



MACQUARIE
UNIVERSITY

FACULTY OF
BUSINESS AND ECONOMICS



HOW TO ALIGN ASSESSMENT

Learning through a program approach

Contents

Introduction	1
1. Assessment in classes	4
2. Assessment in units	8
3. Assessment of programs	17
4. Assessment for accreditation	21
Glossary	22
Tables	
Learning and teaching activities	5
Assessment types	9
Standards of achievement	12
BBA Draft Program Goals and Objectives	19

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Introduction

Whatever happens in each class will contribute to student learning and so will form part of a student's journey to success in a unit and ultimately in a whole program. It is important to see the learning and teaching in every class as part of a bigger picture that leads to an accredited qualification, as well as serving the wider purpose of contributing to the personal development of the student and indeed to the overall growth of social and economic capital.

Assessment drives what students learn. It controls their approach to learning by directing them to take either a surface approach or a deep approach to learning¹. The types of tasks that we set show students what we value and how we expect them to direct their time. In this guide we go beyond the tasks set in a unit to take a "whole of program" approach to designing and aligning assessment. For a unit convenor this means you are responsible for a small but significant part of the students' progress towards their achievement of program goals – you don't have to teach everything in the one unit.

Within a university setting, assessment is critical to the success of the student learning journey and it serves the following functions:

1. To provide feedback on learning to both the student and lecturer during the learning process
2. To grade a student's knowledge, skills and attributes against a standard
3. To guide future student learning and program development
4. To provide assurance of learning for the achievement of program goals
5. To ensure that government and professional accreditation standards are met.

This guide has been designed to provide information and resources that will support the development and implementation of assessment and feedback practices at Macquarie University. To assist in structuring and sharing this information we look at assessment at four levels – from classes through to accreditation – and explore the ways it is possible to promote effective learning and high quality outcomes for students at each of those levels.

Terminology

Program aim and program goals are specific for each program

Program objectives describe measurable attributes of **program goals**

Program objectives are translated into **unit learning outcomes**

Assessment tasks measure the achievement of **learning outcomes** to a standard

Learning and teaching activities contribute to the learning of the unit **learning outcomes**

(There is a glossary of assessment terminology at the end of this guide.)

¹ Ramsden, P. (1992) *Learning to teach in higher education*. London: Routledge.

Roles

Clarity with regard to the roles and responsibilities of how assessment practices are managed can help to make successful learning possible. The following table briefly outlines the roles of the classroom teacher, unit convenor, program coordinator and accreditation coordinator as they relate to assessment practice.

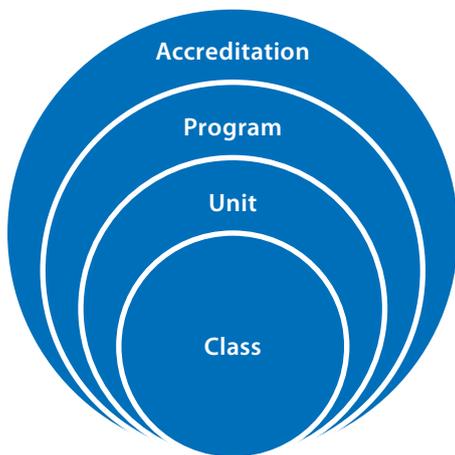
Alignment between roles²

AREAS OF ACTIVITY	CLASS TEACHER	UNIT CONVENOR	PROGRAM COORDINATOR	ACCREDITATION COORDINATOR
Assessment and giving feedback to learners	<ul style="list-style-type: none"> Use a range of learning and teaching activities Provide effective and timely feedback to individuals Provide opportunities for reflection on learning 	<ul style="list-style-type: none"> Design effective assessment tasks Ensure a range of assessment tasks Ensure integrity of the assessment process Provide clear instructions and marking criteria Moderate between markers Make changes to unit based on feedback Adhere to university assessment policy 	<ul style="list-style-type: none"> Set program goals and objectives in consultation with stakeholders Ensure program goals are addressed across core units Coordinate the setting and alignment of unit learning outcomes over the program Ensure appropriate variety of assessment across the program Calibrate levels of difficulty between units Implement current assessment practices Balance assessment tasks across units 	<ul style="list-style-type: none"> Ensure program goals meet government and external requirements for the level of qualification Report on the attainment of the goals Make improvements based on data

² Adapted from the Professional development framework in Brown, N., Bower, M., Skalicky, J., Wood, L., Donovan, D., Loch, B., Bloom, W. & Joshi, N. (2010) A professional development framework for teaching in higher education. In M. Devlin, J. Nagy & A. Lichtenberg (Eds.) *Research and development in higher education: Reshaping higher education*, 33, Melbourne, 6–9 July, 2010 (pp. 133–143). Available at http://www.herdsa.org.au/wp-content/uploads/conference/2010/papers/HERDSA2010_Brown_N.pdf

Aspects of the different responsibilities for assessment within each role overlap and link together, so it is important that all involved have a common understanding of each role. A shared understanding will help to promote and maintain continuity and alignment in assessment. Increasingly the role of program leader is of paramount importance in assessment, because they have an overview of practice from which they are best placed to monitor and direct actions that support both staff and student learning. The diagram below illustrates the way that the different roles and responsibilities are part of the whole assessment process.

Relationship between assessment at different levels



Learning outcomes of this guide

We have divided the guide into sections based on these different levels, that is, classes, units, programs and accreditation. Within each of these are pointers to creating appropriate assessment tasks and goals, so that at the end of this guide you will be able to:

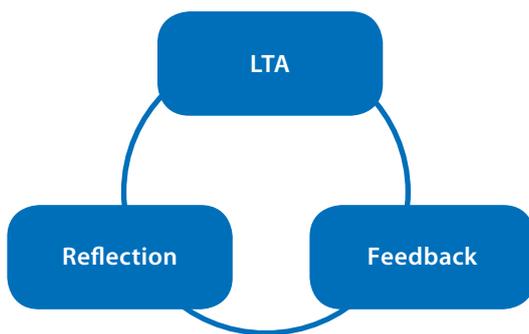
- Plan assessment tasks to align with the learning outcomes of units (Section 1 and 2)
- Reflect on and document the outcomes of the assessment and feedback in your class/unit (Section 1 and 2)
- Provide effective and efficient feedback to students (Section 1 and 2)
- Design a rubric or marking guide to document the standards achieved (Section 2)
- Align learning outcomes to assessment criteria and standards (Section 2)
- Understand the importance of program goals (Section 3)
- Understand how learning outcomes for units align with achievement of program goals and how these will be measured (Section 3)
- Understand the role and importance of external accreditation (Section 4).

We have also included a glossary of terms used in assessment practice at the end of the guide.

1. Assessment in CLASSES

Learning and teaching activities contribute to the learning of the unit learning outcomes

In this section we look at assessment and feedback as a cycle. Here the assessment is informal and self-directed, and it is not graded. This kind of assessment is called “formative assessment”, and it refers to the feedback loop between the student and a learning and teaching activity (LTA):



These activities are not used for assigning marks (that is, summative assessment), but are nonetheless designed to contribute to learning in order to support the learning outcomes for the unit. LTAs assist the teacher to find out how well students have understood a topic (or skill) and for the students themselves to get feedback on their learning.

A simple example of an LTA is a worksheet that has answers or worked solutions. The student works out the answer to the question, looks up the model answer to see if they are correct, and then reflects on why the answer is or is not correct. The reflection step is essential for both the lecturer and student. For lecturers, reflection about the student answers helps improve their teaching effectiveness by developing a better understanding of why students respond in certain ways. For students, reflection will help improve retention of what has been taught and better develop knowledge and skills.

