
UOW Graduate Qualities
Faculty Implementation Guidelines
June 2007

UOW Graduate Qualities

UOW is committed to developing graduates who are:

UOW GRADUATE
QUALITY

Informed

Have a sound knowledge of an area of study or profession and understand its current issues, locally and internationally. Know how to apply this knowledge. Understand how an area of study has developed and how it relates to other areas.

Independent learners

Engage with new ideas and ways of thinking and critically analyse issues. Seek to extend knowledge through ongoing research, enquiry and reflection. Find and evaluate information, using a variety of sources and technologies. Acknowledge the work and ideas of others.

Problem solvers

Take on challenges and opportunities. Apply creative, logical and critical thinking skills to respond effectively. Make and implement decisions. Be flexible, thorough, innovative and aim for high standards.

Effective communicators

Articulate ideas and convey them effectively using a range of media. Work collaboratively and engage with people in different settings. Recognise how culture can shape communication.

Responsible

Understand how decisions can affect others and make ethically informed choices. Appreciate and respect diversity. Act with integrity as part of local, national, global and professional communities.

← HEADING

← DESCRIPTOR

← ELEMENTS

←

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These Guidelines should be read in conjunction with the
UOW Graduate Qualities Policy.

Acknowledgements

A large number of people in Faculties and professional units took the time to discuss UOW's Graduate Qualities and to comment on drafts. Particular thanks are due to FEC Chairs and those who organised consultations in their area.

The project team members devoted a considerable amount of time to the development of the new model. They were:

- Associate Professor Greg Hampton, Head, Student Services (Project Leader)
- Dr Anna Carew, Lecturer / Dr Geraldine Lefoe, Senior Lecturer, CEDIR
- Ms Linda Corrin, Graduate Attributes Project Officer, Careers Service
- Ms Theresa Hoynes, Senior Manager / Ms Jenny Reiners, Project Officer, Policy and Governance Unit
- Dr Lynda Kriflik, Lecturer, Graduate Attributes, Academic Services Division
- Dr Brett Lemass, Senior Lecturer, Faculty of Engineering
- Ms Suzanne Lipu, Information Literacy Coordinator / Ms Margie Jantti, Associate Librarian, Library
- Associate Professor John McQuilton, Associate Dean (Undergraduate), Faculty of Arts
- Ms Heather Sainsbury, Assistant Director / Ms Jenny Hancock, Strategic Planning Officer, Strategic Planning
- Ms Anne Melano, ESDF Project Coordinator.

Two areas of UOW which are well advanced in their development of Faculty-based Qualities kindly contributed examples for these Guidelines:

- Graduate School of Medicine: Professor John Bushnell
- Faculty of Engineering: Associate Professor Paul Cooper, Associate Professor Sharon Nightingale, Dr Anna Carew, Ms Kim Draisma and Ms Michelle Riggs (members of the Carrick project team)

Externally, our thanks are due to Dr Simon Barrie, University of Sydney and Dr John Willison, University of Adelaide, both of whom visited Wollongong campus during the course of project and offered valuable ideas and insights which have influenced the Graduate Qualities model.

1 – Introduction and overview

Who are these Guidelines for?

These Guidelines are to assist Faculties with the transition from Graduate Attributes/Tertiary Literacies to **Graduate Qualities**. They are primarily for:

- Faculty Executive members with responsibilities for the Faculty’s adoption of the Graduate Qualities
- Faculty Education Committees, and/or
- Course and Subject Coordinators who are involved in the interpretation of UOW Graduate Qualities into Faculty/Discipline Graduate Qualities in their Faculty.

What are “Graduate Qualities”?

“Graduate Qualities” are aspirational qualities that we aim to progressively develop in students through learning and teaching at UOW. They articulate those aspects of our approach that are common across Faculties and disciplines.

Some elements of Graduate Qualities deal with discipline knowledge and its application, some with higher order thinking, some with generic skills and others with attitudinal/societal values.

The UOW Graduate Qualities replace the previous Attributes of a UOW Graduate and the previous Tertiary Literacies Policy and Procedures.

Why does UOW have “Graduate Qualities”?

UOW has Graduate Qualities so that, by the time they graduate, all UOW students:

- have a broad perspective on society
- are able to make an important contribution to society and their chosen field
- are thoroughly prepared for success in the workplace
- are highly sought after by employers.

Graduate Qualities provide a common educational focus across UOW and contribute to UOW’s reputation for quality teaching and programs.

Graduate Qualities aren’t achieved in a single subject – their development is an ongoing process across the entire course or program, and continues after graduation.

How can we claim that all our students will achieve all of the Graduate Qualities?

We can offer all students the opportunity to develop the Graduate Qualities. Many elements of the Qualities are fairly straightforward and can be readily taught / learnt to an agreed level and then assessed. Other elements, for example those that deal with higher order thinking and those which are societal/attitudinal, are not as straightforward to achieve or to measure. They are however, considered by the university community to be very important outcomes of higher education and what differentiates university education from vocational and industry training.

Offering all students the opportunity to develop Qualities is an invitation to them to engage fully with university life and learning. The Graduate Qualities process makes it possible to evaluate the outcomes as assessed in student work and other forms of evaluation.

How does the new model work?

1 – UOW Graduate Qualities - A small number of top-level UOW-wide Graduate Qualities encapsulate the essential and distinctive qualities of a UOW graduate, as well as the common elements from the many quality teaching programs of UOW.

2 – Faculty/Discipline Graduate Qualities - These interpret the Qualities for particular Faculties or disciplines. All elements in the UOW Graduate Qualities must be included *in some form* in a list of Faculty/Discipline Graduate Qualities. Faculties may use their own language. Additional elements may be added to the Faculty/Discipline Graduate Qualities.

Alternatively, Faculties may choose to simply adopt the UOW Graduate Qualities (heading and descriptor) as their Faculty/Discipline Qualities.

3 – Learning Outcomes - Faculty/Discipline Graduate Qualities are: mapped across courses; embedded into Learning Outcomes for selected subjects; taught/learnt and their development evaluated (eg through assessment). Most subjects will address only some elements of the Graduate Qualities.



Why have Faculty/Discipline Qualities, as well as UOW ones?

Some Faculties expressed a strong desire to make the language of the Qualities better reflect their discipline(s). They advised that UOW's Graduate Qualities model needs to be flexible enough to reflect differences between disciplines. A sound professional knowledge in Journalism (for example) is very different to that in Engineering, and so are the research methods, problem solving techniques and ethical codes.

For this reason, the UOW Graduate Qualities Policy provides for each Faculty or discipline area to interpret the Qualities. This model was supported in extensive consultations in 2006-7.

Alternatively, a Faculty may also elect to simply adopt (with minor modifications as needed) the UOW Graduate Qualities as their Faculty/Discipline Graduate Qualities, rather than create a separate list. The UOW Graduate Qualities are suitable for all students and courses.

How were the UOW Graduate Qualities developed?

