set of required common papers – a "core" – or themes that run vertically from first level through to more advanced level papers. The forms could also include advanced integrative studies and/or required participation in a learning community (see below).

Learning Communities — The key goals for learning communities are to encourage integration of learning across papers and to involve students with "big questions" that matter beyond the classroom. Students take two or more linked papers as a group and work closely with one another and with their lecturers. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link "liberal arts" and "professional papers", while others feature service learning.

Writing-Intensive Papers – These papers emphasise writing at all levels of instruction and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines.

Collaborative Assignments and Projects – Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

Undergraduate Research – Many universities are now providing research experiences for students in all disciplines. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

Diversity/Global Learning – Many universities now emphasise papers and programmes that help students explore cultures, life experiences and worldviews different from their own. These studies often explore "difficult differences" such as racial, ethnic and gender inequality, or continuing struggles around the globe for human rights, freedom and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

Service Learning, Community-Based Learning – In these programmes, field-based "experiential learning" with community partners is an instructional strategy – and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with on-going efforts to analyse and solve problems in the community. These programmes model the idea that giving something back to the community is an important graduate outcome, and that working with community partners is good preparation for citizenship, work and life.

Internships – Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting - usually related to their career interests - and to give them the benefit of supervision and coaching from professionals in the field.

Capstone Papers and Projects – Whether they are called "senior capstones" or some other name, these culminating experiences require students, nearing the end of their undergraduate study, to create a project of some sort that integrates and applies what they have learned. The project might be a research paper, a performance, a portfolio of "best work," or an exhibit of artwork.

The challenge for lecturers, and indeed departments, is to consider how many of these high impact educational practices are included in their curriculum.

As mentioned above by Kuh (2008), undergraduate research is a high impact educational practice. Since the work of the Boyer Commission in the late 1990s in the USA, there has been an international imperative in higher education calling for students to be aware of, and involved in, the research culture of their universities. Although some forms of undergraduate research are reserved for elite students in summer internship programmes, Healey and Jenkins (2009, 6) advocate for the mainstreaming of research and inquiry into the undergraduate curriculum. They suggest four ways of engaging undergraduates with research and inquiry:

- Research-led: learning about current research in the discipline
- Research-oriented: developing research skills and techniques
- · Research-based: undertaking research and inquiry
- Research-tutored: engaging in research discussions

Arguably most university papers are research-led, but the challenge is to provide *undergraduate* educational experiences that allow the development of research skills and techniques, the experience of doing research and inquiry, and the opportunity to have research discussions. The links between teaching, research and professional practice are most easily demonstrated at advanced levels of study. However, the links can be made from the first day of each student's university study.

The third strategy to engage students with rich and diverse educational opportunities is to encourage and support students to broaden their learning experiences. Students need to be aware of opportunities that exist both within curricula as well as extracurricula activities.

There are a range of resources and support to assist staff to develop rich and diverse educational opportunities. For example, the Committee for the Advancement of Learning and Teaching (CALT) offer *University Teaching Development Grants*, the International Office offer *Internationalisation of the Curriculum Initiative Grants*, and the Quality Advancement Unit offer *Improvement Grants*. In particular, the staff of HEDC are available to help develop ideas for grants, and indeed to assist with project work.

Table 2: Strategies to engage students with rich and diverse educational opportunities

	Implications for practice		
Angred	Individual	Departmental/programme	Institutional
Promoting student-centred approaches	 Focusing on learning outcomes and teaching accordingly to realise these outcomes Using active learning and experiential learning in teaching Designing papers that include high impact educational opportunities 	Promoting active learning and experiential learning opportunities across the curricula Developing and using a range of high impact educational opportunities in curricula Ensuring student workloads are spread in a balanced way across semesters	• Marketing the Otago experience as offering students engagement in their learning (M&C)
Promoting research-informed teaching and student involvement in research	 Exploring how to better link research and teaching Attending a professional development event focusing on the teaching research nexus Joining the Special Interest Group on Undergraduate Research and Inquiry 	 Ensuring papers offer opportunities for interaction with research staff and/or the research environment Providing events during which undergraduates can learn of academics' research areas Exploring the concept of offering 'research from day one' 	Marketing the Otago experience as offering student involvement in a strong research culture (M&C) Promoting summer research studentship opportunities for undergraduates (DVC(R&E), M&C) Providing professional development support for linking research and teaching (HEDC) Promoting a Special Interest Group for teachers interested in fostering close links between research and teaching (HEDC)
Encouraging and supporting students to broaden their learning experiences	Where appropriate, including learning experiences in workplaces or the community	Encouraging interdisciplinary programmes by offering more papers across departmental and disciplinary boundaries Promoting study exchange and volunteer service abroad opportunities Instigating peer mentoring programmes within the department/programme	Marketing the Otago experience as offering opportunities for students to broaden their learning experiences (M & C) Promoting involvement in peer mentoring and peer leadership programmes (HEDC) Promoting learning outside the curriculum through wider University experiences (e.g. OUSA and the community (volunteering, work experience) Promoting exchange opportunities