There is always a choice of learning and teaching activities to guide students on their way to achievement of learning outcomes. Finding and designing learning and teaching activities is creative and stimulating – and a whole book in itself. Activities which are *authentic*, that mirror professional and research practice³, are the most successful in leading students to the program goals.

³ See also the *guide on Research enhanced learning and teaching*, available at http://staff.mq.edu.au/teaching/teaching_development/business_and_economics_teaching_resources/

Learning and teaching activities

Lectures

Lectures are oral presentations intended to present information or teach people about a particular subject. Lectures can be delivered online or through a variety of media.

Tutorials

Tutorials are classes in which a tutor facilitates interactive learning with a small group of students.

Seminars

Seminars are where a small group of students engage in advanced study and/or original research facilitated by a Faculty member. The exchange of information through active discussion is an important part of seminars.

Case studies

Case studies provide students with an opportunity to apply their knowledge to real or simulated scenarios in individual or group situations. They are aimed at developing critical thinking, analytic and problem solving skills.

Simulations

Simulations are modelled on real-life situations and provide learning experiences that promote integration of knowledge, skills and critical thinking. They assist students with the application of theory to practice and encourage creative thinking. By reflecting the complexities of the workplace, simulations facilitate flexibility and transferability of learning. As with project work, simulations which involve group work facilitate the development of teamwork skills.

Project work

Student project work may be independent or involve group learning. Projects assist students in developing more in-depth knowledge and skills in conducting research, communication, and in planning, organisation and time management. Project work may take the form of team simulations, group activities or other specified formats.

Readings

Students are provided with reading lists of textbooks, journals, websites and other relevant reading materials related to the unit. Students will

be required to critically read in order to further develop concepts and ideas referred to in the unit. Reading materials may also be used in tutorials and assessment tasks.

Reflective activities

Reflective activities assist students in integrating the course content and in developing the ability to transfer knowledge and skills from the learning environment into the workplace. Reflective activities facilitate the development of communication skills and an orientation to lifelong learning.

Self-study activities

In order to receive feedback on their performance and understanding of concepts and applications, resources can be made available to provide them with formative feedback on their capability and understanding of the subject. These may be in the form of questions with worked solutions, online quizzes, and textbook questions and answers.

Ensemble or individual performance or production

Students work individually or in a group to practice for a performance or production. This includes studio work to prepare creative output.

Discussion forum

Students use discussion forums for both formative and summative assessment, as well as general discussion and support. Within a unit, students may be required to submit responses to a given piece of work, and/or to lead and participate in a set discussion forum topic which will count towards their overall grade/mark. They may also use the forum to request information or support.

Lecturer support/tutor support

Students have access to a lecturer or tutor for one-on-one assistance/consultation when they have particular queries relating to unit content. This consultation may be in the form of a face-to-face meeting, phone call, chat session or via a discussion forum.

Feedback

As a teacher, your role is to establish the conditions that support student learning. Remember it is the students who are doing the learning, and through your interactions with them you can make a huge difference to how quickly and effectively they will achieve a unit's learning outcomes. Think carefully about the amount and type of feedback that you will give – students need to make mistakes and puzzle over deep problems.

Students often feel that they don't get enough feedback, while teachers may be frustrated that the feedback they give seems to have little effect. One thing to consider is the type, rather than just the quantity, of the feedback. In the literature, it is emphasised that to be effective (and heeded) feedback must more than an explanation or justification of a mark⁴. Hattie and Timperley⁵ state that effective feedback answers three questions:

- Where am I going? (Feed Up)
- How am I going? (Feed Back)
- Where to next? (Feed Forward)

The literature also shows that feedback must be given quickly. Formative feedback on draft reports or progress towards a summative task assists learners to improve their outcomes. Building feedback into your classes rather than relying on feedback only when the assessment is graded means that students receive direction more quickly.

Hints

- Give feedback often – not just on graded work
- Be explicit when giving feedback – say “and now I will provide some feedback on ...”
- Vary the type of feedback – written, oral, online
- Use technology – clickers in class, online discussion
- Use silly things like thumbs up or down to check understanding
- Ensure a mix of individual and group feedback
- Encourage peer and self-feedback – this takes the pressure off you and develops key skills of critical awareness
- See the companion “How to ...” guide on feedback⁶
- The Australian Mathematical Association has produced a module on assessment⁷ with many handy hints.

4 Knight, P. (2006) The local practices of assessment. *Assessment & Evaluation in Higher Education*, 31(4), 435-452.

5 Hattie, J. & Timperley, H. (2007) The power of feedback. *Review of Educational Research*, 77, 81-112.

6 *How to give quality feedback – Learning through dialogue*, available at http://staff.mq.edu.au/teaching/teaching_development/business_and_economics_teaching_resources/

7 See <http://www.austms.org.au/M6+-Assessing+students+in+classes>

Reflection

Opportunities for reflection are an integral part of the assessment cycle.

For a student, the ability to reflect on content, their experiences and their own learning is a critical skill on their journey to becoming a professional. Reflective practice is the capacity to think back on what you have done in order to consolidate what you have learnt and to make changes as necessary. It is one of the keys to becoming a graduate, to becoming a professional. Reflection is where you think deeply about your experience and your learning and make connections with the knowledge, skills and professional practice of your discipline⁸.

As teachers, we also reflect on how students have engaged with the content, on how better to design our learning and teaching activities, and on how our students react to the learning environment.

And how do we encourage students to reflect on their learning? We can:

1. Ask them. See the example in the box from the “Lucy Mentoring” project.
2. Give them space and time. If your curriculum is crowded with too many small tasks, your students will not have the space to reflect.
3. Do it yourself and discuss your thoughts with them. Talk about how you reflect on your research and working in your discipline. Also talk to students about how you have made changes to your learning and teaching activities based on their feedback.

Example: Student mid-session debrief for “Lucy Mentoring” project

- What are the three most interesting things you have done/learnt so far?
- What are the three most challenging issues you faced so far?
- Do you have any tips for other students on how to cope with such issues?
- What are the three things you think will have the most lasting impact on your career?

For assessment in classes you need:

- learning and teaching activities to stimulate engagement and learning
- feedback to monitor learning
- reflection to deepen and strengthen the learning.

In the next section we will look at assessment in units and expand the assessment cycle to include standards and marking.

⁸ Boud, D., Keogh, R. & Walker, D. (1985) *Reflection, Turning experience into learning*. London: Routledge.

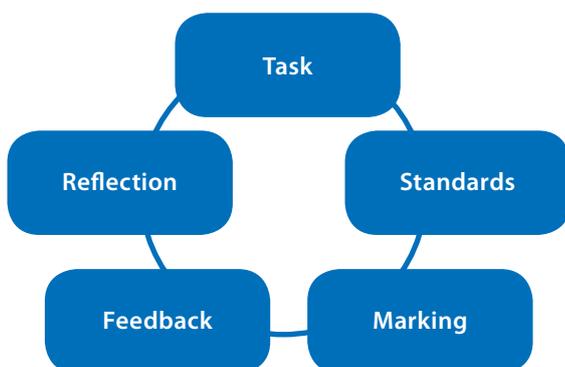
2. Assessment in **UNITS**

Assessment tasks measure the achievement of learning outcomes to a standard

This section introduces two extra elements into the assessment and feedback cycle – standards and marking. In this cycle the tasks are larger and the feedback is more formal. The students' responses are graded against a standard (termed "summative assessment").

In this context, a standard is the level of achievement of a student on the task, for example High Distinction, Distinction, Credit, Pass. It may be signified by a numerical mark or a grade. The standard may be set by an external body, or there may be grade descriptors (see the Macquarie University grading policy⁹). The assessment task is set to allow students to demonstrate achievement of a standard. This can be more important than you may first think: you need to set assessment tasks at an appropriate level that will allow all students to demonstrate their achievement of the required standard.