Through the ESDF program, funding was awarded to a Graduate Attributes Project. The aims of the project were to:

- Review UOW's Graduate Attributes/ Tertiary Literacies Policy and to refine the systems to embed the attributes in curriculum, teaching and assessment practices
- Undertake an extensive consultation process which would serve to broaden general awareness of the attributes and to reinvigorate UOW's efforts to embed them in learning and teaching practice.

In 2006-7, extensive consultation was carried out under this project with UOW academic staff, UOW professional units, students and employers.

A number of practical changes were agreed:

- the Attributes (as they were then called) needed to be reduced in number (previously nine plus six for research) to assist communication with staff and students
- more flexibility was needed so that Faculties and UOW Dubai could use specific language around the Qualities to suit their students and accrediting bodies
- all Qualities needed to be capable of being developed within UOW courses.

Faculties, professional units and students were invited to make suggestions and provide comments on drafts. Five Graduate Qualities were drafted and progressively refined, based on a shared understanding of the qualities that all UOW students should work towards achieving.

The final version is expected to be approved by the university in mid 2007.

A summary of some of the discussions in consultations can be found in Appendix 3.

What changes have been made to UOW policies and codes?

- the previous “Attributes of a UOW Graduate” and “Attributes of a UOW Research Graduate” have been replaced by new UOW Graduate Qualities
- Faculty/Discipline Graduate Qualities have been introduced
- a new UOW Graduate Qualities Policy has been introduced
- the Tertiary Literacies Policy and Procedures and Tertiary Literacies Inventory have been replaced by the new Policy and these Guidelines
- amendments have been made to the Code of Practice – Teaching and Assessment and the Code of Practice – Supervision
- Further amendments are to be made to UOW policies to reflect the new Graduate Qualities and to remove references to “Attributes”.

2 – What do Faculties have to do?

Step 1 Decide on application of Graduate Qualities

Each Faculty or Graduate School will decide on which (if any) of their disciplines or even courses will reinterpret the Qualities, taking into account the diversity of programs.

For example, it may be decided that:

- the Faculty/Graduate School will simply adopt or modify the UOW Graduate Qualities as its Graduate Qualities, *or*
- there will be a single set of Graduate Qualities for the entire Faculty or School, *or*
- some Schools or discipline areas will have discrete lists of Graduate Qualities, *or*
- some courses will have discrete lists of Graduate Qualities, *or*
- another approach will be used – for example, several Graduate Qualities might be common across the Faculty with others unique to a School, discipline area or course.

Step 2 Faculty, School or discipline interprets the Qualities

To be completed by 1 July 2008 (see Graduate Qualities Policy Implementation Schedule)

To interpret the Graduate Qualities for Faculties/ disciplines, time, staff and a range of expertise and resources may be needed. Some areas have decided to hold a half-day retreat, for all staff in the discipline(s). Larger areas might bring together course coordinators, FEC members and representative subject coordinators. Representatives from professions could also be present (eg members of the Faculty Visiting Committee).

Useful documents to consider may include accreditation requirements; subject outlines; national reports on the skills needed in the profession; Qualities devised for this discipline by other universities (see Appendix 4).

Useful points to keep in mind:

- Faculty/Discipline Graduate Qualities are aspirational qualities for all students in an area to work towards, and need to be inclusive of all sub-disciplines/majors
- Each Graduate Quality should be capable of being taught/learnt and their development evaluated.
- Qualities may be fairly specific (particular skills or abilities), or fairly high level (similar to UOW Graduate Qualities or course outcomes), or somewhere in between. This decision is up to the Faculty/discipline. Areas wanting to minimise amendments may tend to higher-level statements.
- Each element of the UOW Graduate Qualities must be reflected in some form in the list of Faculty/Discipline Graduate Qualities.
- A brief, clear list will be better understood by students and staff.
- If timing is an issue, Faculties may choose to simply adopt the UOW Graduate Qualities initially, followed by an interpretation later.

Example

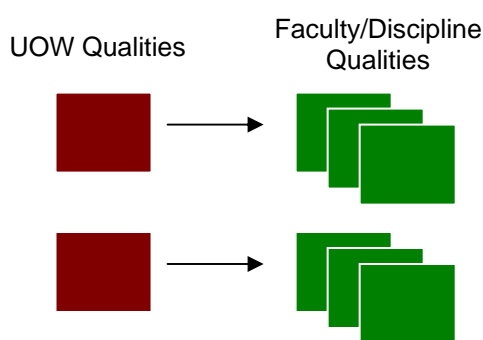
UOW Graduate Quality element	Faculty Qualities (sourced from UOW Medical School Graduate Profile)
Responsible (extract) Appreciate and respect diversity	A sensitivity to and respect for patients' cultural perspectives, ethnic background, age, gender, socio-economic status. A commitment to appreciate and effectively manage the health needs of Indigenous Australians in a culturally appropriate manner.

Step 3 Faculty/Discipline Qualities are cross-referenced to UOW Qualities

To be completed by 1 July 2008 (see Graduate Qualities Policy Implementation Schedule)

A document needs to be prepared and published on the Faculty web site that shows how the Faculty/Discipline Graduate Qualities link to the UOW Graduate Qualities. This may be done in several ways, as sketched out below.

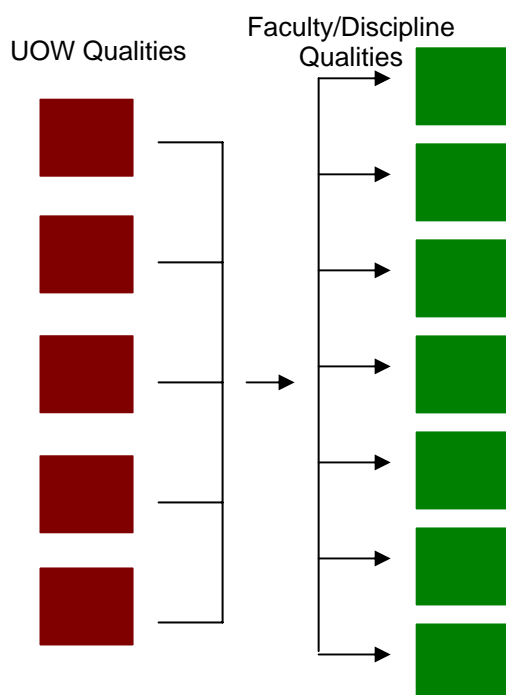
Model 1: each Faculty/Discipline Quality may sit *underneath* a UOW Graduate Quality:



Example

UOW Graduate Quality	Faculty/Discipline Graduate Qualities
Independent learners	Carry out effective critical reading and referencing Show awareness of a broad range of information sources/databases, and use these in research Synthesise and integrate new ideas Reflect on professional experience
<i>Example derived from work of Faculty of Engineering</i>	

Model 2: the Faculty/Discipline Qualities may form a *discrete list*, with the links to UOW Graduate Qualities made clear. Some may refer to more than one UOW Quality.