Goal 3: Enhance staff capabilities to facilitate the provision of high quality educational experiences

Central to any quality teaching and learning environment is well-qualified, well-informed and well-supported staff. In the university environment in New Zealand, there is no compulsory teaching education requirement for new lecturers. Thus it is important, as outlined in Goal I, to recruit staff with the potential for teaching excellence and to provide appropriate professional development support to further develop teaching capability. New teachers should be strongly encouraged to undertake, as a bare minimum during confirmation path, a short course in teaching and learning in higher education, available through either HEDC's workshop programme or their postgraduate programme. HEDC staff are also available in a consultancy capacity for individuals or groups of staff. This support includes peer observations of teaching, advice about course design, assessment practices, and how to evaluate teaching.

Since inquiry and research are central to academia, there should be an expectation that teachers adopt the same inquisitive stance to their teaching. Thus research into teaching should be promoted and appropriately resourced – both in terms of funding and professional development support. Staff will be more motivated to strive for excellence in teaching if they know they can gain appropriate recognition. Thus excellence in teaching should be recognised and/or awarded at all levels, from within departments through to Divisions and indeed the institution (Otago Teaching Awards, OUSA teaching and supervision awards). Staff need to be aware of the range of awards available and be encouraged to apply for them. Furthermore the confirmation and promotion criteria need to promote innovation and excellence in teaching.

The sharing of good practice is central to an institution focused on teaching excellence. At the University of Otago a range of opportunities is regularly scheduled to allow sharing of teaching practice and higher education research. These include the biennial 'Spotlight on Teaching Colloquium', the Quality Forum series and HEDC seminar series. An initiative, which will be new for some departments, is to encourage seminars on teaching and learning as part of their annual seminar series. An on-going initiative by HEDC and Distance Learning is to boost the availability of online resources to support teaching and learning.

Table 3: Strategies to enhance staff capabilities to facilitate the provision of high quality educational experiences

200	Implications for practice		
	Individual	Departmental/programme	Institutional
Encouraging new teachers to undertake professional development	Willingness to engage in professional development Contacting your Faculty Librarian to learn about developments in information resources, particularly in online environments	Strongly encouraging new teachers to attend a short course on teaching and learning to be inserted into criteria for confirmation Allowing release time from departmental duties to engage in professional development	 Promoting and supporting professional development for new teachers (HEDC & Library) Making the attendance of a short course on teaching and learning a strongly recommended component of confirmation requirements (DVC(A&I))
Promoting research into teaching	 Applying for CALT grants to research into teaching Developing links with HEDC academics as possible research partners Attending the Biennial 'Spotlight on Teaching' Colloquium 	 Ensuring some staff apply each year for a CALT grant for research into teaching Encouraging partnership with HEDC academics on research projects Including educational research in departmental research seminar series 	Maintaining CALT grants for research into university teaching (CALT) Promoting educational research as part of a lecturer's research portfolio (SAC) Generating a knowledge network listing opportunities for teacher and educational researchers to collaborate on research projects (HEDC) Providing professional development support for educational research (HEDC)
Providing ongoing support through a range of professional development opportunities	Teaming up with colleagues to engage in peer observations and peer review of teaching	Encouraging academics to undertake regular professional development Encouraging staff to study for a postgraduate qualification in higher education Instigating mentoring for teaching within the department Providing conference funding and/or professional development funding to support academics to attend conferences on teaching	Providing support for teaching including one to one consultancies, workshops, working with teams in departments and programmes, postgraduate qualifications, Special Interest Groups, online resources (HEDC) Mentoring and coaching (Divisional level, HEDC)

Table 3: continued

Strategy	Implications for practice		
	Individual	Departmental/programme	Institutional
Acknowledging and rewarding excellent teaching		Promoting departmental recognition for excellence in teaching and supervision	Informing, encouraging and supporting staff to apply for the University of Otago Teaching Awards (HEDC) Informing students and encouraging them to nominate teachers for the OUSA Teaching Awards (OUSA) Developing criteria for confirmation and promotion that reward innovative teaching (SAC) Encouraging all Divisions and Departments to recognise and reward teaching excellence (CALT)
Showcasing best teaching practice and higher education research	Showcasing best teaching practice teaching and/or research in higher education education education education events	Offering seminars on teaching and higher education research as part of the annual research seminar series Encouraging staff to present in conferences and colloquia and to contribute expertise to professional development workshops	 Offering seminars on teaching and higher education research as part of the annual research seminar series Encouraging staff to present in conferences and colloquia and to confirmed expertise to professional development workshops Providing online resources to support teaching and learning (HEDC) Running (HEDC) Promoting the 'Spotlight on Teaching and HEDC research seminar series and the Quality Forum series (HEDC, QAU)