There is a real art to effective assessment!



9 Available at <http://www.mq.edu.au/policy/docs/grading/policy.html>

10 Anderson, L. W. & Krathwohl, D. R. (Eds.) (2001) *A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

11 Biggs, J. & Collis, K. (1982) *Evaluating the quality of learning: The SOLO taxonomy*. New York: Academic Press.

12 Available at http://staff.mq.edu.au/teaching/teaching_development/business_and_economics_teaching_resources/

Tasks

Let's start with planning assessment tasks. A list of different types of assessment tasks is included in this chapter (see the "Assessment types" list on facing page). Depending on the discipline, other assessment types may be appropriate.

Assessment tasks are designed to measure the achievement of **learning outcomes** to a standard (see the box on page 11 for some hints on learning outcomes). One of the easiest ways to do this is to use a taxonomy: 0a categorisation of types of knowledge or learning, which may be hierarchical. Common examples are Bloom's taxonomy – as modified by Anderson and Krathwohl¹⁰ - and the SOLO taxonomy¹¹. You can align the selected taxonomy with the grading system that you use. Many taxonomies do not include professional attributes and graduate capabilities, so you will need to consider those as well in your planning of learning and teaching activities and assessment tasks. The table of "Standards of achievement" (see "Standards" section) represents a taxonomy which includes three knowledge dimensions linking outcomes to standards; it was derived from authentic student outcomes and links strongly to the SOLO taxonomy.

An interesting exercise is to take one topic and design an assessment task for each category of the taxonomy. Note that the taxonomy does not mean level of difficulty, as you can have a very difficult concept that needs to be remembered or understood; it describes instead different types of learning outcomes.

It is worth bearing in mind that final examinations and other invigilated assessments are high risk for students, as they may have a high weighting of assessment of the learning outcomes. Final examinations, tests and quizzes require more care with setting because students have little opportunity to negotiate meaning. The guide *How to create exams*¹² has detailed advice on this type of assessment.

Assessment types

Assessed coursework

Assessed coursework consists of sets of activities completed and submitted weekly or at other regular intervals. These are designed to build a student's procedural knowledge through the session.

Class participation

Class participation is assessed by a student's engagement in discussions facilitated by the lecturer, contributions to online discussion forums, or general questions asked during lectures or tutorials. Participation is expected to be well considered and relevant to the topic at hand.

Final examination

A final examination is designed to assess a student's body of knowledge and critical thinking skills. Examinations consist of questions requiring written responses. These questions may be in multiple choice formats, or require short answers or short essay responses.

Essay

An essay requires the systematic investigation of a topic and the development of a written argument. Essays assess cognitive and research skills. Essays are expected to develop coherent arguments, be founded on thorough research, and provide insight into the topic area.

Class test

A class test is a time-limited invigilated assessment held in class that is designed to assess a student's knowledge, skills or capabilities. It requires students to respond to one or more questions.

Quiz

A quiz is an online assessment designed to assess a student's knowledge, skills or capabilities, and typically consists of a short series of questions requiring brief responses.

Presentation

Presentations may be conducted by either an individual or a group. They involve the oral description of an area of investigation and may utilise presentation technologies or be accompanied by handouts or other supplementary materials. Presentations typically provide the opportunity for the audience to ask questions to which the presenter/s is expected to provide an informative response.

Assignment

An assignment may take a variety of formats ranging from the production of an Excel spreadsheet, the analysis of a mathematical problem or data set, or a brief written response to a topic question. Assignments are typically modest in scope.

Case study/report

A case study or report is a written document outlining the results of a detailed analysis of a situation using empirical data and research. Case studies and reports are used to assess critical thinking, analytical and research skills.

Creative production

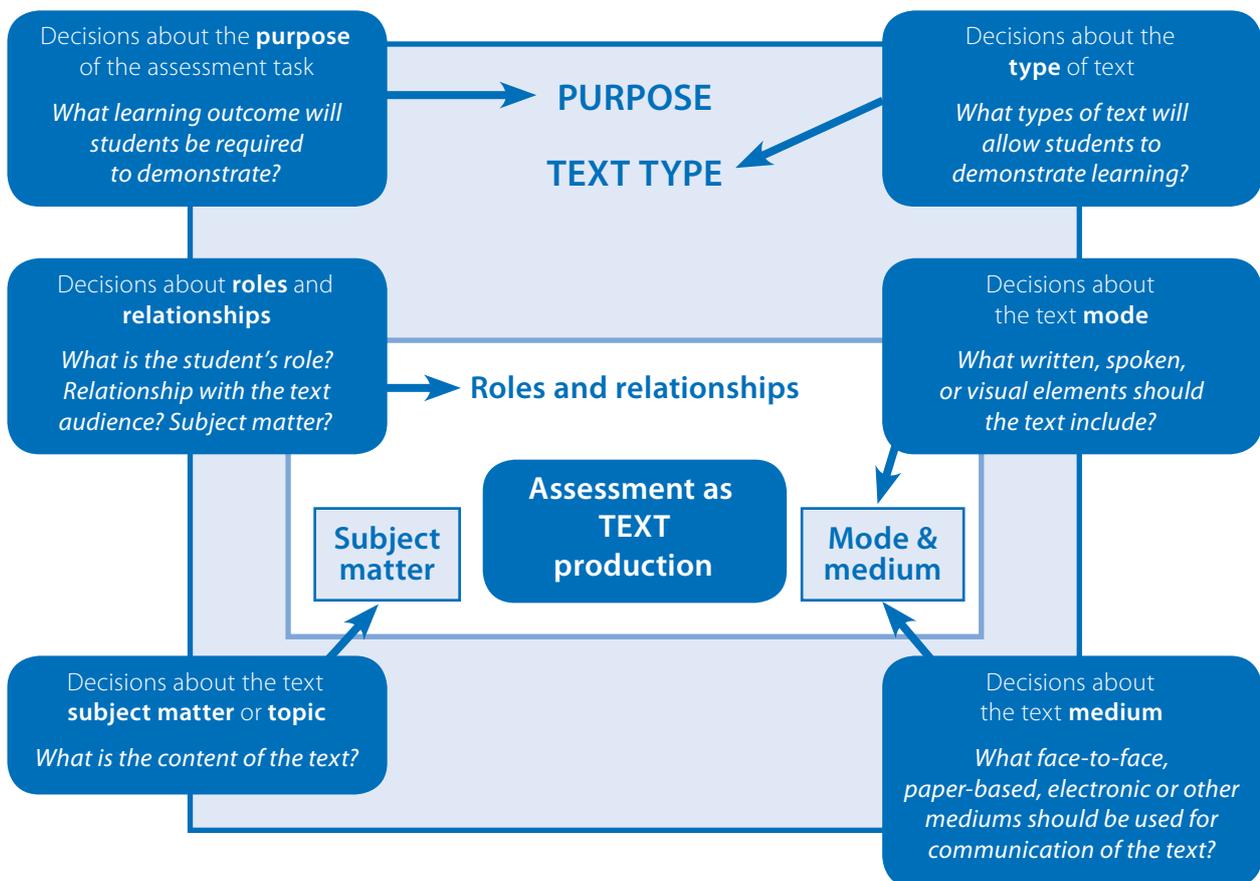
Creative production is a major assignment where the output is a creative product, such as a short story, film, advertisement and/or website.

Task design framework

Designing assessment tasks presents many choices for how to manipulate the elements of the task.

Here is a framework¹³ to help you to create tasks. It uses systemic functional linguistics to show the elements of an assessment task, and the decisions you can make in the design. Note that here text is used in a broad sense to include any product, written or spoken, such as an article, a transcript of an interview, visual images, graphical and symbolic notation¹⁴.