Example

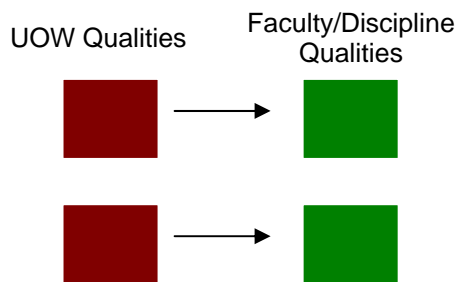
Faculty/Discipline Graduate Qualities	Related UOW Graduate Qualities
An understanding of the philosophical, scientific and ethical principles and concepts underlying the practice of medicine, and ability to apply that understanding to problem solving	Informed (“know how to apply this knowledge”, “understand how an area of study has developed”) Responsible (“make ethically informed choices”)
The ability to evaluate and reflect on his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes	Independent learners (“Seek to extend knowledge”) Responsible (“Act with integrity as part of ... professional communities”)
<i>Example adapted from Graduate School of Medicine</i>	

Other models: Faculties have complete flexibility in how Qualities are interpreted. For example, Faculties may choose to simply adopt (or modify) the UOW Graduate Qualities. It is also open to Faculties to devise more complex models, for example where Qualities are identified for each stage of a course.

Step 4 Existing Faculty documents amended

To be completed in time for Spring Session 2008 (see Graduate Qualities Policy Implementation Schedule)

This step is not intended to precipitate additional curriculum reviews. The detailed embedding of Graduate Qualities into curricula occurs over time as part of the existing three to five year cycle of reviews in Faculties. However, in the meantime to avoid confusion there is a need to replace references to the old Graduate Attributes with references to Qualities. This may initially be done as a ‘quick patch’. For example, a table could be prepared which cross-references the new Faculty/Discipline Graduate Qualities to the old nine Graduate Attributes. This table could be used to amend Subject Outlines and other documents.



Example

Old UOW Graduate Attribute	Cross-reference to Faculty/ Discipline Graduate Qualities
1. A commitment to continued and independent learning, intellectual development, critical analysis and creativity	Critical enquiry and analysis, Ongoing intellectual autonomy <i>(sample only)</i>
<i>Example drafted by Dr Brett Lemass</i>	

As most of the concepts in the Graduate Qualities were also present in the old Graduate Attributes, this is a practical short-term solution. Some funding may be available to assist with this process – see page 16.

Where the UOW Graduate Qualities are adopted by Faculties

If the UOW Graduate Qualities are simply adopted as the Faculty/Discipline Graduate Qualities (wholly or with minor modifications), then Subject Outlines and other documents may simply refer to “UOW Graduate Qualities” rather than to “[Physics] Graduate Qualities”. Amendments will still be needed to replace references to the old nine Attributes with references to the Qualities – see Appendix 2 for a cross-referencing table.

Step 5 Subject Outlines checked

To be completed for Spring Session 2008 subjects (see Graduate Qualities Policy Implementation Schedule)

The UOW Graduate Qualities Policy states that Faculties are responsible for:

... identifying in each Subject Outline the relevant Faculty/Discipline Graduate Qualities to be addressed in that subject (as required by the Code of Practice – Teaching and Assessment).

Updating templates

Faculties with a Subject Outline template will need to revise the template in line with the UOW Graduate Qualities Policy.

If Subject Outlines refer to the old Graduate Attributes

Most Subject Outlines will already include references to the old Graduate Attributes, as this was required under previous policies.* These Outlines may be amended to refer to Faculty/Discipline Graduate Qualities – see Step 4.

However, if this isn't the case, see below for some suggestions to help meet this requirement.

If there are just a few subjects with no reference to attributes

The Faculty or School will need a process for checking and inserting these – eg by referring to the original new subject proposals or the last curriculum review. The old attribute can then be cross-referred to insert a reference to the new Faculty/Discipline Graduate Qualities (see Step 4).

If there are whole groups of subjects with no reference to attributes

It is not the intention that the new Graduate Qualities model will precipitate additional curriculum reviews, so a stop-gap process is suggested. For example, subject or course coordinators could be asked to select from the list of Faculty/Discipline Graduate Qualities those that they believe students are developing in the subject. These could then be added to Subject Outlines.

The detailed embedding of Faculty/Discipline Graduate Qualities would then occur in due course as part of the normal three-five year review cycle (see Step 6).

What if a Faculty needs more time?

Some Faculties organise their subject outlines well in advance, for example some may already have finalised their Spring 2008 Subject Outlines as this document is being published.

In these or other circumstances affecting the timing of changes to Subject Outlines, please contact the DV-C(A&I) and propose a date that is realistic for your area.

* Prior to the new Graduate Qualities Policy, learning outcomes were already required to include the Attributes of a Wollongong Graduate that students were expected to be able to demonstrate. Further, these learning outcomes had to be included in Subject Outlines. (Code of Practice – Teaching and Assessment, 4.1 and Schedule 1, as they then were.)

Step 6 Systematically offering opportunities in courses for students to develop Graduate Qualities

***To be completed as part of the next scheduled curriculum review (three to five year cycle)
OR as part of the development of new courses from 1 January 2009 (see Graduate Qualities Policy Implementation Schedule)***

Individual subjects are not capable of offering students the opportunity to fully develop a Graduate Quality. As with discipline knowledge, the acquisition of a Graduate Quality occurs across subjects and over time. A build-up or scaffolding approach is needed, so that students steadily develop their Qualities as they move through a course.

What happens during course development and review?

In new courses, the Faculty/Discipline Graduate Qualities are mapped into subjects during curriculum design. For existing courses, Faculty/Discipline Graduate Qualities are mapped across subjects and years during each scheduled curriculum review.

Particular attention is given to core subjects. Consideration will also need to be given to students transferring from other courses (within Australia or from overseas). This course mapping may also address the level to which a Graduate Quality is acquired at particular stage of the course (see Appendix 5).

What happens during subject development and review?

Subjects are where Graduate Qualities are translated into teaching and learning activities and assessment tasks where possible.

Not all Graduate Qualities are identified in each subject. Faculties should clarify which elements of the Qualities each subject should cover, and possibly to what level. This can occur during formal subject development/review or course development/review. Learning Outcomes should refer to these Qualities.

Subject Coordinators or teaching teams then decide on the detailed design of activities and/or assessment tasks to enable students to meet the Learning Outcomes.

Faculties may also need a system to address “subject drift” (progressive amendments to subjects which tend to move them away from their original mapping).

How is this different from what we used to do?

The above approach is already similar to that used by Faculties in mapping the old Graduate Attributes into curricula.

The main difference is that Faculties/disciplines are now free to interpret the Graduate Qualities using discipline-specific concepts and language. This gives Faculties more flexibility, as they can review their Qualities to ensure a good fit. It is particularly helpful where the Faculty or discipline has accreditation requirements which must be woven through courses, as it allows a single consolidated set of Qualities to be used.

How much of this is required by UOW policy?

The UOW Graduate Attributes Policy specifies that Faculties are responsible for:

... designing curricula that systematically provide opportunities for the development of the Faculty/Discipline Graduate Qualities within each course of study ...

