

Embedding employability – WIL - Examples

**Employability**

A good practice guide

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Introduction

Employability skills are the non-technical skills and knowledge necessary for effective participation in work. They can include skills such as communication, self-management, problem solving and collaboration. These skills are equally necessary for success in academia.

The ECU Curriculum Framework seeks to integrate academic learning with the development of graduate attributes and employability so that students not only learn *about* nursing, accounting, or teaching, but learn *to be* nurses, accountants or teachers.

In a competitive, culturally diverse and increasingly internationalised workplace students can no longer assume that possession of a tertiary degree will naturally lead to employment. There has been a shift in the mindset of employers, who now seek to employ graduates with “employability” skills and attributes in addition to traditional expertise within their discipline (DEST, 2002). To support students in the development of these skills, universities now have a responsibility to create curriculum that embeds explicit teaching and learning of these skills. The skills that are considered desirable by employers have been broadly categorised in the following clusters (DEEWR, 2013):

1. Self-management

* Managing career and work life
* Working with roles, rights and protocols

1. Interacting with others

* Communicating
* Connecting and collaborating
* Recognising and utilising diverse perspectives

1. Getting the work done

* Planning and organizing
* Making decisions
* Identifying and solving problems
* Creating and innovating
* Working in a digital world

The Core Skills for Work Framework (DIISRTE, 2013) recognises that performance in each of these skill areas is context-dependent, influenced by factors such as the complexity of tasks, degree of motivation, culture and values, and self-belief and resilience. Its developmental approach is informed by Dreyfus and Dreyfus’ *Novice to Expert Model of Skills Acquisition* (1985).

The term ‘work’ used in the Core Skills for Work Framework is intended to go beyond normal employment contexts to encompass education, training and broader community contexts. The Framework recognises that performance is not automatically transferable to new contexts, as application of skills, knowledge and understandings in a anew context requires an understanding of that context.

Another key document, The Australian Core Skills Framework (DIISRTE, 2012) provides detailed information about learning, reading, writing, oral communication and numeracy. It was developed to facilitate a consistent national approach to the identification and development of those core skills, offering a shared language and systematic approach to benchmarking, monitoring and reporting on core skills performance.

One of the guiding principles in the design of the Australian Core Skills Framework (ACSF) is that the interrelationships between the discrete skills are as important as the skills themselves. Key theoretical underpinnings include social constructivism and adult learning theories. The Framework describes learning as an interactive, constructive process of meaning-making, closely aligned to the learner-centred teaching approach at the core of ECU’s Curriculum Framework.

Section One – Embedding employability

Employability skills can be developed by embedding them in the normal discipline unit curricula, and also within specific units that focus on employability such as Work Integrated Learning.

There is no single method ‘correct’ method of embedding employability skills into a unit. Those involved in the teaching process need to consider the best means by which these skills can be learned and demonstrated by students in a particular context or discipline. However, regardless of the course content and context, there should be multiple opportunities at both the unit and course level, to provide students with the chance to develop and demonstrate their employability skills.

# A process for embedding employability skill development

There is a strong correlation between the development of academic skills and employability skills. Many of the skills that are included under the broader banner of “employability skills” are generalised skills that are not only needed for successful participation in employment, but also for academic success in a tertiary environment. Academic tasks that require the complex employment of knowledge, skills and understanding in unpredictable real world contexts provide an excellent vehicle for employability skill development. The following image highlights steps in the process of embedding employability skills in your unit.

The key to making a difference to your students’ employability, as well as their academic success, is to assess the skills that you want students to focus on and to develop teaching and learning strategies that explicitly target those skills that tend to be lacking in your overall cohort.

## Unit Design to Incorporate Employability Skills

While all employability skills are important, there are likely to be some that are more appropriately developed within the context of your unit than others. To embed these skills in your unit:

1. Check that they are captured in the learning outcomes. You may need to write a new outcome or revise an existing outcome to incorporate the skill.
2. Identify the content areas that would most readily lend themselves to development or use of your targeted skills.
3. Consider incorporating some aspect of WIL to enhance the real-world relevance of the skills.
4. Develop assessment tasks that will give students opportunities to demonstrate these skills. Consider what will count as evidence that students’ have a particular skill.
5. Design teaching and learning activities that will support students to learn and practice these skills. Encourage reflection and self-awareness of skill development.
6. Meet with tutors to ensure everyone is comfortable with how to teach and support development of the skills.

#### Example

An Engineering lecturer is reviewing a unit and, while she is pleased with most aspects of her students’ performance, she recognises that many students are passing the unit without demonstrating good communication skills. The lecturer appreciates that to work as a successful member within this industry, students need to be able communicate more effectively than they do. She decides to embed communication skills into the design of her unit.

### Writing an Outcome for an Employability Skill

When writing a learning outcome, the focus needs to be on what students will be able to demonstrate. What will they do (or show, or create, or say)?

An effective learning outcome includes:

* A verb that succinctly captures what students need to do; and
* Some parameters for success

Think carefully about the verb that you use, as it should be something that can be assessed. It needs to be quantifiable and observable, with parameters set for success. For example: “the student will be able to effectively engage with new technology by writing and producing a five minute podcast”, is much more specific and therefore more easily measurable than: “the student will understand how to create a podcast”. In the second example, you need to give some kind of indication as to how you will know that they “understand”. This is important, as you want to be able to measure a student’s progress in a unit and provide clear justification for any grade they receive.

#### Example

The Engineering lecturer in the example above has decided that she wants to support her students in developing their communication skills. As there are many aspects to this broad outcome, she thinks more specifically about what aspect of communication she wants them to develop. Given how frequently those in the industry are required to make presentations and speeches, she decides the focus will be on speaking clearly to an audience. Armed with this idea she develops the following outcome.

At the end of the unit students will demonstrate sound communication skills by giving an oral presentation using appropriate language, body language and tone.

### Assessing an Employability Skill

At the end of the unit, you need to be able to justify, even just to yourself, the grade you assign a student. This is easier when you have developed sound assessments that allow you to determine how well a student has demonstrated a skill or knowledge. Assessing employability skills does not differ from this. You need to develop assessment points that allow your students the opportunity to best demonstrate their skill development. While a learning outcome states what students should be able to demonstrate, and the assessment task is vehicle through which students will demonstrate the skill.

One of the underlying tenets of ECU assessment is that of authenticity. Often the most useful and engaging assessments are those that require the student to apply skills or knowledge to solve a problem or complete a task that they may come across in the workplace.

#### Example

In the example used earlier, the Engineering lecturer has decided that she will redevelop an assessment point to meet the learning outcome she has designed. The lecturer considers the minor assignment, which traditionally has been a written report about a computer program the student has designed. She now redevelops the assessment piece to include an oral presentation of the program that the student has designed in response to a company directive.

She invites an industry contact to attend the formal presentation session and provide feedback to the students. She also restructures the template students use for their ePortfolio task to include recording and embedding the presentation and associated feedback.

### Designing an Activity to Support Development of an Employability Skill

Once you know what skill you want your students to be able to develop, and what evidence will count in assessing that skill, you then need to think about how to create learning activities to support development of the skill. Given the common threads between the skills needed for academic success and those needed to increase employability, it is not difficult to create activities that meet the requirements of both.

Skill development is an active process. If you want to develop and demonstrate your skill in cycling it will not suffice to simply talk about it. So the activities you design to support development of an employability skill need to engage students in learning to be (cyclists) rather than learning about (cycling).

#### Example

The engineering lecturer in our example appreciates that to work as a successful member within this industry, students need to be able communicate more effectively than they do. She designs a formative assessment activity which engages students in presenting to their peers and providing feedback to each other two weeks prior to the due date for their formal presentations. This gives students an opportunity to clarify characteristics of good oral presentations and to use feedback to improve their presentation skills before being graded.

### Summary

There are a number of skills that employers are looking for in employees. Different students will come into a unit with a different set of skills and while this is to be expected, the role of the lecturer or Unit Coordinator is to best support their skill development by creating learning opportunities.

# Employability tools and resources

The following tools are available for download from our [website](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/employability). They are in Microsoft Word format to facilitate easy adaptation to your specific needs.

## Employability Planning Worksheet (Appendix 1)

This worksheet prompts you to be explicit about employability skills that are already being addressed and to consider others that could easily be incorporated. It also provides a useful starting point for course-wide mapping of employability skills. Contact [cld@ecu.edu.au](mailto:cld@ecu.edu.au) if you would like more information on how this worksheet could help you to provide evidence for TEQSA.

## Indicators of Employability Skills

This document, available as a separate download from our [website](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/employability), is designed to help you identify where a particular employability skill is embedded by noting what students are doing. You may wish to include some of these phrases in marking criteria for specific tasks, or in learning activities and evaluation of ECU Graduate Attributes.