Assessment task design framework



13 Adapted from Hughes, C. (2009) Assessment as text production: Drawing on systemic functional linguistics to frame the design and analysis of assessment tasks. *Assessment & Evaluation in Higher Education*, 34(5), 553-563.

14 Fairclough, N. (1992) *Discourse and social change*. Cambridge: Polity.

Inclusive practice

There are several ways to assess the same learning outcome, and so it may be necessary to modify assessment tasks to accommodate the needs of students from different backgrounds or with disabilities. The guide on *How to teach with inclusive practice* describes ways to accommodate these students (available at http://staff.mq.edu.au/teaching/teaching_development/business_and_economics_teaching_resources/).

Standards

Standards may be stated in terms of a grading policy. At Macquarie University the grading policy is at Policy Central¹⁵, but the policy is general and will need to be interpreted for your program and unit. It is not sufficient to state that a mark of 85-100 will be awarded a High Distinction – you need to identify to yourself, your students and possibly an external review panel what your standards are for each program, unit and task. Also include a description that does *not* meet the required level – the line between meeting and not meeting the learning outcomes is hard to judge, but a description of the boundary can be very helpful for students as they prepare their answers and for markers as they judge student responses.

Standards are moderated across programs; therefore for a first year unit you would expect a majority of students to be just developing their skills, while in a third year unit you would expect more students to demonstrate high level learning outcomes. Nevertheless, studies show that students demonstrate the full range of outcomes in first year – the aim is for each student to improve over their program.

There are several examples of descriptors of standards and numerous projects are currently focused on better ways to write standards. One useful way is to combine the items in the list of “types of knowledge” with those in the table of “Standards of achievement” to describe the standards. That is, when assessing the level of achievement in each area you can divide the requisite knowledge into conceptual, procedural, and professional (see the definitions below), and then apply the “Standards of achievement” shown in the table. These standards have been tested with students and have been used to develop successful rubrics for marking.

The types of knowledge can be defined as:

- **Conceptual** Domain-specific and/or skill-specific conceptual knowledge – “knowing that” (i.e. concepts, facts, propositions: surface to deep)
- **Procedural** Domain-specific and/or skills specific procedural knowledge – “knowing how” (i.e. specific to strategic procedures)
- **Professional** Professional knowledge – “knowing for” (i.e. values, attitudes) related to practice and including graduate capabilities.¹⁶

Learning outcomes

- Learning outcomes must be measurable
- All learning outcomes must be assessed
- Three to six learning outcomes per unit is sufficient
- Learning outcomes look forward to how the outcome will be assessed
- Learning outcomes indicate a level (e.g. basic, fundamental, introduction, routine, complex, integrated, broad, focused)
- Learning outcomes indicate a personal responsibility (e.g. independent, under supervision)
- Learning outcomes indicate a perspective (e.g. social, ethical, economic).

Example of a learning outcome

Demonstrate broad awareness of social, ethical and sustainability issues affecting accounting and the role of accountants in local and international case studies.

What will be assessed: awareness of social, ethical and sustainability issues

How it will be assessed: demonstrate (there are many ways to show this outcome)

Context: local and international

Level: broad

Perspective: accounting and the role of accountants.

15 See <http://www.mq.edu.au/policy/docs/grading/policy.html>

16 Wood, L. N., Thomas, T. & Rigby, B. (2011) Assessment and standards for graduate outcomes. *Asian Social Science*, 7(4), 12-17.

Standards of achievement¹⁷

	CONCEPTUAL	PROCEDURAL	PROFESSIONAL
HD	The concept is linked and integrated with other concepts, resulting in a new pattern of understanding. The depth and breadth of the concept is understood in such a way that the individual is inspired to re-organise other concepts, and motivated to make creative and innovative applications.	Demonstrate the capacity to create/develop new valid procedures. Rules are applied in novel ways, or new rules are derived from deep understanding.	Demonstrates a strategic view to enable innovative outcomes in complex situations.
D	The understanding of a concept is broadened, appreciated from different angles, and this elaboration is reflected in the ability to consider the concept in other contexts and from different perspectives.	Demonstrates the ability to select appropriate procedures in a given context. Procedures no longer need to be given.	Demonstrates the ability to adapt to new environments.
C	Some personal meaning has been extracted and their understanding reflects this internalised view. The concept has become a part of their knowledge. Nevertheless, the concept remains narrow and shallow and relatively disconnected from other concepts.	Demonstrates the ability to apply given rules and procedures in a variety of contexts and to novel problems.	Can evaluate a professional situation and identify key issues.
P	Demonstrates the ability to describe and define the basic concepts of the skill, subject matter, and/or knowledge domain, but has not demonstrated an ability to be able to elaborate or reflect on the meaning of the concept(s).	Demonstrates knowledge of the rules and can practice the rules of a given procedure and/or skill.	Demonstrates a basic understanding of processes and functions but basic understanding of the significance of these in professional practice.
F	Demonstrates inability to describe and define the basic concepts of the skill, subject matter, and/or knowledge domain.	Demonstrates no knowledge of the rules and is not able to practice the rules of a given procedure and/or skill.	Demonstrates no understanding of processes and functions or the significance of these in professional practice.

Added depth and knowledge are required as a student moves through a degree, but the levels described in “Standards of achievement” can be applied to all units. Some units or tasks may emphasise conceptual knowledge, others procedural or professional knowledge. Not all units will cover the three types of knowledge; however, over a program all three areas should be covered.

¹⁷ See also www.graduateskills.edu.au

Marking

To ensure consistency, it is important that marking is valid and reliable. There are several considerations to bear in mind when you are designing questions and planning the practicalities of marking:

1. Design the questions well so that they assess the learning outcomes
2. Design the questions with an eye to efficient and reliable marking
3. Design a marking guide to assist with the consistent marking of tasks. Often a marking guide will be in the form of a rubric, and it can be given to the students before they do the task in order to guide their responses
4. Allow sufficient time for marking so that markers are not pressured and have time for checking
5. If you have a team of markers, then run a preliminary meeting for them, showing them how to interpret the marking scheme for real student answers. This is even more powerful if they actually all mark the same answer at the meeting, and then you all discuss it. This can be particularly effective for conveying to markers how you want open-ended questions to be judged for criteria like writing and reasoning (and not just “the answer”)
6. Have the same marker mark the whole cohort for one question/assignment. This has the added advantage of the capacity to identify plagiarism in the cohort
7. Double mark or check mark. For some disciplines it is common for student answers to be marked by two markers independently (double marked) and then the marks averaged; or if there is a large discrepancy, the papers can be marked by another marker. This is similar to refereeing articles for publication. For a new academic, double marking by a mentor or senior colleague can be very helpful. Check marking is when a second marker (generally the unit convenor) takes a sample to review the standard and consistency of the marking

8. As a marker, be prepared for unusual answers as these may be from the better students; confer with others if you are unsure about matching the answer to the marking guide
9. Externally or internally moderate assessment. Moderation is a quality review and assurance process which supports the examination setting and marking activities. It involves consulting other academics and qualified staff to confirm that the examination tasks and marking are valid and reliable. Essentially, it is a checking process. It should also include a check that the assessment task tests the learning outcomes. If you want to know more about moderation, the University of South Australia has produced a useful resource¹⁸.

Hints

- Only assess learning outcomes
- Don't assess everything you teach – consider using learning and teaching activities as well
- Assessment of a learning outcome or graduate capability should have a significant weighting (recommend minimum 20% of the final mark); therefore, you cannot assess too many outcomes or graduate capabilities. This also means that students will realise the learning outcome is an important and significant part of their learning
- Only outcomes that have corresponding learning and teaching activities can be assessed, though these may be attained in a prerequisite unit.