The Quality Review Framework, course and subject approval processes will be amended in 2007-8, to further clarify these requirements.

3 – Communicating with staff and students

As a minimum, Faculties need to clearly document the relationship between the Faculty/Discipline and the UOW Graduate Qualities and publish this on their website (see Graduate Qualities Policy). Some additional suggestions are offered below.

Staff

Ideas for informing staff

- Arrange for a presentation/briefing at Faculty/School meetings or other forums. Faculty Teaching and Learning Scholars and/or FEC Chairs may like to lead briefings. A PowerPoint if needed will be available from <http://www.uow.edu.au/about/teaching/qualities/>, and can be adapted as needed. If there is no-one available from your Faculty to brief staff, please ask one of these members of the UOW Graduate Qualities project team: Associate Professor Greg Hampton; Dr Lynda Kriflik; Dr Anna Carew; Ms Margie Jantti; Dr Brett Lemass; Associate Professor John McQuilton.
- Involve Course and Subject Coordinators in the drafting of Faculty/Discipline Graduate Qualities
- Ask for regular information/updates to staff from the group(s) that are drafting your Faculty/Discipline Graduate Qualities
- Distribute posters and information sheets
- Include information on Graduate Qualities in induction for your tutors, academics and general staff
- Highlight the work being done on Graduate Qualities in curriculum reviews.

Students

Ideas for informing students

- Explain the Faculty's commitment to Graduate Qualities in welcome addresses/Faculty orientations
- Make explicit in subject outlines
- Include in Faculty/Course handbooks and other publications
- Promote the use of ePortfolios, to help students to prove their Qualities on graduation
- In classes, explain the link between learning activities and the gradual development of particular Graduate Qualities
- Link to the Faculty Graduate Qualities web page from popular student pages on the Faculty web site.

Others

Consider how to inform:

- Visiting Committees
- guest lecturers
- industry partners
- employers who supervise students on practicums
- accrediting organisations.

4 – Resources and support

Subject or course coordinators are encouraged to call on the services of Academic Services Division for extra assistance with curriculum design, explicit teaching and/or evaluation of the development of Graduate Qualities. Class groups and individual students can also be assisted.

This support assists numerous subject coordinators and thousands of students each year and is available to Faculties without charge.

Support available – by type of assistance

Key: LD=Learning Development, Lib=Library, CD=CEDIR, S=SEDLOs, CR=Careers, W=Woolyungah

Who can access	Assistance available
<p>Subject and course coordinators (access to a range of services from specialist UOW staff)</p> <p>(Please book in advance so staff can allocate their time to your subject)</p>	<p>Collaboration with Faculties to integrate skills into subjects and courses through explicit learning and assessment. Skill areas include: academic language and learning skills; information literacy; statistics; technology use and management (LD, Lib, CD)</p> <p>Subject/learning design (CD, LD)</p> <p>Workshops on academic language and learning skills for entire classes, either in existing class time or as extra tutorials (LD, Lib, CR)</p> <p>Peer learning communities for selected subjects eg first year classes, classes with high failure rates (PASS)</p> <p>ePortfolio web tool for building evidence of student achievements (CD)</p> <p>Subject-specific resource development (LD for self access academic and language skills; CD as part of FSA program)</p> <p>Activities on cultural diversity (S, W)</p> <p>Workplace learning programs (CR)</p> <p>Good Practice Case Studies (self-access resources) (CD, LD)</p> <p>Printed handouts for classes on language and academic skills (LD)</p>
<p>Individual students (either self-access or referred by staff)</p>	<p>Information Literacy Introductory Program (ILIP) (Lib, LD)</p> <p>Statistical Literacy Introductory Program (SLIP) (LD)</p> <p>Workshops on academic skills (LD, Lib)</p> <p>Academic English language classes (LD)</p> <p>One-on-one consultations for academic and language skills (LD)</p> <p>Self access resources on language and academic skills (LD)</p> <p>Unilearning – self learning web site on academic skills (LD)</p> <p>Library self learning web tutorials – information literacy (Lib)</p> <p>Computer training (ITS)</p> <p>Assistance for students with disabilities or other needs (S)</p> <p>Assistance and tutoring for Indigenous students (W)</p> <p>Resume and job skills assistance (CR)</p>

Support available – by UOW unit

Individual students, entire classes and/or subject design can be assisted by:

Learning Development

Academic language and learning skills and curriculum integration:

- Independent Learners - critical analysis skills, acknowledgement practice
- Problem Solvers - logical and critical thinking skills and problem based learning
- Effective Communicators - articulating and conveying ideas, collaborative learning in groups

See <http://www.uow.edu.au/student/services/ld/staff.html>

PASS – Peer Assisted Study Sessions

The establishment of peer learning communities which assist with the development of:

- Independent Learners
- Problem Solvers
- Effective Communicators

See <http://www.uow.edu.au/student/services/pass/>

Library

Information literacy subject integrated skill development relevant to:

- Informed – how to access subject-specific journals and resources
- Independent Learners – use a variety of information sources and technologies and acknowledge the work and ideas of others.

See <http://www.library.uow.edu.au/services/faclibs.html>

CEDIR

Educational development for subject and assessment design and development of learning environments, learning design, development of resources and ePortfolios is available through CEDIR, relevant to development of:

- all Graduate Qualities
- providing ways for students to reflect on Graduate Qualities

See <http://www.uow.edu.au/cedir/>

Careers Service

Employment programs conducted by the Careers Service provide opportunities for students to put their knowledge to work in a workplace situation – relevant to the development of:

- Problem Solvers and taking on challenges, applying skills relevant to a workplace setting
- Effective communicators – by virtue of working in a small team and presenting the outcomes of their workplace assignments
- Responsible – as students participate in professional settings

See <http://www.uow.edu.au/careers/discover/index.html>

Student Equity and Diversity Liaison Officers (SEDLOs)

Development of programs and resources promoting respect for the cultural diversity of international and domestic students, relevant to development of:

- Effective Communicators – recognise how culture can shape communication
- Responsible – appreciate and respect diversity

See <http://www.uow.edu.au/student/services/isa/>

Woolyungah Indigenous Centre

Assistance for Indigenous students as well advice on programs to promote respect and understanding of Indigenous culture are available, relevant to:

- Independent Learners
- Effective Communicators – recognise how culture can shape communication
- Responsible – appreciate and respect diversity

See <http://www.uow.edu.au/aec/>

In addition, academic staff are assisted by Faculty-specific resources that will assist students to develop the range of skills expected at the completion of undergraduate and postgraduate studies.

5 – Funding

To facilitate the transition, Faculties are advised to seek assistance from one of several possible UOW funding pools to supplement Faculty funding:

Educational Strategic Development Fund (ESDF) grants

A UOW competitive grants scheme, offering up to \$15,000 for Faculty projects that promote the strategic development of UOW's learning and teaching. Several Graduate Qualities projects were funded in 2007. See

http://cedir.uow.edu.au/CEDIR/services/fund_esdf/

Faculty Teaching and Learning Scholars Program

Funding of up to \$10,000 for teaching release and other expenses, for up to six people per year to take a leadership role and carry out a project addressing a teaching need in their Faculty. Several Graduate Qualities projects were funded in 2007. See

<http://www.uow.edu.au/cedir/asd/UOW013198.html>

Learning and Teaching Performance Fund Grants

It is possible that small grants may be made available through the DV-C(A&I) in 2007 as a result of UOW's success in the Learning and Teaching Performance Fund allocations. This has yet to be confirmed. Please contact Professor Rob Castle's office for more information.