Employability skills can often seem invisible or only obvious by their absence. This list articulates potential indicators of attributes, raising awareness of the types of activities involved in developing both Graduate Attributes and employability skills.

| **Attribute** | **Students with this attribute will:** |
| --- | --- |
| Ability to communicate  *written*  *spoken*  *in public fora*  *using technology* | * Use appropriate communication formats, protocols and conventions * Adapt writing style, language and conventions to audience * Manipulate visual and/or written formats to achieve purpose * Adapt language, tone and body language to build rapport * Listen respectfully and check understanding * Use technical terms, jargon and abbreviations appropriately * Interpret and present numerical/statistical information * Interpret and use complex texts with specialised language and symbolism * Select communication technologies to suit purpose and audience |
| Ability to work in teams  *collaborating*  *contributing* | * Treat others with respect * Define and undertake team role * Coordinate activities with others * Share knowledge and resources with others * Seek, and respond to, specific feedback from others * Provide specific, actionable feedback sensitively to others * Recognise and applaud achievements of others * Handle differences sensitively and discuss alternatives to find a way forward * Cultivate relationships and build networks |
| Critical appraisal skills  *planning*  *organising*  *problem solving*  *decision making* | * Clarify expectations and identify protocols and conventions * Clarify skills and knowledge required for tasks * Identify resources available, including people * Determine priorities and develop action plans to fit a timeline * Identify risks and develop alternative strategies * Review progress and adapt action plans * Clarify nature and extent of problems * Investigate underlying causes of problems * Research and generate range of options * Evaluate the validity and reliability of information, considering bias, evidence and assumptions * Establish criteria and process for deciding between options * Monitor effectiveness of solutions/outcomes of decisions |
| Ability to generate ideas | * Reframe and redefine problems to get new perspectives * Question current approaches and identify new approaches * Research options and opportunities * Contribute to creating a safe climate for exploration of new ideas * Encourage and contribute to brainstorming sessions * Use formal thinking techniques to generate new ideas * Evaluate ideas in relation to broad goals * Identify and seek to address issues that may impact on successful implementation of ideas |
| Cross-cultural and international outlook | * Observe communication protocols and conventions * Keep an open mind when dealing with people from diverse cultures * Consult others to obtain diverse cultural perspectives * Watch people from different cultures interact, noting body language, gestures, facial expressions, eye contact * Adapt language and tone to build cross-cultural rapport * Cater for different work practices * Question own assumptions about observed cultural differences * Keep a diary of cross-cultural observations, noting frustrations and successes in communication and collaboration |
| Ability to manage self and learning | * Identify personal skills, aptitudes and learning preferences * Identify required skills/knowledge and determine how to bridge gaps * Seek specific feedback on aspects of work and behaviour * Moderate work and behaviour in response to feedback * Use strategies such as paraphrasing or concept mapping to integrate prior and required knowledge * Use opportunities to share new knowledge/practice new skills * Develop academic voice and take responsibility for academic, professional and personal integrity * Reflect on effectiveness of learning processes and adapt for future situations |
| Ability to use technology | * Consider purpose when selecting technology * Identify limitations of technologies in relation to needs * Use technology to capture data and access information * Use technology to store and retrieve information * Use technology to manipulate data and provide information * Manage online presence, attending to protocols and mitigating risk * Engage and collaborate with others in virtual environments |

## Skills for Success (Appendix 3)

This document is designed to accompany assessment tasks, raising student and lecturer awareness of employability skills embedded in the task. It has the potential to enhance students’ ability to address selection criteria for future employment and offers a useful organiser for students’ personal portfolios.

# Teaching tips for employability skills

This section contains suggestions for teaching the following employability skills:

* Communication
* Teamwork
* Critical appraisal
* Idea generation
* Learning
* Using technology

## Developing communication skills

Start by considering which aspect of the following communication skills you want to have as the focus of your teaching and learning. Each of these sets of communication skills takes time to develop so it is useful to have a primary focus on one or two aspects in each unit even though they will all be embedded in some way.

### Writing skills

It is important to collaborate with the other Unit Coordinators to ensure that one unit isn’t held solely responsible for developing the communication skills valued by employers.

* Provide exemplars of good writing practice.

Place these in Blackboard prior to semester starting. Examples from previous students can be made anonymous and with permission these can be used to show examples of the writing required. Podcasts can also be uploaded against a power point highlighting good practice examples.

* As part of a tutorial/ online provide students with a breakdown of the features of the genre of writing you are expecting.

Provide students with the features of an essay that you expect to see in your unit- tone, vocabulary, tense, structure. What are the features of a report/ chronological essay/ reflection/ exposition? What tense is used most commonly in these texts types? When is passive voice more appropriate than active voice? When is first person acceptable? Add to this over time by providing additional information about structuring paragraphs and sentences.

* Model good practice to your students. Consider your use of voice and how you use it effectively to communicate.
* Include conventions such as ‘report format’ or ’correct voice used’ in your assessment marking key. If you show that these skills have a value, then students will begin to value the skills also.
* Prior to the assessment being submitted have examples of different quality levels of writing with the associated grade.
* Ask students to match their writing to a sample that best correlates with theirs. This allows for student self-reflection about their writing. Also, if their belief about their writing is completely misaligned there can be opportunity for feedback that improves future writing.

#### Grammar, punctuation and spelling

* Provide students with links/ resources online that they are able to access, independently of you, to assess and work on their own grammar, punctuation and spelling.
* Some good general sites include:
  + http://owl.english.purdue.edu/
  + http://www.bbc.co.uk/skillswise/topic-group/spelling
* Show students examples of poorly written texts and have them discuss how they would feel if they received this (This can be done online).
* Provide students with lists of commonly misspelt words (both associated with the discipline and general word lists). Point out that spell check won’t catch all errors. Suggest students read their work out loud or have a partner read their work out loud to them to help them catch any errors.
* Demonstrate how the use of an American dictionary in a spell checker can results in mistakes (Trialed – trialled, focused – focussed, center – centre…)
* Upon returning assignments, correct common errors both in content and conventions with the group as a whole.

#### Vocabulary

* Provide students with vocabulary related to the discipline, perhaps by compiling a class glossary to which all students contribute as they come across new words or phrases.
* Set some time aside to revise new vocabulary and how to use the word correctly.
* Require students to maintain a dictionary/glossary of new terms.
* Test students on their understanding of vocabulary.
* Discuss the role of jargon, clichés, slang, bias, language etc., and the impact these have on how the text is read. Consider what place these have in the workplace.
* Teach code-switching. Code switching simply refers to a person’s ability to adjust their language choices according to context. (That is, knowing the way we speak to our friends is different from how we speak to our lecturer, which differs again from how we speak to our boss.) Swearing, or not, is an example of being able to code switch.

#### Sentence level

* Teach students what a sentence is and what the different types of sentences are.
* Include resources online that highlight how to structure sentences for effect.
* Model the editing process- highlight how to rework sentences for best effect.
* Provide examples of run on sentences, sentence fragments etc, and how these can be corrected.
* Include marks for correct sentence structure.
* Avoid the use of etc in a sentence.

### Oral language skills

Oral communications skills often form the basis of our first impression of others. For our students their ability to clearly communicate in an interview is critical to their success in gaining initial employment, and their ability to clearly communicate with colleagues and customers in meetings, on the phone or in one-on-one interactions will assist their ongoing success. Below are some teaching and assessment strategies that may assist you to develop good oral language skills in your students.

* Model good speaking practice. Ask professional representatives to address your class. Students can analyse the speech for elements of good practice to be discussed as a group.
* Include information about respectful language and expectations of verbal interaction in the Unit Plan.
* Provide some time in class to discuss oral language skills and the importance in the workplace.
* Provide students the meta-language of oral language (eg. tone, semantics, pitch, audience, accent etc.)
* Highlight the differences between spoken and written language such as level of formality or ways of communicating tone.
* Include information sheets about body language for students from other cultures to support better understanding of the unspoken meaning behind body language
* Provide unit information in oral form through a podcast/ video. This will allow students to see you (and know your face) and know your voice and will model good spoken practice.
* Have tutors upload a short video introducing themselves so students can see them and know their face.
* Provide planning tools for creating oral presentations.
* Model responses to miscommunication- How to stop a conversation, asking for repetition, paraphrasing to check understanding

#### Use of voice/body

* Upload podcasts and speeches online (http://www.youtube.com/watch?v=44oel0peahU) and have students watch and discuss elements of tone, speed, volume and body language.
* Provide some time in class for students to practice oral presentations.
* Discuss the impact culture has on how people position their bodies while talking.
* Include these aspects in the marking key.
* Have students post a guide to use of voice/ body in their profession.
* Have students role play common scenarios from the profession. Other students can watch and provide feedback.

#### Memorisation/ Content

* Provide students with phrases/ expressions that can be used to begin a presentation.
* Provide examples of oral presentations that have had elements of content highlighted to show good practice.
* Discuss the role of props and the use of signposts to keep the audience.
* Model how to emphasise key points when talking.

### Reading skills

Reading is a critical part of every unit in every course. Students who are unable to read and understand the language of the discipline are at a distinct learning disadvantage. Below are some suggestions for how you might teach and assess reading in your classroom.

* Provide a range of different text types and include active participation in reading discussions as an element of the overall grade.
* Highlight the different purposes of different text types.
* Provide a list of strategies to enable students to determine the text reliability of web pages online prior to the start of semester.
* Have some core texts available ahead of time for students to access prior to the unit commencement.
* Provide upper limited timelines for how long approximately a reading should take. Suggest to students who take much longer that they find support to increase reading efficiency.
* Help students determine how long they can read a more complex text before they begin to tire- provide students with a text and ask them to time. They can then better manage their time, build up their concentration to be able to read for a sustained period, or seek assistance.
* Encourage students to know the purpose of reading before they start - skimming for basic information, searching for quotes or searching for evidence, consolidating understanding, clarification of understanding etc.
* Encourage students to record information as they read - titles of texts, useful quotes, key theories. This can be done initially through highlighting key details and then through writing details down.
* Support a Discussion Board for students to note down any interesting readings they have completed related to the discipline - both fiction and non-fiction. The more students read, the better readers they will become. The tutor only needs to monitor.
* Provide a supportive atmosphere that encourages students to want to read.

#### Comprehension

* Provide time in class for students to read and answer questions about texts.
* Assign reading and questions for homework to be discussed in class.
* Discuss journal articles and the implications these have for those in the discipline.
* Demonstrate thinking aloud skills. As you read, verbalise your thought processes so students can hear how you comprehend the information.
* Show students how to use graphic organisers to clarify information- what I know, what I need to know etc. (Inspiration, T chart, Y chart, Mindmap, Flow charts, Venn diagrams, Tree diagrams etc)
* Have the students work in groups to create a series of possible questions for the author of a text.
* Ask students to determine whether a text is fact or opinion and discuss the vocabulary used.
* Explicitly teach the means authors use to convince the reader of a viewpoint such as use of experts, omission of detail, choice of words, syllogisms etc. Discuss the impact this has on the author’s integrity and position as a respected leader in a field.