¹⁸ University of South Australia (n. d.) *Assessment moderation toolkit*. Available at <http://resource.unisa.edu.au/course/view.php?id=285>

Marking using a rubric

A marking rubric helps you to communicate the standards of the assessment task to students and markers. You define the standards for the different graduate capabilities and learning outcomes that you wish to assess. For instance, using the example for BBA102 in the table, we can calculate the overall mark for a student by breaking down an assessment task into separately assessed criteria, each of which is assigned a unique weighting; a final mark can be calculated by multiplying the weighting by the grade for each component.

Rubrics are designed by applying the standards to the learning outcomes assessed in the task.

Marking rubric BBA102

%	LEARNING OUTCOME	FAIL	PASS	CREDIT	DISTINCTION	HIGH DISTINCTION
25%	Knowledge and understanding of the selected industry, position and competencies	Demonstrates little or no knowledge of the selected industry, position and competencies as a result of the research	Demonstrates a basic knowledge of the selected industry, position and competencies as a result of the research	Demonstrates a good knowledge of the selected industry, position and competencies as a result of the research	Demonstrates a detailed knowledge of the selected industry, position and competencies as a result of the research	Demonstrates a sophisticated knowledge and understanding of the selected industry, position and competencies as a result of the research
25%	Demonstrated critical analytical skills and integrative thinking	No evidence of assessment of research findings and no application to personal career choices and career decisions	Some evidence of assessment of research findings and application to personal career choices and decisions	Good assessment of research findings and application to personal career choices and decisions	Solid assessment of research findings and application to personal career choices and decisions	Methodically assesses research findings and applies it to personal career choices and career decisions
25%	Problem solving	Little attention paid to presentation of career planning document and demonstrated linkage between goals/objectives and the information researched	Some attention paid to presentation of career planning document and demonstrated linkage between goals/objectives and the information researched	Presents a structured career planning document that demonstrates a linkage between goals/objectives and the information researched	Presents a logical career planning document that demonstrates a linkage between goals/objectives and the information researched	Presents a well-structured and formatted career planning document that demonstrates a clear linkage between career goals/objectives and the information researched
25%	Effective communication, creative and innovative thought	Delivered a below average presentation of a prioritised list of graduate capabilities relevant to the industries selected. Little demonstration of involvement from all team members	Delivered an adequate presentation of a prioritised list of graduate capabilities relevant to the industries selected, involving all team members	Delivered a presentation of a prioritised list of graduate capabilities relevant to the industries selected, involving all team members	Delivered an informative presentation of a prioritised list of graduate capabilities relevant to the industries selected, involving all team members	Delivered a well-structured presentation of a prioritised list of graduate capabilities relevant to the industries selected, involving all team members

Feedback

Feedback to students following an assessment task is critical as it points the way to achieving the learning outcomes. Summative assessment in particular is high stakes so careful feedback is needed. The previous hints apply (see Section 1), such as getting feedback to students quickly; however, there are a few other important elements.

Students can find it difficult to see the difference between answers which received different grades – different standards of answers. Many students may never have seen a High Distinction answer and so do not understand what is required to improve their responses. One very useful way to give examples is to post student answers on the iLearn site. These can be annotated by the marker, showing the good elements of the answer and where it could have been improved. Of course, you need to have permission from students to post their answers but most will be happy for you to do this.

Students should receive individual feedback for summative assessment tasks about how to improve in relation to the learning outcomes. A marking rubric with a short individual comment is an efficient and effective way to give feedback; pick two or three main practical areas that the student can work on.

Students at risk of not meeting the required standards can be advised to attend learning support activities. Students may also have an adverse emotional response if they believe that they have not achieved as well as they expected¹⁹ and can be referred to Student Wellbeing.

Reflection

In this part we expand on the reflective activities from Section 1 to include reflection as an assessment task or part of an assessment task. For example, many of the Participation and Community Engagement (PACE) units have reflection as a significant part of the assessment, in the form of students being required to describe how they will integrate their experiences in the participation activity with their formal university learning.

While it is more obvious that this needs to be done as part of the PACE experience, all units benefit from reflection as part of assessment. Here are a couple of examples; one is about reflecting on working as a team as part of an assignment, and the other is an examination question.

¹⁹ Rowe, A. (2011) The personal dimension in teaching: Why students value feedback. *International Journal of Educational Management*, 25(4), 343 – 360.

Example: Reflection on working as a team (assignment)

- How did your team usually work together? Please give some specific examples.
- What was your particular role (or roles) for the project?
- What did you feel were the best aspects of your project?
- What problems did you face, and how did you address those problems?
- What would you do differently next time you carried out a project of this type?
- In what ways did carrying out this project help you (or not) in your learning for your degree?
- What advice would you give to students in the next [insert unit name] group?
- What advice would you give the lecturer of the next [insert unit name] group?

Example: Reflection on your learning (examination question)

John Shepherd has had many teaching awards and is well known for great student outcomes and a student-centred approach to teaching. Here is his question on reflection for his class:

Context. Course unit: ACST201 – A second year mathematics of finance subject; core for applied finance and some business students (finance stream), and a popular elective with many accounting and some economics students. Enrolment now about 800.

Examination question. The last question (one of six) in the final examination; students should have had about half an hour to answer it:

You receive a letter from one of your close friends who is also a Macquarie University student. Your friend says in the letter:

I'm trying to plan my study program for next year. I'm thinking of enrolling in ACST201 as an elective unit. I know you did this subject this year and it will help me to make up my mind if you can tell me what you learned from ACST201. But don't tell me what the university calendar or the unit outline or the teacher said you were supposed to learn – tell me what you learned in the subject. I don't want to know what someone else said you were supposed to learn, but what you believe you did actually learn.

In 250 to 300 words, write your letter in reply, explaining to your friend what you have learned from ACST201 this year.

How do we reflect on our teaching and our students' learning?

In terms of assessment, reflection completes the cycle for teachers as well as students. It is important to reflect on how successful the assessment tasks have been in giving information on their achievement to the students.

- Do you need to change the learning outcomes?
Note that you may not be able to do this without approval if they are set at degree program level.
- Is there the right mix of tasks?
- Were the assessment tasks well designed?
Did you allow enough time for preparing them?
- Was the workload for you and the students too high?
Too low?
- Did most students reach the minimum standard, and did some students shine?

It is tempting to respond to a problem with student performance by blaming the students or the learning and teaching activities. Consider the assessment tasks as well. For this deliberation to be fruitful, it is important that you engage seriously with the variety of student responses to the questions you have written. You can learn to write better questions, and better marking guides, by reflecting on this experience.

David Boud and colleagues have produced an interesting set of "Propositions for assessment"²⁰ which may be useful in guiding your reflections.

20 Boud, D. and Associates (2010) *Assessment 2020: Seven propositions for assessment reform in higher education*. Sydney: Australian Learning and Teaching Council. Available at http://www.ims.uts.edu.au/assessment-futures/Assessment-2020_propositions_final.pdf

Workload for you and the student

For summative assessment, three tasks per semester are sufficient. More than that is too much work for you and the students. Carefully check the amount of time students need to complete the task so that they are not overworked. Leave time for reflection. Consider also the time required to mark and to give quality feedback to the students.

A full-time undergraduate load is 12 credit points or 4 units per semester. With 3 hours per credit point for undergraduate units, each 3CP unit is 9 hours per week or 135 hours over the semester (15 weeks including semester break). For most units there are 3 hours of face-to-face contact (or online equivalent), leaving 6 hours for work outside the classroom.