6 – Frequently asked questions

What is the timeline for introducing the new Graduate Qualities?

Please see the schedule on page 20.

Do we have to redo our recent curriculum review?

No. It isn't until the next scheduled curriculum review that new Graduate Qualities are required to be systematically mapped into courses.

In the meantime, Faculties are asked to replace document references to the old Graduate Attributes with references to the new Graduate Qualities. This can be done as a "quick patch". See page 10 for more information.

How can I find out what my Faculty/Discipline Graduate Qualities are?

Faculty/Discipline Graduate Qualities will be drafted by 1 July 2008. In some cases, they will be the same as the UOW Graduate Qualities. Other Faculties will have a single set of Faculty Graduate Qualities, and others several sets of Discipline Graduate Qualities.

To find out the approach taken in your Faculty, please contact your FEC Chair.

What is the process for approval when Faculties want to amend their Faculty/Discipline Graduate Qualities?

Amendments can be approved within the Faculty (eg by the FEC and Faculty Executive).

What do specific words in the Graduate Qualities mean?

This is up to your Faculty/discipline to decide.

The new model allows each Faculty/discipline to interpret the Qualities in ways that make sense for their area. For example, "Problem-solving" is a general concept for all UOW graduates; but what it specifically means for Law students will be very different to what it means for Performance students.

What level do our students have to achieve?

This is up to your Faculty/discipline to decide. The new model allows each Faculty/discipline to determine how much emphasis should be placed on a particular Quality or element.

For example, "Recognise how culture can shape communication" is highly developed in Nursing students, who learn cross-cultural skills to communicate with people of diverse ages, ethnicities, sexualities, religions and socio-economic backgrounds in our society.

In some other disciplines, the attention to this Quality may be different and possibly less extensive. The onus on today's graduates is that they interact with professionals in applied and related disciplines, with the business community, politicians/governments who are making policy and allocating resources and with the public.

The level of achievement may also vary across the years or stages of a course (see Appendix 5).

Do I have to cover each Graduate Quality in every one of my subjects?

No. Graduate Qualities are developed over an entire course. Most subjects will address only some elements of the Graduate Qualities.

Which Graduate Qualities apply to my subject?

Faculties/discipline areas are required to map Graduate Qualities to subjects. This is when it will be determined *which subjects* need to develop *which elements of Graduate Qualities*. The level of achievement may also be articulated – eg the expectations for first year as compared to final year students.

This process will usually occur as part of the curriculum review. Some Faculties are using other approaches.

Whatever process is used, subject coordinators are usually involved. For more information, please approach your course coordinator or FEC Chair.

If a Graduate Quality is attached to my subject, what are my teaching and assessment responsibilities?

If an element of a Graduate Quality has been matched to your subject, you will be expected to provide opportunities for students to develop that element of the Quality. It is usually up to the subject coordinator to work out how this will happen – sometimes there may be explicit face-to-face teaching, sometimes students may work on learning activities outside of class, and sometimes there may be discussion or activities in class. There is a range of possibilities, with no single correct approach.

Subject Coordinators are also responsible for evaluating student achievement in Graduate Qualities as defined for their subjects.

How do I evaluate student achievement of the Graduate Qualities?

Usually, you would use assessment task(s) to measure the level of student achievement. Occasionally, evaluation through assessment tasks may not be the best approach. In this case, alternative forms of evaluation may be used, or a combination of assessment and other evaluation methods. For example, the understanding of a particular ethical issue could be measured in an assessment task; students could articulate their change in perspective in their UOW online portfolio; and/or teachers could reflect on the attitudes and shifts they have observed in groups of students as part of end-of-session teaching team or Assessment Committee meetings.

Are there separate UOW Graduate Qualities for higher degree research (HDR) students?

There are no longer separate lists of attributes for coursework and research students at the UOW level. The new UOW Graduate Qualities were written as one integrated set.

I supervise HDR students. Is there anything that I have to do?

In most cases, research students will already possess many UOW Graduate Qualities to a well-developed level as a result of their previous university studies.

As a normal part of work with higher degree research students, supervisors support students to further develop the Graduate Qualities as appropriate to research degrees (Code of Practice – Supervision s 5.7A).

How will UOW measure whether Graduate Qualities are actually being acquired by students?

Subject Coordinators measure Graduate Qualities through evaluation of what has been learnt in specific subjects.

UOW will measure Graduate Qualities using student perceptions (surveys).

UOW will also rely on review processes, such as reviews of subject outlines and course/subject approval processes.

How do Faculty/Discipline Graduate Qualities work for double degree students?

The default position is that those students would be covered by two separate sets of Faculty/Discipline Graduate Qualities. However, it is also completely open to the Faculties/disciplines involved to decide to devise Graduate Qualities for certain double degree courses – see page 26 for links to some examples of this from other universities.

Is a “UOW Graduate Quality” just a heading (eg Informed) or does it include the descriptor as well?

The Graduate Quality comprises both the heading and the descriptor - see page 2.

What will happen to the existing Graduate Attributes web site?

It is anticipated that the web site will be updated during 2007-2008.

Where does this leave the Tertiary Literacies and other policies?

The following policies have been repealed/superseded by the Graduate Qualities Policy:

- The Tertiary Literacies Policy and Procedures
- The Tertiary Literacies Inventory
- The former Attributes of a UOW Graduate
- The former Attributes of a UOW Research Graduate.

They are replaced by:

- the Faculty/Discipline statement of Graduate Qualities (in some Faculties, this may be identical to the UOW Graduate Qualities)
- the Graduate Qualities Policy.

(The concepts underlying the former Tertiary Literacies policy are of course still applicable – academic skills, information literacy, computer and statistical skills and professional practices are still explicitly taught/learnt and their development evaluated in UOW programs.)

The Information Literacies Policy is still current, but will be reviewed in 2007-8.

Will we still refer to “tertiary literacies”?

Not usually, as it may cause confusion. The formal UOW model that “tertiary literacies” referred to has been superseded.

The new Graduate Qualities model has two levels:

- UOW Graduate Qualities
- Faculty/Discipline Graduate Qualities.

If a general term is needed, “Graduate Qualities” is preferred.

Will we still talk about “computer literacy”, “statistical literacy” etc?

These terms are from the old Tertiary Literacies Policy. They aren’t used in the new UOW Graduate Qualities Policy, however, some of these terms may still be useful as general descriptors. Professional units may continue to use these terms if they are useful; for example “information literacy” will continue to be used by the Library.

Faculties may use whatever language they wish in interpreting the UOW Graduate Qualities into Faculty/Discipline Graduate Qualities.