#### Summarising

* Model the summarising process for students.
* Explicitly teach the different purposes of reading that will be required in your unit. This can be done by uploading a document that outlines these purposes and links them to the texts students will be reading.
* Include an annotated bibliography as part of an assessment.
* Have students summarise a text for other students and present to tutorial or post on Discussion Board.

### Listening skills

Good communicators are good listeners. Listening is a skill that can be explicitly taught and practised. Below are some suggestions for how you can develop your students’ listening skills so that they learn to listen, not just hear.

* Create opportunities for students to share what they’ve learned about a new topic with someone else. Get them to focus on really listening to the other person, using the 10 steps for effective listening:
  + Face the speaker and maintain eye contact
  + Be attentive
  + Keep an open mind
  + Try to picture what the speaker is saying
  + Don’t interrupt with your point of view
  + Wait for the speaker to pause before asking clarifying questions
  + Ask clarifying questions, not challenging questions – these are for later
  + Try to understand how the speaker is feeling
  + Give signs that you are hearing by giving feedback such as nodding your head
  + Pay attention to what isn’t said (use non-verbal cues such as facial expressions)
* Construct listening activities around authentic tasks relevant to the discipline and future careers of your students.
* Vary the goal of listening activities so that students learn to consciously focus on what they need to get from listening
  + Main idea comprehension – getting the big picture
  + Detail comprehension
  + Orientation – working out the position of the speaker in relation to a topic
  + Listen to tone and observe body language
* Use pre-listening activities to prepare students for what they are going to hear or view
  + Review students’ background knowledge and discipline-specific terminology about the topic
  + Clarify cultural information that may assist comprehension of the topic
  + Clearly identify the purpose of the listening – what students need to get out of it
  + Discuss what students will be required to do straight after the listening activity
  + Get students to predict the content of what they are about to hear or view
  + Ask students to listen for unfamiliar words and concepts for later discussion
* Keep writing to a minimum during listening. If students are to complete a written task after listening, encourage them to read through it before listening.
* Assist transfer of learning by getting students to draw a picture of what they’ve heard and compare that picture with others. Discuss.
* Hold students accountable for listening – or at least don’t give them reasons to not listen, like providing detailed slides that already contain everything you’re going to say.
* Model good listening. Pay careful attention to what students say in response to your questions, don’t interrupt, and paraphrase what you think they’ve tried to convey.
* If you’re talking for a while, create opportunities for students to help each other listen by stopping for a ‘note check’ when students can compare notes with those sitting near them and fill in gaps.
* After listening, put students in groups to create a list of comprehension questions to ask each other.
* Encourage students to respond to what they’ve heard. Ask questions like “Do you agree?” and encourage debate.

## Developing teamwork skills

To enhance students’ employability, it is important that they are provided with the opportunity to not only work in teams, but to develop the kinds of skills that will help create a cohesive and efficient team. Few professions allow for work to occur in isolation, so the ability to collaborate and contribute effectively in a team environment is highly valued by employers.

The Carnegie Foundation claims that personal qualities account for 85 percent of the factors contributing to job success and, according to the Harvard Bureau of Vocational Guidance, 66 percent of people fired from their jobs were fired because they failed to get along with people.

#### Characteristics

People who are effective team members are

* good collaborators,
* good communicators,
* reliable contributors,
* open-minded,
* non-judgemental,
* sensitive to cross-cultural differences,
* able to adapt their behaviour to suit different roles and situations, and
* adept at providing constructive support and feedback to others.

There are many aspects to teamwork, so it may be useful to identify a key focus for your unit – what one thing do you really want students to be able to do at the end of your unit in relation to teamwork? A few suggestions are offered below.

* Share knowledge and resources with others
* Coordinate activities with others
* Critically evaluate own teamwork skills
* Provide specific, actionable feedback sensitively to others
* Handle differences between team members sensitively
* Communicate respectfully in team situations

Remember to include teamwork in learning outcomes and assessment marking criteria to demonstrate clearly to students that the *process* of working in teams is valued, not only the product.

#### Evidence of teamwork skills

The extent to which an individual’s teamwork skills are developed is evidenced by their behaviour. The following list of behaviours can be used by the lecturer or by students themselves before and during a teamwork project to guide behaviour, as well as for final assessment. In meetings a good team member:

* participates enthusiastically in discussion;
* expresses him/herself clearly and coherently;
* introduces new ideas;
* builds constructively on the ideas of others;
* influences the direction and nature of the discussion;
* listens carefully to other members’ views;
* quietens a dominant interrupter to allow someone else to make a point;
* makes decisions collaboratively; and
* discriminates clearly between the important and the trivial.

### Teaching tips for various stages of the project

It is important for students to know that teams don't just form and immediately start working together to accomplish great things. Tuckman (1965) described the following stages of team growth and suggested that teams must be given time to work through the stages to become effective.

1. **Forming.** When a team is forming, members cautiously explore the boundaries of acceptable group behaviour. During this stage students should be encouraged to review and share previous experiences before developing a team contract. The contract should include communication protocols, individual contributions and roles, timelines and other issues that were articulated during the discussion of previous experiences.
2. **Storming**. At this early stage team members are often struggling with unfamiliar and challenging work and are inexperienced at working together. As a result they may focus energy on each other instead of their work. During this stage students can be encouraged to refocus on their goals and review their contract and timelines. Lecturer guidance can be crucial at this stage, perhaps offering decision making tools and strategies to resolve conflict.
3. **Norming**. During this stage team members accept the team and begin to reconcile differences. Progress can be accelerated by explicitly attending to listening skills, raising awareness of intra and interpersonal skills, reviewing time management skills and practising summarising and clarifying skills.
4. **Performing**. By this stage the team members have discovered and accepted each other's strengths and weaknesses, and learned what their roles are. As the work comes together students could be encouraged to explicitly reflect on what worked and what didn’t – for them individually and for the team as a whole – so that lessons can be learned and skills improved for the future.

If teams are to work on one large project throughout the semester, then the project needs to be broken into smaller assignments that have to be handed in throughout the semester, so students can get a sense of how the team is doing. Feedback (and eventually grading) should be on both the work accomplished and the group processes that allowed it to happen.

### Teaching tips for team meetings

When students are inexperienced at structured teamwork, or have had unsatisfactory experiences in the past, scaffolding team meetings in class can be very beneficial. The suggestions below are clustered around meeting stages:

1. Opening discussion

* state different perceptions of what the task really is
* legitimise - show an understanding of how others see the problem
* brainstorm ideas – at this stage all ideas are encouraged and accepted
* propose some potential solutions
* ask each individual for a possible solution
* list available resources

1. Narrowing down the solutions

* look for redundant and overlapping ideas
* separate solutions based on "pros/cons"
* categorise solutions
* make sure solutions address the issues
* discuss and agree on criteria for evaluating solutions
* evaluate solutions using agreed criteria

1. Closing discussion

* clearly articulate agreed consensus
* clearly articulate follow-up actions for each team member (including timelines).

Since working as part of a team can improve learning and is a much needed skill in today's workplace, some team exercises should be included in the classroom. With well planned out tasks, careful guidance, and close observation, instructors can make team exercises extremely valuable learning experiences.

### Teaching tips for virtual teams

Communication in the virtual environment has some challenges as team interactions are filtered by both technology and culture. For example, nonverbal communications are often limited when compared to the typical face-to-face team meetings.

Zaugg & Davies (2013) identified three components to developing soft skills that facilitated stronger virtual team member interactions: the choice and use of virtual communication tools, the refinement of communication skills, and the scheduling of time to build trusting relationships.

#### Choice of virtual communication tools

* More media-rich communication tools facilitate greater team interactions and promote stronger team relationships - the greater the media richness the more verbal and non-verbal information can be sent.
* Document-sharing using cloud technology can meet the desired criteria of accessibility and compatibility with team meeting interactions. Arranging for the common sharing of documentation prior to team meetings can facilitate team interactions during the meetings.
* Combining audio, video, text, document-sharing and screen-sharing technologies helps to convey messages more clearly.

#### Refinement of virtual communication skills

Remind students to:

* either avoid use of idiomatic or vernacular phrases, or use them judiciously and explain them;
* paraphrase what was discussed to ensure clear understanding;
* ask for clarification if another team member’s message is not quite clear;
* pause after making statements so that listeners can ask questions;
* be prepared to explain views in different ways;
* enunciate words clearly, and use text to support communication of unclear words or phrases;
* allow time for comments to be digested and appropriate responses to be formed;
* ensure everyone on the team has an opportunity to contribute and respond – actively seek out the opinion of those who have said nothing;
* acknowledge the contributions of others; and
* share key documents prior to team meetings.

#### Building virtual team relationships

Encourage virtual student teams to:

* schedule time before and/or after meetings for team members to just ‘visit’ and get to know each other;
* share visuals such as photos of themselves, pets, favourite places or foods; and
* include video where possible so that body language can be observed, at least to some extent.

### Teamwork web links

* Griffith University’s [Teamwork Skills Toolkit](http://www.griffith.edu.au/learning-teaching/student-success/graduate-attributes/graduate-statement#gga2) contains a number of teamwork activities and pro-formas that are ready to use with students. The Toolkit is accessible from the Graduate Attributes web page.
* Colorado State University provides resources on [Teaching Teamwork Skills](http://teaching.colostate.edu/tips/tip.cfm?tipid=36) that include: assigning students to teams; providing training in teamwork skills; structuring assignments so students must work together, giving feedback; communicating the message that teamwork skills are important; and providing a mechanism for reflection.
* The University of Waterloo’s [Teamwork Skills](https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/tips-students/being-part-team/teamwork-skills-being-effective-group-member) page includes strategies to encourage students to develop a healthy team climate and strategies to encourage students to develop an effective team process. Reflective questionnaires about climate and process are available for student use. The web page also includes an “Are we a team?” checklist.