The Learning and Teaching Centre has further details on workload at www.mq.edu.au/lte/eval_teaching/workload.htm

Reading: Reading for students is slower than experienced readers such as academics, and it can take a student 10 minutes to read a page of academic text (including textbooks). Limit the amount of reading you expect your students to do over the semester: around 12-15 pages per week is all that you can expect a student to read in detail.

Writing: A reasonable expectation for written or online submission is around 1,000 to 1,500 words per credit point. A rule of thumb would be a maximum of 4,000 to 5,000 words for a 3 credit point unit – this would represent the entire assessment.

So a student workload plan per week could look like:

Learning and teaching activities: in class or online	3 hours	2 hours: lecture, 1 hour: tutorial
Learning and teaching activities: outside class	4 hours	12-15 pages reading per week, self-study activities, reflective activities, discussion or consultation with tutors
Assessment preparation	2 hours	Including time for research and delivery, to find references and resources, and undertaking group activities
Total hours per week	9 hours	

3. Assessment of PROGRAMS

Program aim and program goals are specific for each program

Program objectives describe measurable attributes of program goals

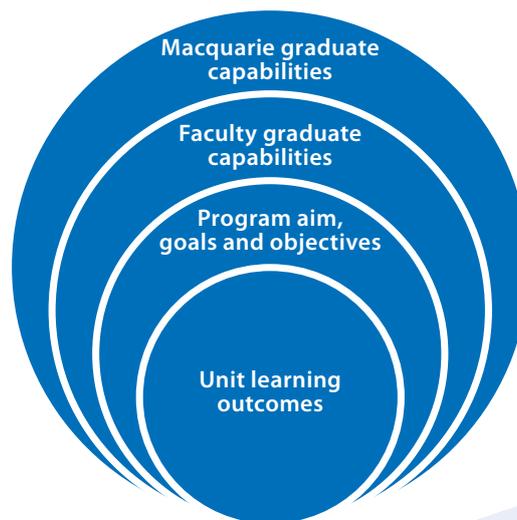
Program objectives are translated into unit learning outcomes

A program is a connected series of units that make up a major, specialisation or degree. At Macquarie University, undergraduate majors are generally 8 units; undergraduate degrees are around 24 units; masters specialisations 4 units; and masters by coursework vary between 8 and 16 units.

A program is designed to develop and assess graduate capabilities over the program. In addition, every program must develop and assess discipline specific knowledge and skills that students can apply in their professional lives.

As programs become accredited, the position of a program and the role of program coordinators become more important. We can make our units fantastic, but if they do not connect together to make a coherent program that also addresses graduate capabilities, students will be learning disparate pieces of knowledge and may not make appropriate connections or be supported to achieve higher levels of learning. The diagram illustrates the relationship between unit learning outcomes flowing through to the University graduate capabilities.

Alignment between unit learning outcomes and program goals, faculty and University capabilities



Program aim

The first thing you need to look at is the **program aim**. This is a short statement that summarises the overall purpose of the program and why it exists. Program aims are often tested by staff, students, industry advisory boards and external review panels. The Bachelor of Business Administration, for example, has the following aim:

Aim: The Bachelor of Business Administration provides students with capabilities that will enhance their effectiveness as decision makers working in local and global business environments.

For a specific degree – the Master of Physiotherapy – the program coordinator wrote the program aim and goals to align with:

- the University Academic plan
- physiotherapy standards
- discipline threshold learning outcomes for physiotherapy
- Macquarie University postgraduate capabilities.

Program goals and objectives

The achievement of the overarching program aim is usually demonstrated through the attainment of program goals and specific program objectives (sometimes referred to as outcomes). Like the program aim, program goals are often quite general and describe what students will be or will have as the result of completing a program. In addition, they usually align with university-wide graduate capabilities.

Program objectives describe what the students will be required to demonstrate as evidence of their learning. In contrast to program goals, the program objectives are specific and measurable. Measurement of objectives is reported in the assurance of learning process (see below) to show the extent to which program goals are being achieved. Program objectives are then translated into unit learning outcomes.

An example of the alignment of University graduate capabilities, faculty graduate capabilities, program goals and objectives is shown for the Bachelor of Business Administration (see the table “BBA draft program goals and objectives”).

All program goals and objectives need to align with the learning outcomes specified in the Australian Qualifications Framework (AQF). AQF learning outcomes are broken down into three categories – knowledge, skills, application of knowledge and skills – and become progressively more advanced across ten different levels. These levels correspond to various certificates, degrees and diplomas. Level 7, for example, corresponds to a Bachelors degree (see box for descriptions of AQF level 7), so any program goals and learning outcomes developed for a Bachelors program must align with the AQF learning outcomes specified for that level.

Australian Qualifications Framework (AQF)

The Australian Qualifications Framework (AQF) is a quality assured national framework of qualifications in the school, vocational education and training (VET) and higher education sectors in Australia (see AQF Council [2011], *Australian Qualifications Framework*. Available at http://www.aqf.edu.au/Portals/0/Documents/Handbook/AustQuals%20FrmwrkFirstEditionJuly2011_FINAL.pdf).

A bachelor degree in Australia is AQF Level 7 and requires the following outcomes (AQF Council [2011], p. 46):

Bachelor Degree qualification type descriptor

Purpose The Bachelor Degree qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway for further learning

Knowledge Graduates of a Bachelor Degree will have a broad and coherent body of knowledge, with depth in the underlying principles and concepts in one or more disciplines as a basis for independent lifelong learning

Skills Graduates of a Bachelor Degree will have:

- cognitive skills to review critically, analyse, consolidate and synthesise knowledge
- cognitive and technical skills to demonstrate a broad understanding of knowledge with depth in some areas
- cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence
- communication skills to present a clear, coherent and independent exposition of knowledge and ideas

Application Graduates of a Bachelor Degree will demonstrate the application of knowledge and skills:

of **knowledge** with initiative and judgement in planning, problem solving and decision making in professional practice

and **skills** and/or scholarship

- to adapt knowledge and skills in diverse contexts
- with responsibility and accountability for own learning and professional practice and in collaboration with others within broad parameters.

BBA Draft Program Goals and Objectives

MQ GRADUATE CAPABILITIES	FBE GRADUATE CAPABILITIES	PROGRAM GOALS	PROGRAM OBJECTIVES
Discipline Specific Knowledge and Skills	<p>Discipline Specific Knowledge and Skills</p> <p>Our graduates will have the depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards.</p>	<p>1. Graduates will have the knowledge and skills to perform functions critical to the operation of local and global businesses.</p>	<p>1.1 Understand the internal component parts of a business organisation, their interrelationships and management</p> <p>1.2 Understand accounting as a tool for monitoring, controlling, and reporting on business activities</p> <p>1.3 Understand law as an element of the organisation's environment and as the basis for a socially responsible organisation's behaviour</p> <p>1.4 Understand the contribution of marketing in an organisation's interactions in local and global business environments</p>
Critical, Analytical and Integrative Thinking Creative and Innovative	<p>Critical, Analytical and Integrative Thinking</p> <p>Our graduates will be capable of reasoning. They will have the ability to question, analyse, integrate and synthesise learning and knowledge from a range of sources and environments. They will be able to critique constraints, assumptions and limitations. They will be able to think independently and systemically in relation to business activities.</p>	<p>2. Graduates will be critical, analytical and integrative thinkers able to apply conceptual knowledge to business practices.</p>	<p>2.1 Review the success of operational strategies pursued by businesses</p> <p>2.2 Apply conceptual discipline knowledge to case-based business problems</p>
Problem-solving and Research Capability Capable of Professional and Personal Judgement and Initiative	<p>Professional Judgement and Problem Solving</p> <p>Our graduates will demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of researching, interpreting and assessing information in various forms. They will be able to relate their knowledge to business situations in order to diagnose and solve problems.</p>	<p>3. Graduates will have knowledge of ethical frameworks through which to exercise judgement and develop solutions to problems.</p>	<p>3.1 Devise an effective strategy to maximise an organisation's competitive advantage</p> <p>3.2 Make an operational or strategic decision relating to a business problem.</p>
Effective Communication Engaged and Ethical Local and Global citizens Socially and Environmentally Active and Responsible	<p>Engaged Global Citizens</p> <p>Our graduates will be familiar with the challenges of contemporary business internationally. They will understand the need to respect diversity, be inclusive and ethical. They will have the ability to communicate and convey their views in forms effective with different audiences.</p>	<p>4. Graduates will have the interpersonal, communication and leadership skills to work effectively with business colleagues and stakeholders.</p>	<p>4.1. Demonstrate effective oral business communication to a variety of audiences</p> <p>4.2. Demonstrate effective written business communication to a variety of audiences</p> <p>4.3. Demonstrate the capacity to make positive contributions to commercially focused group projects</p>

Assurance of learning

Assurance of learning (AOL) is the process of continuously improving programs, based on assessing students' achievement of program goals.