Appendix 1 – Extracts from the UOW Graduate Qualities Policy

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6 Responsibilities

- 6.1 Each Faculty or Graduate School is responsible for:
- a. developing/adopting Faculty and/or Discipline Graduate Qualities which interpret each element of the UOW Graduate Qualities;
 - b. clearly documenting the relationship between the Faculty/Discipline Graduate Qualities and the UOW Graduate Qualities and publishing this on their website;
 - c. reviewing the Faculty/Discipline Graduate Qualities and their application to the UOW Graduate Qualities as required;
 - d. designing curricula that systematically provide opportunities for the development of the Faculty/Discipline Graduate Qualities within each course of study;
 - e. implementing learning and teaching strategies that foster the development of the Faculty/Discipline Graduate Qualities;
 - f. explicitly evaluating the development of Faculty/Discipline Graduate Qualities within the curricula;
 - g. providing students with opportunities to reflect upon the Faculty/Discipline Graduate Qualities and demonstrate their achievements, for example by offering access to an online portfolio tool;
 - h. identifying in each Subject Outline the relevant Faculty/Discipline Graduate Qualities to be addressed in that subject (as required by the Code of Practice – Teaching and Assessment).
- 6.2 Students are expected to:
- a. actively engage in the learning and research experience; and
 - b. work toward developing the Graduate Qualities to the best of their ability.
- 6.3 Professional non-faculty units will:
- a. work with Faculties to integrate the development of the Faculty/Discipline Graduate Qualities into the curriculum, including assistance with learning and teaching strategies and evaluation of student achievement;
 - b. provide programs, activities and advice for students to support their achievement of the Graduate Qualities.

...

Implementation Schedule

Critical Deadlines

Adoption by Faculty of Faculty/Discipline Graduate Qualities	1 July 2008
Posting link between Faculty/Discipline Graduate Qualities and UOW Graduate Qualities on Faculty website	1 July 2008
Application of new Subject Outline requirements	Subjects offered in Spring Session 2008
Application of policy to existing courses	
a. cross-reference the new Faculty/Discipline Graduate Qualities to the old Graduate Attributes, and use this table to substitute wording in Faculty documents	Commencement of Spring Session 2008
b. revise curricula to systematically develop new Faculty/Discipline Graduate Qualities	As part of next scheduled review (in accordance with Course Review Guidelines in Quality Review Framework)
c. application of new policy to new course approval applications	1 January 2009

Appendix 2 – Cross-referencing Graduate Attributes to Graduate Qualities

Mapping of Existing Graduate Attributes to Proposed Graduate Qualities

<i>This table may assist Faculties which simply adopt the five UOW Graduate Qualities, by providing cross-references which can be used to update Faculty documents. Some adaptation may be needed.</i>	
Existing Graduate Attributes	New UOW Graduate Qualities
A commitment to continued and independent learning, intellectual development, critical analysis and creativity.	<u>Independent learners</u> : Engage with new ideas and ways of thinking and critically analyse issues. Seek to extend knowledge through ongoing research, enquiry and reflection.
Coherent and extensive knowledge in a discipline, appropriate ethical standards and, where appropriate, defined professional skills.	<u>Informed</u> : Have a sound knowledge of an area of study or profession and understand its current issues, locally and internationally. Know how to apply this knowledge. Understand how an area of study has developed and how it relates to other areas.
Self confidence combined with oral and written skills of a high level.	<u>Effective communicators</u> : Articulate ideas and convey them effectively using a range of media.
A capacity for, and understanding of, teamwork.	<u>Effective communicators</u> : Work collaboratively and engage with people in different settings.
An ability to logically analyse issues, evaluate different options and viewpoints, and implement decisions.	<u>Problem solvers</u> : Apply creative, logical and critical thinking skills to respond effectively. Make and implement decisions.
An appreciation and valuing of cultural and intellectual diversity and the ability to function in a multicultural or global environment.	<u>Responsible</u> : Appreciate and respect diversity. <u>Effective communicators</u> : Recognise how culture can shape communication.
A basic understanding of information literacy and specific skills in acquiring, organising and presenting information, particularly through computer based activity.	<u>Independent learners</u> : Find and evaluate information, using a variety of sources and technologies. Acknowledge the work and ideas of others.
A desire to continually seek improved solutions and to initiate, and participate in, organisational, social and cultural change.	<u>Problem solvers</u> : Take on challenges and opportunities. Be flexible, thorough, innovative and aim for high standards.
An acknowledgment and acceptance of individual responsibilities and obligations and of the assertion of the rights of the individual and the community.	<u>Responsible</u> : Understand how decisions can affect others and make ethically informed choices. Act with integrity as part of local, national, global and professional communities.

Appendix 3 – The Evolution of the Qualities

The UOW Graduate Qualities were drafted by a cross-UOW team in consultation with the UOW community. Over 24 Faculty and Professional Unit consultations were held, and 9 student interviews. After each series of consultations, all the suggestions were considered and the wording and model were reviewed. Over 350 suggestions were received in total. Some of the main debates are summarised below:

Quality	Comments
Overall comments	<p>Many people commented that the five headings made the Qualities easy to remember.</p> <p>Most found the draft Qualities to fit well with the aims of their courses and programs. Where wording or concepts were found not to reasonably apply to an area's curricula, every effort was made to amend the draft Qualities.</p> <p>Faculty representatives in consultations were sensitive to the ways in which their disciplines were different to others. They were happy to refer the particular imperatives of their discipline to the Faculty Graduate Qualities, which could be unique to their area.</p> <p>The model where Faculties/disciplines could derive their Qualities was welcomed in nearly every consultation. Several disciplines with accreditation processes found it particularly helpful, as it would enable the attributes required by accreditors and the UOW Qualities to be consolidated.</p>
Informed	<p>The two words most often suggested for this heading were 'Informed' and 'Knowledgeable'. The strength of 'informed' was that it suggests staying abreast of current developments and related disciplines, as well as (according to the Oxford) being educated and acquainted with the facts. The strength of 'knowledgeable' was that it emphasises a solid understanding of a discipline; however to some, it sounds as though knowledge can be possessed rather than being continually renewed. On balance, 'Informed' was preferred to give UOW a distinctive approach ('Knowledg(able)' is very commonly used).</p>
Independent learners	<p>The word 'Independent' was endorsed at several Faculty consultations. However, it isn't intended that students will be 'independent learners' from the outset. Rather, this is something that they are working towards and should achieve by graduation.</p>
Problem solvers	<p>This Quality was considered critical in virtually every Faculty. Two sorts of problems are envisaged – those given to someone to solve, and new challenges that they may seek out for themselves.</p>
Effective communicators	<p>This was regarded as a critical area for every Faculty. The wording is inclusive of students with disabilities (words such as 'listen' were avoided).</p> <p>Whether or not to include 'teamwork' in this Quality was the subject of much debate, and 'teamwork' appeared in some versions tested in consultations. However, following the principle that the description of a Quality must apply to all disciplines, 'teamwork' was dropped in favour of 'work collaboratively'. It is worth noting that 'Teamwork' has strong support from employers, and may be worth expanding on in Faculty Graduate Qualities.</p>
Responsible	<p>The wording of the descriptor was amended progressively during consultations to make its elements more capable of being evaluated.</p> <p>UOW's commitment to valuing diversity is included here. In consultations, even where the course was highly theoretical in nature Faculties had an expectation that their graduates would be able to interact with people from diverse backgrounds.</p> <p>In some consultations, there was discussion of whether the wording of the descriptor should incorporate 'leadership'. Most of these discussions concluded that not all graduates would become leaders and that the wording of the Qualities implies that graduates can take on leadership when required.</p>

Appendix 4 – Sample Faculty/Discipline Graduate Qualities

Several Faculties have asked for examples of Graduate Qualities, to help with their own drafting. Links to the work of some other universities in this area are listed below for ideas only, and without recommendation. More are available on university web sites.