## Developing critical appraisal skills

The ability to think critically is a skill that is necessary to make good personal, professional and academic judgements. For many students the word ‘critical’ carries negative connotations, so they tend to focus on weaknesses or deficits. As lecturers we can broaden their understanding of this process, emphasising that appraisal involves the recognition of positive as well as negative aspects of the subject of appraisal, be that a product, a process, a performance or a proposed solution.

The elements of critical appraisal are:

* Clarifying the goal of the thinking/appraisal (this may require analysing a problem);
* Ensuring adequate information is available (locating and organising information);
* Determining the validity of information;
* Determining the relevance (applicability) of information;
* Formulating inferences from information; and
* Making decisions in relation to the goal.

Critical thinking is not just cognitive. This is discussed further in the Research Skills section of this document.

Below are some ways to embed development of critical appraisal skills in your unit:

* Create in-class opportunities for students to be reflective, to stop and think, to be aware of the assumptions they make, so think about evidence to support positions, to not automatically accept whatever is presented in the media.
* In class discussions, and on students’ written work, gently ask such questions as “Why do you think that might be?”, “How do you know”, "What are the reasons?" and “Is that a good source of information?” thus prodding them to have good reasons for their views and to seek reasons for others' views.
* Emphasise alertness to alternative hypotheses, conclusions, explanations, sources of evidence and points of view.
* Use Problem-Based Learning (PBL) to engage students in working on authentic (work-based) problems. This approach works best when adopted in a systematic way across an entire course or programme, rather than just in one unit.
* When setting problem-solving challenges, encourage students to evaluate their range of possible solutions and to identify the criteria they used to select their ultimate solution.
* Teach students problem solving and identification strategies so that they are able to spot opportunities or potential problems before they occur (and are able to solve problems if they arise).
* Teach students how to support their conclusions with reasoned arguments and evidence, in both written and verbal communication.
* Encourage the development of students’ critical reasoning skills by requiring them to argue different sides of an issue at the same time in written work or class discussion.
* Deliberately give students conflicting or ambiguous information or perspectives to think through (but let students know that this is a deliberate strategy to encourage their critical thinking).
* Challenge students to analyse their own, or a peer’s, writing. Have them highlight examples of critical thinking attributes such as bias, validity, applicability, evidence (or lack thereof), inference and errors in reasoning.

There are many aspects to critical appraisal. You may wish to select one or two sub-skills to focus on at specific times, perhaps aligned with the stages of an extended project or group task. Below are some steps to assist you with this,

### Planning and organising

The following questions are useful in a lecture or tutorial situation that, for example, is designed to assist students with understanding the importance of planning:

* What are goals and what sort of goals can we set?
* Do we need to set goals? Why? Why not?
* Are all goals equally realistic?
* What are some of the reasons people don’t set goals?
* What are the outcomes for those who don’t set goals?
* How do you define whether a goal was successfully met?
* What happens if a goal is not met?
* Have you ever failed in an attempt to achieve a goal? How did this feel? What did you do next? How do overcome a failed attempt at meeting a goal?
* How can we set a goal that is achievable and meaningful? What is required?

Some further suggestions for guiding students follow below:

#### Establishing clear goals and action plans

* Teach students how to set SMART goals – Specific, Measurable, Attainable, Relevant, Time-framed.
* Explain the need to set goals and the success rate of students who set clear goals.
* Have students reflect on short term and long term career and academic goals by completing a self reflection task. This exercise can help them align personal goals with the learning goals of the unit.
* Show students in class how to deconstruct an assignment into smaller and more manageable tasks. Students can then decide how to organise their time to complete all smaller tasks.
* Demonstrate to students how to deconstruct an assignment question to be able to create a plan of completion.
* Include assignments where students are given a series of problems and are then asked to work in groups to create an action plan. Scaffold their efforts with pre-prepared resources such as templates to guide their efforts.

#### Allocating time and resources effectively

Students’ awareness of their time management skills can be raised by encouraging them to reflect on previous situations when they were required to manage their time but may not have done so well. Another useful starting point (and a fun discussion topic) is the [Time Management Survey](http://www.mindtools.com/pages/article/newHTE_88.htm) available on the Mind Tools website, and also the [Productivity Survey](http://www.mindtools.com/pages/article/productivity-quiz.htm). Here are further suggestions for how you can assist students:

* Guide students in constructing a timetable for completion of assignments. This should include resources required along the way, and is particularly important if many students need to access limited resources such as library items in closed reserve.
* Occasionally set group tasks in class, allocate limited resources and limited time to complete. At the end have students reflect on the pressure of completing work to a deadline and discuss how authentic this situation is.
* Complete role play activities. For example, students assume the role of leaders in an organisation and with limited budgets, resources and time need to maximise their output.
* Encourage students to reflect on how well they allocated time and resources to the completion of an assignment or task. This can be included as part of the assessment and appropriate marks allocated.
* Provide students with approximations of how long a task might take. (Be careful to not just tell them how long you think it should take! Base approximations on reports from previous year groups about how long tasks took them). This can give students an idea of about how long is necessary to spend on a given task- if a student takes much longer than this, there should be room for reflection on why this is the case.
* Upload links on your Blackboard site to resources that support time and resource allocation.

#### Prioritising and managing tasks

* Initiate an online discussion about why students choose to go to university and what other activities they do that require time, energy and resource allocation. A good work-life balance underpins sustainable academic effort.
* Give students a list of tasks professionals might undertake in their discipline and ask students to prioritise them. Encourage discussion about the process of prioritising: how they would decide what to do in what order and why they would do it this way.
* Provide students with a Discussion Board thread dedicated to time management strategies and how to overcome common time management pitfalls such as:
  + procrastination,
  + failing to manage distractions,
  + taking on too much,
  + becoming addicted to the ‘deadline adrenaline rush’,
  + multi-tasking, and
  + not taking breaks.

### Problem solving

Students solve problems all the time, but they’re often not aware of what they’re doing. Awareness is essential for explicit development of any skill, so a quick survey such as ‘[How good are you at solving problems?](http://www.mindtools.com/pages/article/newTMC_72.htm)’ can provide a great springboard for further work.

Further suggestions for developing your students’ problem solving skills follow below:

* Explicitly teach students the steps involved in problem solving:
  + Identification of the problem;
  + Sorting of relevant information;
  + Consideration of possible solutions;
  + Implementing best solution; and
  + Reflecting on action taken.
* Provide students with weekly mini-problems based around the topic of the week. Provide in-class time to discuss and develop potential solutions for the problems. Students can then vote on the best solution and justify their decision.
* In lectures, make links back to prior learning to help students recognise when similar problems they are currently faced with, have been previously solved.
* Provide authentic (simulating real-world) problems for students to solve when creating assessments. Real life problems are often ill-structured and students need the opportunity to work through these in a supported environment. Well defined and well structured problems provide less opportunity for students to actively engage in the real difficulties of problem solving.
* When providing feedback, use errors students make to highlight some of the common misconceptions held.
* Ask students to provide evidence of their thought processes when providing a solution to a problem.
* Engage students in ‘constructive controversy’, where they form teams to adopt specific positions and each team argues for their position/solution. A twist on this is to allocate the task of arguing for a position to a team that does not support the position, forcing students to think from a different perspective.
* Create opportunities for students to link their declarative knowledge (what they know about a topic) with their procedural knowledge (what they know about the process involved in solving a problem).
* Teach students the process of appreciative inquiry: solving problems by looking at what is currently working well and building on that. While the ‘problem’ still needs to be defined, a positive approach might, for example, change a statement like ‘sort out team conflict’ to ‘ways to improve team productivity’.

### Decision making

* Provide students with opportunities to make decisions related to their careers in the discipline: Will they specialise? Where will they work? Will they work full or part time?
* Provide students with a common problem faced by those in the discipline and ask them to create possible solutions and then as a group decide which would be most appropriate and justify this. (Role play).
* Teach students to use De Bono’s 6 Thinking Hats.
* Give students ethical dilemmas based on issues in the discipline and highlight the need to make a decision based on what is right rather than what is expedient or merely quickest.
* Help students recognise their own biases by encouraging them to reflect on evidence.

### Creativity/ Potential to innovate

* The [Mind Tools Creativity](http://www.mindtools.com/pages/main/newMN_CT.htm) website has specific tools that can be used to support students’ creativity.
* Explicitly teach the idea that innovation is the result of application and dedication. It is not a “special” trait possessed by some, but is a skill that can be learnt and applied. A process that can be applied is:
  + Identifying a current issue/ problem.
  + Gathering all current ideas/ solutions/ products.
  + Modifying what is currently available- make it bigger/smaller/ combining two ideas/ adding an additional element.
  + Testing the new idea.
  + Evaluating the new idea and looking for possible ways to improve it.
  + Use brainstorming tools like SCAMPER to help students begin to think through alternative ideas. Tutorials are available from brainstorming.co.uk.
  + Give students an authentic (real-world, complex) problem to solve. Ask them to provide multiple solutions to a single problem.

### Research skills

The critical reading required for effective research is not purely cognitive, although it is often thought of as a purely intellectual process in which rationality is valued above all else. In guiding students to become critical readers and thinkers it is important to make them aware that thought and reasoning is infused with emotional currents and responses.

We should encourage students to investigate their emotional responses to the material they read in order to try to understand why they become enthused or appalled, perplexed or engaged. As students read work that challenges some of their most deeply held assumptions, they are likely to experience strong feelings of anger and resentment against the writer or her ideas, feelings that are grounded in the sense of threat that the work holds for them (Brookfield, 2012). It is important that students know this in advance of their reading and understand that their emotional reactions are the inevitable accompaniment of undertaking any kind of intellectual inquiry that is really challenging.