While indirect measurements – such as learner evaluations of units (LEUs) – measure student perceptions of learning and will usually highlight where improvement is needed, AOL uses specific assessment tasks to measure the achievement of program objectives against agreed standards.

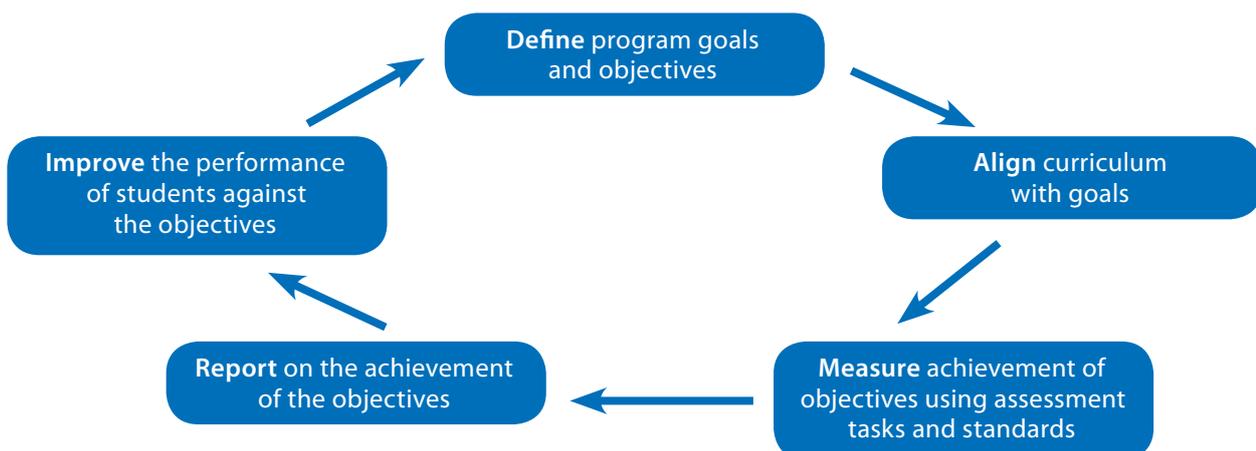
There are five key steps in the AOL process:

- 1. Define:** program goals and objectives
 - What critical skills and knowledge do we expect all graduates of the program to have on completion?
 - What differentiates the program from other programs offered?
- 2. Align:** curriculum with goals
 - In what units will students be taught and learn these critical skills and knowledge?
 - Where will they be assessed?
- 3. Measure:** identify instruments and measures
 - What assessment tasks and standards will be used to measure the objectives?
 - What validated marking rubrics will be used?
- 4. Report:** collect, analyse and disseminate data
 - Where have students done well or not so well?
- 5. Improve:** use assurance data for continuous improvement
 - What can we learn from where they have done well?
 - What can we share that has worked well?
 - What will we do if they have not achieved the goals we set?

Example

Consider the BBA example for draft program goals and objectives (see the table in the previous section). Let us look more closely at the objective 4.2 Demonstrate effective written business communication to a variety of audiences and consider how to implement steps 2 to 5 in the AOL process.

- **Step 2 (Align)** – Identify the units that include learning and teaching activities related to written business communication skills. These units need to be taken by all students in the program, that is, they should be core units and not electives. Identify where assessment tasks require demonstration of written business communication skills at AQF level 7 (Bachelors degree).
- **Step 3 (Measure)** – Select the single assessment task that will be used to measure the written business communication skills of all students. Agree on a suitable rubric for written business communication skills that will be used to ensure consistent marking. For programs with different majors, assessment tasks may vary between majors but the rubric and standards required for each objective must be the same and applied consistently across the program.
- **Step 4 (Report)** – Decide whether the completed assessment task for all students will be measured, or whether a sampling regime will be used. Conduct the measurement, record the results and report against the objective. What percentage of the cohort achieved the objective?
- **Step 5 (Improve)** – Identify improvements that can be made to increase the percentage of students achieving the objective, and plan to implement at least one of these improvements. Review the goals and objectives, and the AOL process itself.



4. Assessment for ACCREDITATION

Accreditation is a process in which the University and the program are reviewed to ensure they meet external standards, such as the Australian Qualifications Framework or the requirements of professional associations. Macquarie University is regulated by standards set by the Australian Government through the Tertiary Education Quality Standards Agency (TEQSA).

Many programs at Macquarie University have also been accredited by professional associations. Professional accreditations are voluntary, but because these accreditations indicate an assurance of quality they can make programs more attractive to students. Not all disciplines (for example economics) are governed by professional associations. Regardless of whether they are professionally accredited or not, all Australian degree programs must meet Australian Government regulatory requirements.

TEQSA will accredit programs and ensure that they meet standards for a specific discipline. One example of such an accreditation is the Accounting Threshold Standards²¹. In the past, accreditation has not focused on assessment at program and unit level; however, TEQSA will require robust evidence of assessment outcomes in the future.

Accreditations can be done at various levels, from a whole university down to a specific program. Some examples are:

- Compulsory (regulatory) national accreditation of a university as a whole – the review is done by TEQSA, which expects all tertiary education institutions operating in Australia to implement standards-based assessment in accordance with the Australian Qualifications Framework (AQF) and the Higher Education Standards Framework. TEQSA is also focused on an institution being able to demonstrate that its programs meet the needs of industry groupings, employers and students.

- Voluntary faculty-based accreditations – usually this involves reviews by international accreditation bodies such as the Association to Advance Collegiate Schools of Business (AACSB), which would assess the Faculty of Business and Economics and all degree programs it offers. These bodies also expect institutions to focus on program improvement to meet the requirements of industry stakeholders. AACSB in particular requires the demonstration of program improvement through a robust AOL process.
- Voluntary department or program focused accreditations – for example, accreditation of accounting programs by CPA Australia. Again, accrediting bodies require the same focus on assessment and program improvement, but usually there are specific content requirements for their areas of specialisation.

Robust assessment processes and practices are vital for accreditation and will ensure quality outcomes for students. The TEQSA accreditation standards (which include assurance of learning processes) will assist us to demonstrate the improvement of programs to meet the needs of key stakeholders.

Final word

What you achieve in each class and each unit contributes to creating an exciting and challenging program for all our students. Assessment is the key that drives student learning.

Be creative – enjoy designing tasks and working with others to create engaging and effective experiences for our students.