All links were current as at current 28 February 2007. See the online version of these Guidelines to be published at <http://www.uow.edu.au/about/teaching/qualities/> for clickable links to these pages.

Arts

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Arts>

English Literatures, Philosophy and Languages

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/honours/languages.asp>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/drafts/englishdraft06.asp>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/drafts/philosophydraft06.asp>

History and Politics

http://www.arts.adelaide.edu.au/faculty/programs/ug/dprograms/graduate_attributes_inst_250505.pdf

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/drafts/historydraft06.asp>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/drafts/politicsdraft06.asp>

Social Sciences, Media and Communication

http://www.arts.adelaide.edu.au/faculty/programs/ug/dprograms/graduate_attributes_bmedia_250505.pdf

http://www.mopp.qut.edu.au/C/C_01_04.html

<http://www.ug.edu.au/sjc/index.html?page=8530&pid=0>

<http://mams.rmit.edu.au/tir4fhus1z97.pdf>

<http://mams.rmit.edu.au/fmor281p0097.pdf>

<http://www.waikato.ac.nz/wfass/qualifications/bsocsc/profile.shtml>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/honours/communications.asp>

Commerce

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Economics%20and%20Business>

http://www.adelaide.edu.au/professions/gradattributes/comm_bcom.pdf

<http://www.ecom.unimelb.edu.au/future/ugrad/ugattributes.html>

<http://www.docs.fce.unsw.edu.au/fce/EDU/part3.pdf>

http://www.lts.rmit.edu.au/renewal/gradcap/bach_commerce_capabilities.doc

Accounting and Finance

http://www.adelaide.edu.au/professions/gradattributes/comm_mcom_acc.pdf

http://www.adelaide.edu.au/professions/gradattributes/comm_bfin.pdf

http://www.adelaide.edu.au/professions/gradattributes/comm_maf.pdf

<http://mams.rmit.edu.au/f6q7dkes7r18.pdf>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/drafts/accountingdraft06.asp>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/honours/accounting.asp>

Economics

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Economics%20and%20Business>

http://www.adelaide.edu.au/professions/gradattributes/eco_beco.pdf

http://www.adelaide.edu.au/professions/gradattributes.html#eco_pg

<http://mams.rmit.edu.au/f6q7dkes7r18.pdf>

<http://www.gaa.ac.uk/academicinfrastructure/benchmark/honours/economics.asp>

Marketing and Management

http://www.adelaide.edu.au/professions/gradattributes/comm_mcom_mktg.pdf

<http://mams.rmit.edu.au/63i210w46ax5z.pdf>

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/business.asp>

Creative Arts

<http://mams.rmit.edu.au/nmjxzv8rr1p9z.pdf>

Art and Design

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Sydney%20College%20of%20the%20Arts>

http://www.arch.adelaide.edu.au/study/postgradattrib_certdip_desst.html

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/artanddesign.asp>

Journalism and Creative Writing

<http://www.uq.edu.au/journ-comm/index.html?page=8531&pid=0>

<http://mams.rmit.edu.au/tir4fhus1z97.pdf>

<http://www.waikato.ac.nz/wfass/qualifications/bcs/profile.shtml>

Music and Drama

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Sydney%20Conservatorium%20of%20Music>

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/music.asp>

Education

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Education%20and%20Social%20Work>

http://www.adelaide.edu.au/clpd/Ita/attributes/GradAttribContinuum_060809.pdf

http://www.adelaide.edu.au/professions/gradattributes/edu_gdedu.pdf

http://www.adelaide.edu.au/professions/gradattributes/edu_medstud.pdf

http://www.education.qut.edu.au/documents/sao/BEd_EPA_Feb_2006.pdf

<http://www.unimelb.edu.au/abp/policies/advanced-diploma.pdf>

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/educationstudies.asp>

Engineering

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Engineering>

http://www.ecms.adelaide.edu.au/civeng/grad_attributes.html

<http://www.chemeng.adelaide.edu.au/current/ug/grads/>

<http://www.ltu.unsw.edu.au/content/userDocs/GradAttrEng.pdf>

<http://www.eng.uts.edu.au/CurrentStudents/undergraduate/ExtCrs.htm#GradAtts>

http://www.mech.uq.edu.au/corrosion/16icc_GA_P-26-15.pdf

<http://mams.rmit.edu.au/3vdiakes7r18.pdf>

<http://mams.rmit.edu.au/7n7wbkes7r18.pdf>

<http://mams.rmit.edu.au/54dgoxh87sl8.pdf>

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/engineering06.asp>

Physics

<http://mams.rmit.edu.au/3my2uvtk6pr9z.pdf>

<http://mams.rmit.edu.au/ani8c30ptymtz.pdf>

http://www.ic.ac.uk/physics/courses/uq/prog_specs/bsc_spec.pdf

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/physics.asp>

http://www.iop.org/Membership/Policies_and_Procedures/file_21676.pdf

Graduate School of Business

http://www.adelaide.edu.au/professions/gradattributes/agsb_mba_ccmgmt_gdba.pdf

<http://mams.rmit.edu.au/rh31in2cfl09z.pdf>

Health and Behavioural Sciences

Nursing

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Nursing>
http://www.adelaide.edu.au/clpd/Ita/attributes/GDNS_A&R_gradAttributes_colour_061026.pdf
<http://mams.rmit.edu.au/ctpiqr3p6gsy.pdf>
<http://mams.rmit.edu.au/8zb1bial5isy.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/scottish/nursing.asp>

Health Sciences

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Health%20Sciences>
<http://www.unimelb.edu.au/HB/facs/SCI-S13227.html>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/healthstudies.asp>

Medicine

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Medicine>
http://www.ltu.unsw.edu.au/content/course_prog_support/faculty_grad_atts.cfm?ss=0
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/medicine.asp>

Psychology

<http://www.bacs.uq.edu.au/CurriculumReview/psych%20for%20BSc.doc>
<http://www.uq.edu.au/careers/index.html?page=34001&pid=0>
<http://mams.rmit.edu.au/mgbz8d2igt1.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/psychology.asp>