Goal 4: Enhance the quality of teaching and the learning environment

Central to any quality teaching and learning environment is a culture of improvement through quality enhancement processes. Such processes involve continually seeking feedback and using these data to further improve teaching and learning experiences. For quality enhancement, there needs to be an institutional mandate that such processes are important, as well as structures to enable the gathering of, and acting upon, feedback. Teaching is a core business at Otago, and the Higher Education Development Centre has as its mission to work in partnership with staff and students to advance, preserve and promote the ideals, knowledge and values of higher education. Part of this mandate is to promote and support teaching and learning at Otago, and accordingly HEDC has a team of staff developers, learning advisors and educational media specialists.

The Quality Advancement Unit (QAU) supports the University's commitment to continuous improvement in teaching and learning. It achieves this through:

- its management of the University's internal reviews process (which can identify good teaching practice and initiatives that promote a supportive teaching and learning environment)
- the conduct of annual Graduate and Student Opinion Surveys (that provide data to inform teaching and learning practices)
- the organisation of Quality Forums (that promote the sharing of good practice across the institution)
- · Improvement Grants that are a contestable source of funding that may be used to support teaching and learning initiatives.

Finally, a range of Boards and Committees are responsible for maintaining and promoting quality in teaching and learning at Otago.

To help guide teaching and learning activities at Otago, as well as the *Otago Teaching and Learning Action Plan*, departments should be tasked with customising this plan to their own context and culture. Once implementing the Plan, there should be regular monitoring (at least annually) to check progress against the initiatives.

A key strategy in the Teaching and Learning Action Plan is to ensure that graduate attributes are embedded in curricula and/ or extra-curricula experiences so that all students have an opportunity to achieve them by the time of graduation. Not only should curricula experiences be provided to help develop these attributes, but some should also be assessed, and indeed there should be some evaluation post-graduation to determine whether in fact the graduate profile is being realised. There is also a desire to encourage students to be aware of the graduate profile and to track their progress towards achieving it. See section 6 for advice regarding teaching towards the Otago Graduate Profile.

Central to quality enhancement is the cyclical process of gathering of data on current practice, using these data to drive further developments, and gaining feedback on the new initiatives etc. All levels within an institution should engage in this process, from lecturers improving their teaching through to senior leaders overseeing major curriculum initiatives. A key part of quality assurance is engagement with Departmental and Programme Reviews, academic audit and benchmarking processes.

Table 4: Strategies to enhance the quality of the teaching and learning environment

Spot ent S	Implications for practice		
	Individual	Departmental/programme	Institutional
Promoting quality assurance processes	• Being aware of indicators for quality teaching at the individual level (see p.7)	 Being aware of indicators for quality teaching at the departmental or programme level (see p.7-8) Ensuring applications amongst staff for improvement initiatives 	 Being aware of indicators for quality teaching at the institutional level (see p.8) Promoting the Quality Advancement Unit, Higher Education Development Centre, Distance Learning and Academic Committees (particularly Senate, Divisional Boards, BUGs and BoGs) as having critical roles in quality assurance
Embedding the <i>Otago Graduate Profile</i> in curricula and extra-curricula experiences	• Familiarising yourself with the <i>Otago</i> Graduate Profile and ensuring your papers contribute to the overall development of the Otago graduate attributes (see section 6 for guidance)	Ensuring that a graduate profile is developed (based on the Otago Graduate Profile) and embedding the graduate attributes in teaching and assessment practices (see section 6 for guidance) Monitoring achievement of the Otago Graduate Profile through graduate, alumni and employer feedback	 Supporting departments and programmes to embed graduate attributes in their curricula (HEDC) Monitoring achievement of the Otago graduate attributes through the Graduate Opinion Survey and other instruments (QAU)
Regularly gathering, and acting on, appropriate data to evaluate the quality of teaching and of the learning environment to enhance learning	Regularly evaluating teaching by gaining feedback from a range of data sources	Developing an appropriate evaluation plan for papers and programmes Having departmental or programme-wide discussions of the results from course evaluations Gaining feedback from recent alumni and other stakeholders	Providing guidance on the development of evaluation plans for HoDs and Programme Coordinators (HEDC)
Ensuring a cycle of external review		 Undertaking external review on a regular cycle Benchmarking against other departments/ programmes 	Departmental Reviews to consider the Departmental Teaching and Learning Action Plan as part of the review process (QAU)