Against that backdrop, what can we do to build students’ research skills?

* Build into each unit an assessment piece that requires independent research.
* Explicitly teach the rules of referencing and include in classes a discussion about the ethical implications of plagiarising.
* Have students write an annotated bibliography, dedicating some class time to how to review and critically analyse information.
* Explicitly teach the steps involved in conducting research:
  + defining the focus;
  + formulating a proposal;
  + gathering information;
  + evaluating information;
  + interpreting and discussing findings; and
  + formulating a recommendation.
* Build in smaller mini deadlines for students to help them avoid “endless” reading and resource collecting. Scaffold and allocate marks?
* Teach students how to read for a purpose and how to write short summaries and note take. Model these processes as part of your teaching and provide opportunity to practice these without allocating a grade.

### Developing thinking

* Ask students to explain fully how they arrived at answers to questions. Correct answers can occur even when faulty logic has been applied. Misconceptions can hinder later learning
* Explore alternative viewpoints to theories/ concepts in the discipline.
* Provide and encourage the use of ‘wait time’. This will allow students to think through a response without feeling the pressure to deliver straight away.
* Provide students with criteria they can use to determine whether an argument has been presented logically and has used orderly thinking.
* Ask students to develop criteria they can use to evaluate their thinking.
* Guide students through some strategies for developing critical thinking while reading:
  + Ask about purpose: why was the text written?
  + Ask about context: where was it written, when and by whom?
  + Ask about structure: Do the parts fit together logically? Is there a clear argument?
  + Ask about the arguments: Are they fair? Do they leave out perspectives of certain groups?
  + Ask about evidence: Does it support the point of view? Is it from an authority in this field? Is it evaluated from different perspectives?
  + Ask about language: Is it coloured to present some things as more positive than others?
  + Ask about attribution: Are claims attributed clearly to specific sources?
* Teach students how to write a critical review by following these steps:
  + summarise the ideas of the original text,
  + select sections of the text (e.g. thesis/methodology/conclusion)which are open to question,
  + comment (if possible from both a positive and negative perspective) on the section,
  + draw on other sources to back up your comments, then
  + come to a conclusion on the overall worth/validity etc of the original text.
* Engage students in as many activities as possible that involve:
  + Information processing: finding relevant information, organising it and representing it;
  + Reasoning: giving reasons, making inferences, arguing, explaining;
  + Inquiry: asking questions, finding out, planning research;
  + Creative thinking: generating ideas, imagining, hypothesising;
  + Evaluation: developing and applying evaluation criteria, making decisions; and
  + Meta-cognitive reflection on the outcomes of thinking.

## Developing idea generation skills

*The best way to have a good idea is to have lots of ideas.* - Linus Pauling, US chemist & pacifist (1901 - 1994)

Creative thinking is the act of coming up with new ideas (new to the thinker, not necessarily to the world). It is something which can be taught. It’s not necessarily about arts, but about teaching students initially to be curious and then teaching them how to ask good questions.

What can you do to develop your students’ creativity?

* Believe (and let them know you believe) that they can all be good at generating ideas. Build self-efficacy in this skill.
* Value (and teach students to value) a variety of approaches, methods and solutions, moving them away from thinking that an idea that seems to work is the only ‘right’ idea. Tolerate ambiguity.
* Adopt (and encourage students to adopt) a playfully thoughtful approach to conjuring up and exploring possibilities.
* Challenge (and encourage students to challenge) assumptions and preconceptions of creativity.
* Value (and encourage students to value) mistakes and the learning that can arise from them. If students fear mistakes they become afraid to risk the independent and sometimes-flawed thinking that leads to creativity. Many ideas are great, not because they are perfect themselves, but because they become the basis for other ideas.

### Activities that promote idea generation

The potential of activities to promote students' idea generation skills is enhanced by framing projects around a significant and engaging question. The question should arouse students’ curiosity in order to engender spontaneity and creativity. It may create dissonance – be paradoxical.

Below are a few suggestions for developing your students’ ability to be creative and innovative:

* Teach, practise and assess the four rules of brainstorming by Osborn (1963):
  + Judicial judgment is ruled out. Criticism of ideas will be withheld until the next day;
  + “Wildness” is welcomed. The crazier the idea, the better; it’s easier to tone down than to think up;
  + Quantity is wanted. The more ideas we pile up, the more likelihood of winners; and
  + Combination and improvement are sought. In addition to contributing ideas of our own, let’s suggest how another’s idea can be turned into a better idea; or how two or more ideas can be joined into still another idea. Ask “what if ...?” questions and encourage students to generate their own “what if ...?” questions.
* Teach students to piggyback on the ideas of others – this also encourages active listening.
* Encourage students to develop metaphors and use analogies to trigger new ideas or novel ways of thinking about something.
* Construct problem based projects and assessments with open- ended tasks and activities that promote novel solutions and ideas.
* Ask students to come up with unusual ways to use known objects, ideas or solutions, for example: Here is a hat – what could it be used for?
* Employ enablers (enabling in terms of thinking differently) when asking students to be creative, such as introducing the session with a fun and humorous activity, or changing the setting by removing desks or meeting outdoors.
* Connect the unconnected by using mind mapping with a twist:
  + Place a key word or phrase in the middle of a page;
  + Write anything else that comes to mind on the same page (don’t judge, just write); then
  + See if you can make any connections.
* When setting problem-solving challenges, encourage students to develop multiple solutions to a set problem.
* List assumptions associated with a task or problem, for example, that a solution is impossible due to time and cost constraints; something works because of certain rules or conditions; and people believe or think certain things. Then ask under what conditions these assumptions are not true. Continue the process of examination as old assumptions are challenged and new ones are created. Avoid “we can’t do that” or “we did that before and it didn’t work”
* Encourage students to identify and then question their own and others’ assumptions – this often leads to new ideas. For example: We don’t have enough money. Don’t we? What if we sell... What if we don’t buy...
* Teach students how to use laddering – from Personal Construct Psychology (Kelly, 1955):
  + Beginning with an existing idea, "ladder up" by asking what wider category this is an example of.
  + "Ladder down" by finding more examples for that category.
  + Then "ladder up" again by seeking an even wider category from the new examples obtained from step 2.
* Structure brainstorming sessions using processes like [SCAMPER](http://www.mindtools.com/pages/article/newCT_02.htm):
  + Substitute
  + Combine
  + Adapt
  + Modify
  + Put to other uses
  + Eliminate
  + Reverse
* Guide students through a process of reframing the problem from a number of perspectives. Each perspective may reveal different aspects of the problem, generating different ideas. A [Reframing Matrix](http://www.mindtools.com/pages/article/newCT_05.htm) can be a useful visual tool for this strategy. Another way is to start a session with the phrase: If I were...
* Encourage quantity of ideas and initially suspend judgement about the quality. If ideas are judged too early it could diminish the courage of students to contribute future ideas. Remind students that if most of the ideas they come up with are workable, then they didn’t take enough risks.

## Developing self-managing learners

*The illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and relearn.* – Alvin Toffler (futurist and author of Future Shock and The Third Wave).

To maintain ongoing employment success, our graduates have to prepare themselves to become self-managing learners that are able to

* analyse new conditions as they arise,
* identify the new knowledge and skills that they will be required to deal with these conditions,
* independently chart a course that responds to these changes, and
* think about their own cognitive processes: their thinking, reasoning, problem solving and learning. Self-managing learners are metacognitive.

Although everyone manages their own learning to some extent, people who are effective at leading major organisations are constant learners who actively use feedback systems to continuously improve and increase their capabilities (Covey, 2006).

Self-directed or independent learning can encompass a variety of situations and contexts where students are interpreting and scaffolding new knowledge and skills, including situations of group learning where activity may be collaborative. Independent learning is not about learning in ‘isolation’.

### Setting the foundations for independent learning

If our students are to become self-directed learners they need to develop awareness of learning as a process, as well as developing the skills of inquiry and critical evaluation (Candy, 1991). As a lecturer you can prepare your students by:

* talking to your students about their previous learning and teaching experiences;
* discussing their expectations of the course – how are they expecting to be taught, assessed and how do they expect to facilitate their own learning;
* talking about your expectations and the requirements of the course;
* reaching a shared understanding of these expectations;
* talking about independent learning in the context of communities of learners; and
* providing opportunities for developing study communities (through group work, study buddies, online discussion boards).

The transition for students into new ways of learning can be supported by providing plenty of opportunities for students to explore their learning with peers and teachers.

#### Ongoing support

What else can you do to help your students become self-managing learners?

* Give an overview of the subject matter so that learners have a framework within which to build their knowledge.
* Recommend multi-media resources for independent study including texts, audio, internet and video.
* Remind students of the various support systems available to them especially a few weeks after induction when this useful information may have been forgotten.
* Find ways to connect with your students and their learning journey, perhaps relating aspects of your own ongoing journey. Whilst not necessarily directly affecting students’ skills in independent learning, the connections made between teachers and students in the classroom can motivate students to learn outside the classroom.
* Encourage and build confidence especially in the early stages by providing opportunities for students to bring questions and observations to class which have arisen from their independent reading.
* Encourage, and create opportunities for students to share, strategies that helped them learn a particular concept or process.
* Provide un-assessed opportunities to test out students’ independent learning with tasks set between classes.
* Create situations where students can control aspects of classroom learning such as selecting a reading for critical analysis for the next class.
* Gradually move over time from a role as teacher to that of a learning facilitator and teacher (Scharle & Szabó, 2000) as students become more confident independent learners.