Informatics

Electrical, Computer and Telecommunications Engineering

<http://courses.swinburne.edu.au/Courses/ViewCourse.aspx?id=8004>
<http://mams.rmit.edu.au/3yebghus1z97.pdf>
<http://mams.rmit.edu.au/jrt8561x4bpqz.pdf>
<http://mams.rmit.edu.au/oetjs6pwb2sk1.pdf>

Information Systems

http://www.commerce.adelaide.edu.au/current/ug/professional/bbit_gradattributes.pdf
http://www.adelaide.edu.au/professions/gradattributes/comm_bbit.pdf
<http://www.unimelb.edu.au/HB/2003/facs/SCI-S11815.html>

Information Technology and Computer Science

<http://mams.rmit.edu.au/md2bmmvlhrxt1.pdf>
<http://mams.rmit.edu.au/p3vv99s5iqxt1.pdf>
<http://mams.rmit.edu.au/2pr40wopixt1.pdf>
<http://mams.rmit.edu.au/n8evbd2igt1.pdf>
<http://mams.rmit.edu.au/u47nxvopixt1.pdf>
http://www.informaticsgroup.com/programmes/bachelor/bachelor_usq_IT_231104.htm
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/computing.asp>

Mathematics and Applied Statistics

http://www.maths.adelaide.edu.au/math/grad_atts.html
<http://mams.rmit.edu.au/6dvb5yc0hs19z.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/mathematics.asp>

Law

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Law>
<http://www.law.adelaide.edu.au/degrees/attributes.html>
http://www.adelaide.edu.au/professions/gradattributes/law_mblaw_mlaws.pdf

http://www.waikato.ac.nz/law/info/grad_profiles/gp_llb.shtml
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/law.asp>

Science

<http://www.nettl.usyd.edu.au/GraduateAttributes/facultyGA.cfm?faculty=Science>
http://www.sciences.adelaide.edu.au/programs/program_information/graduate_attributes.html
<http://www.science.unsw.edu.au/guide/slatig/sciga.html>
http://www.lts.rmit.edu.au/renewal/gradcap/applied_science_descriptors.doc
<http://mams.rmit.edu.au/1zmoa30ptymtz.pdf>
<http://www.bacs.uq.edu.au/CurriculumReview/UOGraduate%20Attributes210502.pdf>
<http://science.uniserve.edu.au/projects/skills/index.html>
<http://www.unimelb.edu.au/HB/facs/SCI-S12793.html>

Biological Sciences

<http://mams.rmit.edu.au/81ko41m9xymtz.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/biosciences.asp>

Chemistry

<http://mams.rmit.edu.au/5r1pyvtk6pr9z.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/chemistry.asp>

Earth and Environmental Sciences

<http://mams.rmit.edu.au/7mu0gmjgtwja.pdf>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/EarthSciences.asp>

Double degrees (various disciplines)

http://www.adelaide.edu.au/professions/gradattributes/edu_bteach.pdf
<http://mams.rmit.edu.au/plc2qsa48llqz.pdf>
<http://www.unimelb.edu.au/HB/facs/SCI-S11807.html>
<http://www.unimelb.edu.au/HB/facs/SCI-S11832.html>

Research students (Faculty specific)

http://www.adelaide.edu.au/professions/gradattributes/agsb_dba.pdf

Foundation courses (various disciplines)

<http://mams.rmit.edu.au/4r1igr7ubl9i.pdf>
<http://mams.rmit.edu.au/trmvxtla8l9i.pdf>
<http://mams.rmit.edu.au/zewqm6sxdrdp.pdf>

Collections (links to many of the above and additional examples)

<http://www.itl.usyd.edu.au/GraduateAttributes/interpretations.cfm>
<http://www.adelaide.edu.au/professions/gradattributes.html>
http://www.ltu.unsw.edu.au/content/course_prog_support/faculty_grad_atts.cfm?ss=0
<http://www.lts.rmit.edu.au/renewal/gradcap/gradcap4.htm>
<http://www.rmit.edu.au/browse;ID=n14jse03a1n9>
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/>

Appendix 5 – Example of a build-up approach to Graduate Qualities

Example: UOW Graduate School of Medicine

The Graduate School of Medicine has an approach whereby Learning Outcomes are developed that apply across the entire course, with increasing levels of understanding and ability required as students progress. These levels are adapted from “Miller’s Triangle” (1990) and are reflected in the nature of the assessment tasks and the standards that students must reach:

1. the acquisition of knowledge and/or skills or attributes (*knows*)
2. understanding of how the knowledge and/or skills or attributes may be applied (*knows how*)
3. demonstrated ability to apply the knowledge and/or skills or attributes (may be in a laboratory or clinical simulation) (*shows how*)
4. demonstrated ability to apply the knowledge and/or skills or attributes in a real clinical practice environment (*does*)
5. demonstrated performance (effective application) of the knowledge and/or skills or attributes in a clinical practice environment (*does effectively*)

Source: MBBS Schedule of Learning Outcomes

Further reading on build-up approaches

Several well-known educational theories suggest that learning/learning objectives can be arranged in a hierarchy (from simple to complex) and/or offer other classifications of the process of learning.

These models provide further possibilities for examining how students can gradually build their Graduate Qualities.

Articles that explore these ideas include:

Alan Holzl (2000), *How do we Assess Graduate Attributes?* 2000 Effective Teaching and Learning at University Conference,

http://www.tedi.uq.edu.au/conferences/teach_conference00/papers/holzl-2.html,

downloaded 15 March 2007.

Several practical examples and related articles have been developed by John Willison et al, University of Adelaide. See for example

http://www.adelaide.edu.au/clpd/Ita/attributes/GDNS_A&R_gradAttributes_colour_061026.pdf and

http://www.adelaide.edu.au/clpd/Ita/attributes/GradAttribContinuum_060809.pdf

Appendix 6 – Further reading

Numerous papers and web sites exist on Graduate Qualities/Attributes. These resources have been selected as helpful:

University of Queensland, *Mapping and embedding graduate attributes: A process to trigger discussion and action for the review, mapping and embedding of graduate attributes within programs and courses*, downloaded 2 April 2007,
<http://www.tedi.uq.edu.au/Teaching/GradAttributes/index.html>

J Bowden, G Hart, B King, K Trigwell and O Watts (2000), *Generic Capabilities of ATN University Graduates*, Teaching and Learning Committee Australian Technology Network, downloaded 5 April 2007,
<http://www.clt.uts.edu.au/ATN.grad.cap.project.index.html>

D Bath, C Smith, S Stein and R Swann (2004), 'Beyond Mapping and Embedding Graduate Attributes: Bringing Together Quality Assurance and Action Learning to Create a Validated and Living Curriculum', *Higher Education Research & Development*, vol 23 no 3, August 2004, pp 313-27.

UNSW Learning and Teaching Unit (2006), *What is Curriculum Mapping?*, University of New South Wales, Sydney,
http://www.ltu.unsw.edu.au/content/course_prog_support/whatmap_grad_atts.cfm, accessed April 2007.