6. Teaching Towards the Otago Graduate Profile

As teachers it is our responsibility to ensure that the learning opportunities we provide allow students to acquire the full set of graduate attributes that make up the *Otago Graduate Profile*. Also, it is likely that there will be additional attributes, either discipline-specific or required by governing bodies. It is not enough to simply assume that students have the opportunity to develop these attributes – rather they must be explicitly incorporated into curricula (both through teaching and assessment) and extra-curricula experiences. To do this will require conversations amongst all levels of teaching staff to ensure that, collectively, papers are providing opportunities to develop the requisite attributes. Moreover students should be made aware of the *Otago Graduate Profile*, and they should be encouraged to track progress, and gather evidence, of having acquired the full set of attributes. In this section possible teaching strategies are provided to help develop the various graduate attributes.

In the Otago Graduate Profile there are three sets of attributes (Table 5). The first is an overarching attribute involving in-depth knowledge, in which all University of Otago graduates will possess a deep, coherent and extensive knowledge of at least one discipline, coupled with knowledge of the fundamental contribution of research to this discipline. The next set is 'affective attributes', which are most likely to occur as a result of a challenging, fulfilling, broadly based and multi-faceted education. Descriptions of these attributes use terms such as 'an appreciation of', 'a willingness to' and 'a commitment to', and the attributes essentially describe the values and attitudes of graduates and their choices and behaviours in given circumstances. The descriptions promote the importance of our graduates coming to their own conclusions about how to behave, and carefully avoid prescribing actions. These attributes are difficult to assess in the time frame of an undergraduate experience and, unless sought as specifically-identified outcomes by individual programmes, their acquisition should be encouraged and supported, but not necessarily assessed. A range of extra-curricula activities should be provided by the institution as its contribution to the learning environment that all of our students experience. The remaining attributes are those most often sought by employers and they relate to a range of abilities that all Otago graduates should demonstrate. They should be specifically taught, developed and assessed within programmes. Descriptions of these attributes use terms such as 'an ability to apply' and 'knowledge of', and the attributes involve essentially cognitive or skills-based activities. In addition to this list it is likely that disciplines will have further attributes, either intrinsic to the discipline or required by professional bodies.

Table 5 provides staff with guidance on possible teaching and extra-curricula activities to help students develop the particular graduate attribute.

Table 5: Possible teaching strategies and activities to help students develop graduate attributes

Graduate attributes	Possible teaching and extra-curricula activities
In-depth knowledge: Deep, coherent and extensive knowledge of at least one discipline coupled with an understanding of the fundamental contribution of research	 Lead students to understand the major conceptual paradigms, frameworks and theories that relate to the subject matter studied. Provide students with a suitable knowledge of the subject content, developed through a programme of study characterised by coherence, depth and progression. Develop in students an ability to practice the appropriate methods and practical techniques associated with the subject being studied. Instil in students a sense of the limitations, the provisional nature and the constraints of knowledge gained within a particular sphere. Equip students with a sense of the interconnectedness between different fields of knowledge, and with the ability to integrate and synthesise perspectives gained from a range of fields.
Affective Attributes	
Global perspective: Appreciation of global perspectives in the chosen discipline(s) and the nature of global citizenship	 Encourage students to examine the perspectives of their own and other worldviews and recognise the complexity of elements. Explore global interdependence and questions of identity and community, and personal and social responsibility. Promote learning experiences that address real-world global dilemmas through research, application and diverse perspectives. Explore problems that require multiple perspectives and investigation of their solutions. Raise students' awareness of the cultural specificity of what and how they learn (and are being taught). Immerse students in diverse communities (professional and cultural) in order for them to "develop dexterity in using both familiar and new approaches" (Gutierrez & Rogoff, 2003).
Interdisciplinary perspective: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst disciplines	 Develop more team taught papers across disciplines. Encourage interdisciplinary programmes. Provide student internships between departments and institutions.
Lifelong learning: Commitment to the on-going acquisition of new knowledge and new skills, and an ability to apply these to an ever-changing environment	 Ensure students have the basic learning skills for study at tertiary level. Encourage the use of appropriate resources which support lifelong learning. Ensure students develop understanding at a conceptual level. Instill in students a love of learning. Empower students to own their learning.