### Tools for self-managed learning

Consider introducing your students to a range tools that could assist them to manage their learning and to improve their effectiveness as learners:

* E-portfolios (collections of multimedia including text, images, audio, blogs) can be assembled to demonstrate their learning over time (see Hill, 2009).
* Learning journals: students who analyse and reflect on their learning are more effective learners; that is, they are more able to acquire, retain, and apply new information and skills.
* Study skills sessions (goal setting, time management, working to deadlines, self-appraisal, reading).
* Ongoing support, both in the classroom and the library, to help students use strategic approaches to finding the information they need by defining the scope of their searches.

### Learning strategies instruction

Learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations” (Oxford, 1990, p. 8).

Learning strategies differ from learning styles/preferences in that they can more easily be adopted or dropped by learners (Brown, 2001).

The goal of learning strategies instruction is for students to become independent learners with the ability to use strategies aptly in a variety of contexts. Effective learners consciously employ a diverse range of strategies, whereas unsuccessful learners tend to use inefficient or ineffective strategies without realizing that those strategies are not producing acquisition (Anderson, 2005).

In the beginning, however, learning when and in what contexts to use particular strategies or groups of strategies requires direction and guidance from the teacher.

### A process for teaching learning strategies

#### Preparation

Develop student awareness of different strategies through small group retrospective interviews about tasks, modelling think-aloud then having students think aloud in small groups, discussion of interviews and think-alouds.

#### Presentation

Develop student knowledge about strategies by providing rationale for strategy use, describing and naming strategy, and modelling strategy.

#### Practice

Develop student skills in using strategies for academic learning through co-operative learning tasks, think-alouds while problem solving, peer tutoring in academic tasks, group discussions.

#### Evaluation

Develop student ability to evaluate own strategy use through writing strategies used immediately after task, discussing strategy use in class, keeping dialogue journals (with teacher) on strategy use.

#### Expansion

Develop transfer of strategies to new tasks by discussions on metacognitive and motivational aspects of strategy use, additional practice on similar academic tasks, assignments to use learning strategies on tasks related to cultural backgrounds of students.’ (O’Malley & Chamot, 1990)

Competence in self-directed learning needs to be developed. Students need practice to learn how to be better learners. Therefore teaching should move gradually towards student self-regulation.

### Basic Types of Learning Strategies

Learning strategies can generally be classified into two broad groupings:

1. Direct cognitive strategies for specific learning tasks, such as memory strategies.
2. Meta-cognitive learning strategies such as those employed to manage the process of learning, including planning, evaluating, self-monitoring, motivational and affective (emotional) strategies.

#### Direct task-based learning strategies

These strategies vary according to the learning task.

* Memory strategies help with storage and retrieval of information. These include strategies such as
  + repetition;
  + note-taking – writing down without processing;
* Cognitive strategies are used for manipulation of the learning material. These include strategies such as
  + translation or interpretation – repeating in own words;
  + note-taking – processing information to create personalised notes;
  + deduction;
  + contextualisation;
  + inferencing;
  + questioning for clarification.

#### Meta-cognitive learning strategies

You can help students acquire meta-cognitive learning strategies by:

* encouraging them to focus on how to learn a particular concept or skill;
* asking them to articulate their thinking/learning so that the processes are made more explicit and visible in the classroom;
* encouraging them to support each others’ efforts to learn and jointly construct their learning
* assisting them to make connections and transfer their learning across contexts;
* ensuring the classroom environment is sensitive and constructive so that learners feel safe to make mistakes; and
* developing a reflective culture in your classroom where time taken to reflect on the process of learning is appreciated and valued.

It should be noted that meta-cognition (thinking about thinking) is at the heart of all learning; learners need to ‘unpack their thinking’ in order to appreciate the strategies they have used to learn, to assimilate the learning that has taken place and to link the learning to a new context.

The process of meta-cognition involves planning, doing (thinking/acting) and reflecting.

##### Plan

You can assist your students during the planning stage by helping them to:

* activate prior knowledge, skills and understanding using tools such as [Concept maps](http://cmap.ihmc.us/publications/researchpapers/theorycmaps/theoryunderlyingconceptmaps.htm) or [KWL grids](http://www.science3-18.org/index.php?option=com_content&view=article&id=881&Itemid=2049);
* determine the thinking process/method and learning strategy using tools such as [Decision-making grids](http://www.mindtools.com/pages/article/newTED_03.htm); and
* determine success criteria using tools such as KWL grids or [Think-pair-share](http://serc.carleton.edu/introgeo/interactive/tpshare.html).

##### Do

You can assist your students to do the thinking and learning by helping them to:

* think about cause and effect and making inferences using tools such as [Fishbone diagrams](http://www.mindtools.com/pages/article/newTMC_03.htm), KWL grids or [Odd One Out](http://www.thinkingclassroom.co.uk/MembersResources/TeachersToolbox/OddOneOut/LastWeeksOddOneOut.aspx);
* form opinions and make decisions using tools such as [Inference Ladders](http://www.mindtools.com/pages/article/newTMC_91.htm), [Diamond Ranking](http://teachingtechniques.boston.ac.uk/diamond_nine_and_ranking.html) or [Decision Trees](http://www.mindtools.com/dectree.html);
* think logically and seek patterns using tools such as an [Affinity Diagram](http://www.mindtools.com/pages/article/newTMC_86.htm); and
* consider evidence, information and ideas using tools such as [Jigsaw](http://www.jigsaw.org/) and [Venn Diagrams](http://homepage.usask.ca/~wiebeb/Venn2.html).

##### Reflect

You can assist your students to reflect on their thinking and learning by helping them to:

* evaluate their own learning and thinking using tools such as [PMI diagrams](http://edgalaxy.com/thinking-tools/2012/9/6/pmi-chart-plus-minus-interesting-thinking-tool.html), Concept Maps, or Journals; and
* review outcomes and success criteria using tools such as PMI diagrams or Traffic Lighting (green for ‘great’, amber for ‘almost there’ and red for ‘re-think’.

Students’ beliefs about learning are formed by their previous educational experiences, so introducing new learning strategies that may challenge long-held beliefs will take time, practice and positive results before the strategy forms part of students’ learning toolkit.

#### What else can you do?

By changing students’ educational experiences you can influence both their capacity and motivation to learn. Some ways you can do this are by:

* helping students to accept temporary discomfort and take risks to reap the rewards of new learning (to learn, unlearn and relearn). Discuss the fact that transformative learning often springs from initial discomfort and confusion, leading to a realisation that existing skills and knowledge are no longer adequate. Work at creating a safe environment for learning and valuing the questioning that arises from uncertainty and ambiguity.
* helping students to discuss how their feelings influence their learning, and share strategies about how to handle them. Discuss the value of perseverance when learning is difficult and knowing when and how to reward themselves to maintain motivation.
* ask questions that are worth answering! Good questions promote discussion, make students think, and have more than one answer (everyone can have an answer).
* increase wait-time. Most teachers wait for under one second before either modifying their question or answering it themselves. Allow time for students to think about questions and eventually you will develop a classroom culture in which everyone expects to think.
* review assessment tasks and learning activities to determine what types of thinking are required. Will students reflect throughout the task or only at the end? What thinking strategies do the learners already have or might they need for this task? What links can be made with prior knowledge, skills and understanding? When and how will students articulate and reflect on what they learned and how they learned it?
* work on improving the quality of student answers by
  + asking follow-up questions such as ‘Why do you think that is?’, ‘Can you tell me more?’;
  + telling students there’s not only one correct answer to the question;
  + not evaluating answers – withholding judgement;
  + asking another student to summarise an answer or add to an answer;
  + asking students to view the issue from a different perspective;
  + asking students to describe how they arrived at their answer; and
  + deflecting student questions to the class rather than directly answering them.

### Conclusion

The above suggestions are not meant to be prescriptive. You may be implementing many of these already, some may need adaptation to your local context and others may be something you work towards in the medium to longer term. Whatever methods you choose or suggestions you adopt, supporting your students to become self-managing learners is a great way to encourage lifelong learning.

## Developing technology skills

The ability to use technology effectively is highly valued by employers. Effective technology use includes using technologies to:

* access and filter data;
* extract and integrate information for learning; and
* interact, collaborate and create online.

Many students today have high skill levels in the technical use of technologies. The challenge is how to help them use their technical capabilities to bring about meaningful learning (Fetherston, 2001) and to eventually improve their productivity.

### Teaching students how to use technologies

While recognising the value, and indeed necessity, of teaching students how to use technologies specific to each discipline, as well as to general research work (such as statistical processing software), the focus of this section is on the use of general Information and Communication Technologies (ICT).

#### Using technologies to access and filter data

The internet offers access to vast amounts of information (and misinformation). We can teach our students to:

* use search engines more effectively. Most search engines have tutorials for how to refine your searches, such as in this [Google Guide](http://www.googleguide.com/advanced_operators.html).
* be aware of the influence of search optimisation techniques on websites. Students may not be aware that many websites use these techniques to optimise the site’s chances of being found by search engines. This does not necessarily mean they’re the most useful or relevant sites.

A quick classroom activity to emphasise the value of good searching technique is to get students to compare the results of their searches (possibly using different search engines) on a specific topic, to discuss who found the ‘best’ sites and to share strategies for quickly finding the most relevant information.

#### Using technologies to extract and integrate information for learning

Cognitive skills such as critical thinking underpin effective technology use. Mason, Ariasi and Boldrin (2011) classified the cognitive skills that students actually use in learning from the web as:

* evaluating the credibility of websites. Students tend to evaluate credibility based on source, with high credibility afforded to research institutes and established authorities such as government bodies.
* examining justifications for specific claims. Students looked for research evidence and compared claims with prior knowledge.
* pulling all the facts together. Students looked for strong agreement from multiple credible sources before accepting claims as facts.