²¹ Available at <http://www.olt.gov.au/resource-accounting-ltas-statement-altc-2010>

Glossary

A

Accreditation

Accreditation is a process whereby the program meets external standards, such as the Australian Qualifications Framework or requirements of professional associations

Assessment tasks

Tasks that are graded and count towards a final grade – summative assessment

Australian Qualifications Framework (AQF)

The Australian Qualifications Framework (AQF) is a quality assured national framework of qualifications in the school, vocational education and training (VET) and higher education sectors in Australia (see <http://www.aqf.edu.au>)

Authentic assessment

Authentic assessment presents students with real-world challenges that require them to apply their relevant skills and knowledge. For a particular discipline, we interpret this as assessment that models the role of a professional in that discipline

Autonomy

Ability to apply knowledge and/or skills with appropriate degrees of independence for the level of the qualification

B

Basic

Basic knowledge and skills include those that form a starting point or basis for the development of learning or work

Broad

Broad knowledge and skills include those that cover a general, wide-ranging area of learning or work

C

Cognitive skills

Include the mental skills that are used in the process of acquiring knowledge; these skills include reasoning, perception and intuition; they are defined by the skill dimension (such as interpret, analyse, transform)

Coherent

Knowledge and/or skills including those that are logically ordered, sound and/or integrated

Community of practice

Group of people who practice in the same domain and who then learn how to do it better because they interact regularly

Complex

Activities and/or contexts refer to competing ideas or perspectives and/or information that is voluminous, ambiguous and/or incomplete

Comprehensive

Knowledge and/or skills covering a complete area or field of work or learning

Constructive alignment

Alignment of assessment tasks and learning activities with the intended learning outcomes; the term and concept was first developed by Biggs

Course

Specified study program of core and/or elective units upon successful completion of which a degree is awarded

Creative skills

Skills that lead to innovative, imaginative and/or artistic outputs

D

Deductive

Arguing that a particular instance follows logically from a general principle

Defined

Activities and/or contexts referring to definite or clear activities or contexts within distinct boundaries

Diagnostic assessment

Assessment designed to identify gaps in students' prior knowledge; generally done at the beginning of a program

F

Feedback

Information that one receives about one's performance on a task, in order to improve it

Field

Refers to the main focus of work activities and/or a learning program

Formative assessment

Assessment that give students feedback on their learning but which is not usually graded, or makes a low-stakes contribution to the final grade

G

Generic skills

Skills not specific to work in a particular occupation or industry but which are important for work, education and life in general. Known also as employability skills, general or graduate capabilities, or transferable skills, these skills have application in study, work and life contexts

Goals

Overall outcomes of a degree or program; for a class or unit, "learning objectives" are used

H

Hierarchical

[Knowledge] structured in layers that must be built in order as you move through a program

I

Integrated

Combines two or more kinds of knowledge and concepts (such as technical and theoretical)

L

Learning objectives

The set of knowledge, skills and/or competencies a person has acquired and is able to demonstrate after completion of a learning process; in the AQF these are expressed in terms of knowledge, skills and application

Learning outcome

A statement of what students will be able to do, know, understand or value at the completion of a class, unit or course; also called intended learning outcome

Learning styles

The preferred way in which an individual learner engages with new concepts

Learning and teaching activities

Tasks to aid learning, or "formative assessment"; these are not graded

Lesson

A lesson or class is a small part of the learning environment. This can be online, by distance, face to face, at home, or in the library. It is a discrete short learning module and the learner receives informal feedback on their learning. It can take many forms such as: working through examples, checking answers with a model solution, participating in an online discussion of a reading

Levels

An indication of the relative complexity and/or depth of achievement and the autonomy required to demonstrate that achievement

M

Marking guide

A guide for markers, and often students, as to how the assessment task will be graded. For markers it is used to assist with consistent marking of papers; for students, it lets them know where they have achieved their marks and how to improve in future tasks

Mastery

Demonstrates comprehensive knowledge and understanding of the field of work or learning

Moderation

Moderation is a quality review and assurance process which supports the examination setting and marking activities. It involves using other academics and qualified staff to confirm that the examination tasks and marking are valid and reliable. Essentially, it is a checking process. Moderation should include a check that the assessment task tests the learning outcomes

P

Program

Here used as a synonym for course. A program is a connected series of units to make up a major, specialisation or degree. At Macquarie University, majors are generally 8 units, specialisations are 4 units, and undergraduate degrees are around 24 units

Program aim

A program aim is the statement of the purpose of a program

Program goal

A program goal is a general statement of the outcome of a program

Program objective

A program objective is a translation from the program goals to a measurable statement; these will be threshold learning outcomes for the program

Pedagogy

The practice and theory of teaching

R

Reliability

In assessment, refers to consistency in the grading, when similar performances are graded by the same assessor or when different markers grade the same performance with similar results

Responsibility

Refers to the degree of accountability in applying knowledge and/or skills in work and/or learning contexts for the level of the qualification

Routine

A straightforward or regular course of procedure with distinct boundaries that can be applied to a task or interactions

Rubric

A matrix of outcomes of an assessment task (unit or program) that clearly shows the standards required; it may be used as a marking guide

S

Skills

Refer to what a graduate can do. They can be described in terms of kinds and complexity. Skills include cognitive skills, technical skills, creative skills and generic skills

Specialised

This kind of knowledge and/or skills refers to the depth and specificity

Standards (qualifications)

Benchmarks or expectations of learning that have been established with stakeholders and include all factors that influence the consistency and relevance of qualifications

Standard (assessment)

The level of achievement of a student on the task; it may be signified by a numerical mark or a grade, for example High Distinction, Distinction, Credit, Pass

Subject

See "unit", here used as synonyms

Summative assessment

Assessment that gives students a judgement on their learning, for grading purposes

Systematic

This kind of knowledge and/or skills refers to those that are coherent and well ordered

T

Task

A request or instruction designed to elicit a response or to "create performances that can be and are judged or assessed, formally or otherwise."²²

Taxonomy

A categorisation of qualitatively different types of learning; used to design learning and assessment tasks

Technical skills

Operational skills necessary to perform certain work and learning activities

Threshold

Minimum standard of achievement or attainment

Threshold concept

Is "akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress."²³

U

Unit

A sequence of learning activities based around a unifying theme, over a period of (usually) 12-14 weeks, which is assessed as an individual element within a course. At Macquarie University, this is 13 weeks of lessons at around 3 hours per week in class time and 6 hours of study time

V

Validity

In assessment, refers to whether an assessment task measures what it is claimed to measure

22 Knight, P. (2002) The local practices of assessment. *Assessment & Evaluation in Higher Education*, 31(4), p. 441.

23 From Meyer, J. H. F & Land, R. (2003) Threshold concepts and troublesome knowledge (1): Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.) *Improving student learning - Ten years on*, Oxford: OCSLD (pp. 412-424).



This booklet is one of a series produced for the Learning Excellence and Development (LEAD) program. The program brings together as a team a multi-disciplinary group of university staff – general staff as well as academics – working on projects to enhance student learning. The program is managed by the Faculty of Business and Economics.

The guides are available online at http://staff.mq.edu.au/teaching/teaching_development/business_and_economics_teaching_resources/

Other publications in the LEAD series include:

How to run a LEAD project – Learning through innovation

How to lead discussions – Learning through engagement

How to create exams – Learning through assessment

How to give quality feedback – Learning through dialogue

How to collaborate with peer observation –
Learning from each other

How to teach with inclusive practice –
Learning through diversity

Research enhanced learning and teaching –
Learning through scholarship

Do you want to:

- make your assessment more efficient and effective?
- learn about aligning assessment with learning outcomes?
- understand program goals?
- know more about Assurance of Learning?
- find out about standards, accreditation and TEQSA?

Assessment drives what students learn. The types of tasks that we set show students what we value and how we expect them to direct their time. In this guide we go beyond the tasks set in a unit to take a “whole of program” approach to designing and aligning assessment.

FACULTY OF BUSINESS AND ECONOMICS:
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