Affective attributes (cont)	
Scholarship: Commitment to the fundamental importance of the acquisition and development of knowledge and understanding	 Make explicit the role of scholarship in the discipline. Teach students how significant theoretical developments were generated.
Attributes valued by employers	
Communication: Ability to communicate information, arguments and analyses effectively, both orally and in writing	 Explicitly teach students how to write academically, generate posters, give oral presentations, develop web resources etc. Provide a range of assessment tasks across a degree programme ensuring coverage of different ways of communicating.
Critical thinking: Ability to analyse issues logically, to challenge conventional assumptions, to consider different options and viewpoints, make informed decisions and act with flexibility, adaptability and creativity	 Role modelling and explaining disciplinary thinking. Teaching students how to ask good questions. Using problem-based and inquiry-based tasks to foster problem solving skills. Teaching students how to critique research articles.
Cultural understanding: Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner.	 Acknowledge possible areas of tension in knowledge systems, such as Māori models of pedagogy and scholarship compared with western ones (Greenwood & Te Aika, 2008). Teach using diverse models of pedagogy that engage students with multiple ways of knowing (e.g see Penetito, 2010). Promote understanding of perspectives from different cultures.
Environmental literacy: A basic understanding of the principles that govern natural systems, the effects of human activity on these systems, and the cultures and economies that interact with those systems	 Give first year orientation lectures that provide an overview of environmental literacy. Include consideration of sustainability and environment where appropriate in coursework. Provide an easy structure for students to orientate themselves within an environmental framework.
Ethics: Knowledge of ethics and ethical standards and an ability to apply these with a sense of responsibility within the workplace and community	 Include consideration of ethical and social issues in course design. Promote awareness of formal ethical procedures and standards within the University. Encourage students to share the University's role as a critic and conscience of society. Use staff awareness of their influence as role models to lead by example.

Attributes valued by employers (cont)	Possible teaching and extra-curricula activities
Information literacy: Ability to apply specific skills in acquiring organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity	 Ensure students are provided with opportunities to learn about the full range of resources to support their learning. In partnership with subject librarians, teach students how to find and evaluate information. Teach the conventions of academic scholarship regarding authorship and ensure students are familiar with the University policy on plagiarism. Ensure information literacy skills are assessed.
Research: Ability to conduct research by recognising when information is needed, and locating, retrieving, evaluating and using it effectively	 Explicitly teach research skills, such as developing good research questions, literature searching and evaluating information. Strive to facilitate students' development of more advanced research skills including research design, data collection and data analyses. Try to enculturate students in the research culture of the University from day one.
Self-motivation: Capacity for self-directed activity and the ability to work independently	 Develop learning environments which encourage intellectual independence. Motivate students to develop intellectual independence. Ensure students are equipped with the necessary skills to be intellectually independent. Develop assessment practices which reward demonstrations of intellectual independence. Encourage teachers to develop their understanding of the special attributes of intellectual independence in the particular discipline.
Teamwork: Ability to work effectively as both a team leader and a team member	 Ensure opportunities to work in teams in core papers. Provide guidance on how teams function and the roles of various members. Assess both the group product and contribution to group processes.

7. Sources of Support

- · HEDC, Library, QAU and ITS staff, as well as members of CALT are more than willing to help you interpret and enact this plan.
- Online resources:
 - http://hedc.otago.ac.nz/hedc/asd/Digital-Resources-for-your-Teaching.html
 This site has several templates available to help you design and deliver your courses. Many templates for assessing various types of student work are included (assignments, literature reviews, oral presentations, posters, contribution to group work).
 - http://akoaotearoa.ac.nz/resource-centre
 This is a very useful site with a wealth of resources from Ako Aotearoa (the National Centre for Tertiary Teaching Excellence) funded research.
 - www.adg.canterbury.ac.nz/info_series.shtml
 Over the years the University of Canterbury has compiled a very useful information series covering aspects of course design, evaluation, lecturing, peer observation etc.

8. Glossary

Bb Blackboard is the trade name of the learning management system used at Otago University

BoGs Board of Graduate Studies (University Committee)

BUGs Board of Undergraduate Studies (University Committee)

CALT Committee for the Advancement of Teaching and Learning (University Committee)

CDC Career Development Centre

CUAP Committee on University Academic Programmes (Universities NZ Committee)

DVC (A & I) Deputy Vice-Chancellor (Academic & International)

DVC (R & E) Deputy Vice-Chancellor (Research & Enterprise)

HEDC Higher Education Development Centre

HR Human Resources

ITS Information Technology Services (OU)

LMS Learning Management System

M&C Marketing and Communications

OUSA Otago University Students' Association

PASS Peer Assisted Study Sessions

QAU Quality Advancement Unit

SAC Staffing Advisory Committee

UO University of Otago

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