The following questions can be used to guide students in evaluating the usefulness of a site:

* Who is the author?
  + How do I know the author is knowledgeable about the topic?
  + What might the author’s motivation/bias be?
* How reliable is the information?
  + Is the information based on evidence?
  + Is the information corroborated by several reliable sources?
* How well does the site explain the information?
  + Is the explanation detailed and clear enough for my purpose?

A useful classroom activity on which to base learning about integrating information found on websites is to direct students to four websites about a topic and give them 10 minutes to respond to a question that requires integration of the information from those sites.

Try to use websites that emphasise the search points above, such as one that

* would come up at the top of a search list because of optimisation techniques;
* looks glossy but does not show who the author is;
* gives different information (not corroborated by the other three sites); and
* is written in technical language with a level of detail far beyond what would be required to answer the question.

Vary the above activity to suit your purpose by changing the question, changing the audience, and/or adding new websites.

#### Using technologies to interact, collaborate and create online

Most of our students use technologies to interact with friends all the time, yet they may not be aware of the potential threats to their privacy and the longer-term implications of creating an online presence that could later be viewed by potential employers. Get students to search for answers to the question: How far will employers go to pry into your social network?

Use discussion boards for both online and face-to-face units. Find out more about the benefits of using discussion boards [here](http://www.wpi.edu/Academics/ATC/Collaboratory/Idea/boards.html), including

* greater cognitive and exploratory learning;
* increased student-to-student conversation and collaboration;
* more developed critical thinking skills; and
* greater student empowerment.

Practice good discussion board moderation techniques yourself, and give students opportunities to do the same, using guidelines such as:

* ask open-ended questions;
* play devil’s advocate by using contradictions and counter-examples;
* acknowledge and build on contributions of others;
* redirect questions to others; and
* keep postings short and concise, ending with a question or point for further debate.

Include discussion board participation in your assessment scheme, using criteria such as:

* integration – of readings, of multiple points of view, of other participants’ postings;
* timeliness;
* relevance;
* tone, and appropriate use of discipline specific language and terminology; and
* accuracy, level of detail, and depth.

Be clear and explicit about your expectations, for example:

*You are expected to post four substantive original contributions and six substantive responses this semester. You may not post substantive contributions/responses more than once a week, but may contribute to the discussion by offering brief comments or asking follow-up questions.*

Offer guidelines for postings such as:

* use professional and courteous language for all postings;
* clearly state the topic of your posting and outline your main point in the first paragraph; and
* proofread before posting.

### Teaching students how to evaluate technologies

In addition to using technology effectively, we need to know how to select the right tool for the job. That requires an understanding of the affordances of technologies for a particular task in a specific context. It includes:

* evaluating benefits and risks of using technologies; and
* awareness of emerging technologies in relation to current and future needs.

Neil Postman posited that technology gives and takes away (Postman, 1993).

In teaching students how to evaluate technologies we can guide them to consider what a technology affords them:

* what the technology offers, and
* what it restricts or removes.

For example, email offers asynchronous communication that can be casual or formal, but it does not allow access to other communication cues available in face-to-face meetings such as tone of voice, facial expressions, and body language. Emoticons are an attempt to address this deficiency.

Csikszentmihalyi (1993) classified technologies that assisted our thinking as extra-somatic devices. Similarly, Marshall McLuhan (1988) defined technologies as devices that extend natural human abilities. He developed a model on which to base evaluations that helps us to fully describe the properties of each technology (known as McLuhan’s four laws of media):

1. **Extension**: What does the technology extend or enhance? What does it intensify, or make possible, or accelerate?
2. **Reversal**: What might the technology reverse if over-extended? For example, motor vehicles allow faster travel, but too many motor vehicles cause traffic jams which have the opposite effect.
3. **Retrieval**: What can the technology retrieve? For example, storytelling was largely an oral-visual tradition before the advent of printers. You-tube offers retrieval of that tradition.
4. **Obsolescence**: What is pushed aside by the new technology? Note that a new technology may not make the old one totally obsolete (did printing make writing obsolete?).

The above offers a guiding framework for students engaged in the task of evaluating either current or emerging technologies.

Section Two – Work-Integrated Learning (WIL)

Research indicates that university students value the inclusion of generic skills in the curriculum, *but would like more opportunities to learn the skills in practical settings* (Blackwell, Bowes, Harvey, Hesketh, & Knight, 2001; Crebert, Bates, Bell, Patrick, & Cragnolini, 2004a; Little & Harvey, 2006). Work-integrated learning offers such opportunities.

A report prepared for the Business Industry Higher Education Collaboration Council (Precision Consultancy, 2007), notes that work-integrated learning is an important vehicle for the development of graduate attributes and employability skills.

Within Australia, work-integrated learning (WIL) has been described as: “an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick et al., 2008, p. iv).

At ECU the ‘purposefully designed curriculum’ for a WIL activity must:

* be primarily related to students’ academic study while integrating career aspects and employability skills;
* focus on productive and meaningful workplace tasks that build on students’ theoretical knowledge base in a structured and appropriately supervised manner; and
* have explicitly defined learning outcomes and an assessment methodology that relates academic theory to the workplace experience of students.

See Section 4.5 (b) of ECU’s [Course and Unit Planning and Development policy](http://www.ecu.edu.au/GPPS/policies_db/policies_view.php?rec_id=0000000389).

WIL experiences are specifically designed to help students:

* develop their capacity to apply their knowledge and skills;
* streamline their transition from university to the workplace;
* develop important lifelong knowledge and skills that will assist their career; and
* engage with industry professionals, including potential future employers.

WIL provides students with organised and meaningful experiences by working with formalised partnerships to provide a predetermined program of learning and assessment activities.

# Principles underpinning WIL at ECU

Section 4.5 of ECU’s [Course and Unit Planning and Development policy](http://www.ecu.edu.au/GPPS/policies_db/policies_view.php?rec_id=0000000389) informs staff of the approaches and principles underpinning WIL. WIL must be planned and developed carefully to ensure the optimal learning benefits are achieved.

The principles that underpin ECU’s commitment to providing WIL opportunities for its students are:

1. opportunities for students to undertake WIL activities are expected to be provided in all undergraduate courses, but not all students are required or may be able to participate in WIL activities;
2. these opportunities are expected to act as the means for creating and sustaining partnerships with mutually beneficial outcomes for students, Hosts, the University and the wider community;
3. these opportunities will be designed to comply with all applicable ECU policies, any professional accreditation requirements and with the provisions of relevant Commonwealth and State government legislation and regulations, in particular the Work Experience in Industry requirements of the Higher Education Support Act (2003)(CT); and
4. professional development for staff together with guidelines and documents for supporting WIL will be provided and maintained by CLD.

# Responsibilities of staff

Please see <http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/work-integrated-learning-wil> for a description of roles and responsibilities of staff involved in WIL. As a unit coordinator you are responsible for the following:

### Unit Coordinator Responsibilities

It is the responsibility of the Unit Coordinator to:

* 1. ensure that students engaged in WIL activities are adequately supervised and that their assessment is conducted in accordance with ECU’s Assessment Policy;
  2. in consultation with potential Hosts, identify opportunities for WIL activities and allocate students to those activities;
  3. provide adequate and appropriate information for Hosts about ECU’s expectations of all parties involved in WIL activities;
  4. administer agreements between ECU, its students and Hosts to ensure all parties’ obligations are complied with; and
  5. regularly consult with Hosts about the performance of students placed in those organisations and provide and record details of timely feedback provided to students engaged in WIL activities.

The HOS, the Host, the Student and the University all have specific responsibilities that are outlined in the document (URL above).

# Planning the WIL curriculum

WIL can be a whole unit or part of a unit. While it must be primarily related to students’ academic study it should integrate career aspects and employability skills. It should focus on productive and meaningful workplace tasks that build on students’ theoretical knowledge base.

The WIL curriculum should have explicitly defined learning outcomes that focus on the integration of academic and work-related learning and are ideally assessed using ‘real-world’ evaluation criteria. WIL should be about ‘doing’ the subject rather than ‘learning about’ the subject, so that students are immersed in the experience of ‘becoming’ (a nurse, accountant, teacher).

It is a good idea to specify the time commitment expected of students.

Moreland (2005) suggests that work-related learning experiences (such as WIL) involve students in:

* learning about themselves;
* learning and practising skills of value in the world of work;
* developing personal attributes of value in the world of work;
* applying discipline knowledge and observing the results;
* experiencing the world of work in order to provide insights into university studies; and
* learning how to manage themselves and their learning in work-related situations.

If you would like to add a work-integrated learning element to an existing unit it may be useful to consider the following:

#### Before the WIL Experience

* Consider which learning outcomes in your course are best achieved through learning in a workplace setting. What knowledge and/or skills you want students to gain as a result of the WIL experience?
* Establish who will be doing the assessment. University supervisors, employers, both, other? Provide clear criteria for assessment of the experience. Help the supervising professional practitioner become familiar with the learning outcomes and assessment criteria of the practicum.
* Notify your Head of School of your intention to add a work-integrated learning element, identifying potential host partners, and check if others are contacting the same hosts.
* Meet with potential community, practitioner or business partners to establish the partnership and maintain ongoing relationships. Go to the meeting with a list of the benefits our students could bring to the partner e.g. students could develop a product or provide a service, develop a business plan or design a website.
* Arrange necessary checks for students, e.g. criminal records checks, working with children checks and any required immunisations.
* The consequences for students being absent during any workplace teaching should be made clear in the Unit Plan. Also ensure that students know what support is available for them if and when they require it.

Prepare students for the experience by:

* stressing important workplace skills like communication, team working, punctuality, perseverance and the importance of professional appearance and conduct.
* teaching students how to reflect on their experiences at both a professional and personal level.
* familiarising students with the idea that getting to know their own limitations is part of the learning process.
* encouraging students to do personal preparation by researching the sector, industry or organisation where they will conduct their WIL placement. Note that students’ preparation could be assessed if it is part of the learning outcome(s) for WIL.
* teaching students the Plan-Do-Review-Improve (PDRI) cycle as a framework for the whole experience:
  + spend time preparing their actions (plan);
  + act in the professional setting as planned (do);
  + reflect critically to identify strengths and weaknesses (review); and
  + gain insight into themselves as practitioners that can be integrated into new patterns of ideas and attitudes (improve).

#### During the WIL Experience

* Provide structured activities for students that assist them to analyse, discuss and evaluate their experiences.
* Facilitate communication with, and between, students whilst they are out on placement (e.g. via Blackboard Discussion Boards) to support and encourage reflection in action.
* Motivate students to take all opportunities to observe and learn from expert practitioners in action as well as develop their own practical skills in the professional setting.
* Visit students on longer placements so they don’t feel cut off from the University community.
* Communicate regularly with the WIL partners to monitor student progress, and identify any emerging problems, early.
* Check that workplace mentors/supervisors are providing regular feedback to the students so that the students have clarity on how they are progressing and what they need to do to improve.

#### After the WIL Experience

* Establish opportunities for students to discuss how they developed their professional skills, personal skills and/or knowledge base through the WIL experience.
* Help students understand the links between academic content and professional practice.
* Encourage students to reflect on their strengths and weaknesses revealed through the WIL placement and to identify appropriate career choices, pathways and opportunities for further development.
* Conduct critical incident debriefings – important for students and for ongoing relationships with employers.
* Keep contact with WIL partners to sustain their relationships with the University.
* Encourage students to stay in touch with potential future employers they met during their WIL placement.

## Align teaching with learning outcomes and assessment

It is important to align teaching with learning outcomes and assessments. Teaching may be facilitated online, on campus and/or in the workplace. Teaching and assessment before WIL facilitates students’ preparation before they go to the host organisation. Assessing students’ preparation may help to identify students’ needs. Students at risk can be identified. Extra support may be provided so that these students can be successful in that placement.

Role plays during tutorials in other units before the WIL experience facilitate students’ learning of practical aspects of client interviews and managing potential difficulties.

Marking criteria, and the level of performance expected, should be clarified for students before the placement. The following example illustrates one way this could be done.

*Videos of two previous year’s performances are shown in a lecture. Students use clickers to grade each performance for drama, visual arts and music. So students learn how to assess their peers using the rubric as well as learning lecturers’ expectations of the assessment. The lecturer leads a discussion about why the grades were chosen. A written summary of the discussion that clarifies and elaborates expectations of the performances for all students is posted on the unit’s Blackboard site.*

# Career development learning during WIL

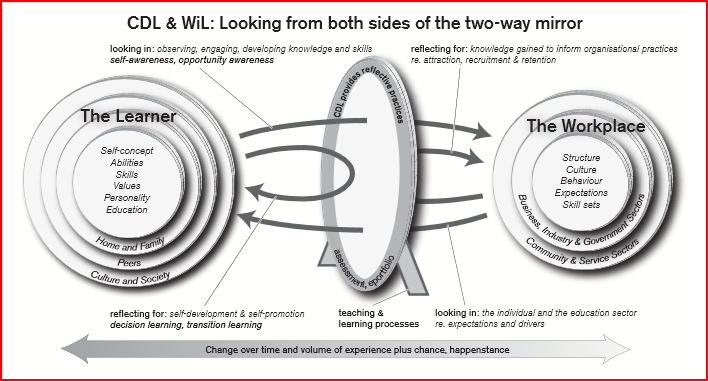
Where career development learning is embedded in work-integrated learning programs, it provides opportunities for students to assess their skill development and plan to grow areas needing attention while they are still in a learning environment. It significantly enhances the quality of WIL by helping students to be career ready as well as work ready (Watts, 2008).

A 2009 [NAGCAS ALTC Project](http://www.nagcas.org.au/ALTC/) on maximising the student experience of WIL recommends embedding career development learning into WIL experiences as follows.

* Prior to commencement of their workplace learning experience students write career goal statements and undertake a skills analysis.
* They develop this with their industry supervisor through a series of performance appraisals and an attempt is made to provide opportunities to address areas where skill development is indicated as needed.
* A mid-placement evaluation with their work place supervisor is preceded by a student self-assessment of progress against goals.
* Opportunity is provided at the conclusion of the program to reflect upon the career development learning that has occurred.
* Students are required to write a final report on the project and their learning outcomes. In particular they are required to reflect upon the impact of the placement on their future career and career goals.
* Formal career development learning concludes with a presentation on the experience to their peers drawing upon their subject portfolio.

The [NAGCAS ALTC final project report](http://nagcas.org.au/ALTC/universities) offers the following diagram in response to their finding that

*“A critical success factor in the workplace experience being transformational for all parties is the underpinning of reflective practices designed around career development learning.” (*p. 30).



# Learning through reflection

Many of the metacognitive strategies detailed earlier in this guide – under [*Developing self-managing learners*](#_Meta-cognitive_learning_strategies) – are likely to be valuable for students engaging in WIL. Technologies, such as e-portfolios and mobile phones, facilitate the use of video and audio capture of

* experiences,
* products,
* processes, and
* reflections.

Diagrams or concept maps can help students to link academic and workplace learning, and can supplement written reflections.

Often students who have neither the time nor the energy to do a written reflection at the end of the day can manage a quick voice-memo, either at the end of the day or along the way, perhaps supported by a photo or video taken with their mobile phone.

The process of reflection is complex. Reflective writing has the potential for distortion and embellishment of the experience. Unstructured reflections may also be vague, general and subjective. Assisting students to structure their reflection through the use of a model such as DIEP (Describe, Interpret, Evaluate and Plan) enhance the effectiveness of reflection for learning.

A *Guide to Reflective Practice in WIL* is available from our [Work-Integrated learning](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/work-integrated-learning-wil) web page. It will help you to guide students through a reflective practice process using a DIEP (Describe, Interpret, Evaluate and Plan) approach.

# A model for developing WIL assessments

Section 4.5 of the [Course and Unit Planning and Development policy](http://www.ecu.edu.au/GPPS/policies_db/policies_view.php?rec_id=0000000389) stipulates that WIL at ECU must:

* be a formal component of an overall course;
* have explicitly defined learning outcomes; and
* have an assessment methodology that relates academic theory to the workplace experience of students.

The following model may assist you to develop an appropriate and effective assessment methodology:

### Consider background/context

Many practical aspects of the WIL in your unit affect the design and implementation of assessment strategies. For example, while students in one workplace may have all tasks assigned by their supervisor, other students may be allowed a choice. So it may be inappropriate to assess students’ autonomy as part of professional skill development in that unit.

Some of the practical aspects of the WIL in your unit, such as the extent to which University staff are able to provide support and feedback during placement, and whether the placement is required for a student’s professional accreditation, may affect the design and implementation of assessment strategies. A WIL Profile document can be downloaded from the [WIL page](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/workplace-integrated-learning-wil) of the Learning Intranet to assist you in identifying practical aspects that may affect the design and implementation of assessment strategies.

### Identify what knowledge and skills you are trying to assess

Examine the learning outcomes for the unit and identify which are to be assessed by your WIL assessment item.

Consider what main type of learning this assessment item assesses. For example, some of the main types of learning that you may wish to assess are:

* Discipline specific academic skills and theoretical knowledge;
* Professional skills and knowledge (hard skills and competencies);
* Professional skills and knowledge (the so-called soft skills like communication and team work);
* Graduate attributes and generic skills;
* Application to theory and practice; and
* Personal development and transformative skills ([Winchester-Seeto, Mackaway, Harvey, & Coulson, 2010](#_ENREF_1)).

Any of the above, that you decide should be assessed, need to relate to a learning outcome.

List the learning outcome(s) that are assessed by this item.

### Determine what constitutes evidence of learning and attend to validity and reliability

What evidence would convince you that students have achieved the learning outcome?

Such evidence could be provided by direct observation (for example student conducting a client interview) of the student performing the requisite skill. Some skills may only be displayed in an overall way during WIL rather than at one set time and place.

To attend to validity and reliability, ensure that:

* the evidence aligns to the learning outcome it is assessing;
* all parties interpret the learning outcome the same way;
* all parties agree on what indicators of performance will be accepted;
* the assessment style and timing suits all students; and
* all evidence of learning will be assessed fairly by all assessors (use moderation of assessment processes).

### Choose authentic assessment strategies that are aligned to learning outcomes

Authentic assessment asks students to “do” their discipline in an authentic context.

Authentic assessment:

* engages students in tasks that have real-world relevance;
* reflects real-world evaluation processes; and
* uses criteria that reflect **real-world evaluation criteria**.

Here are some questions that might be useful in choosing your strategy:

* What assessment strategies are used to assess employees in typical workplaces related to this discipline?;
* What assessment strategies have been used for WIL in this course previously, and to what extent were they successful (i.e. offering valid and reliable grading of achievement?;
* What are the strengths of that assessment strategy for this purpose?;
* What are the potential problems and considerations of that assessment strategy?; and
* How will the evidence of learning be assessed fairly by all assessors, i.e. what moderation procedures can be utilised?

Winchester-Seeto, et al. (2010) list assessment strategies commonly used for WIL in Australian universities. Note that many commonly used strategies, such as tests, examinations and traditional academic essays, do not fall within the above definition of authentic. For brief notes about the strengths, potential problems and considerations of assessment strategies, see [Assessment toolkit resources: Assessment in learning through participation](http://staff.mq.edu.au/teaching/curriculum_development/pace/resources/pace-assessment/).

### Identify where the assessment will take place and who will do the assessing

It is important that students are assessed in the WIL environment – this is the authentic setting – so seriously consider this option.

Assessors may be

* yourself or other academic staff;
* workplace supervisors who see that student most of the placement;
* other industry assessors who may see the student infrequently; and/or
* students’ peers and/or themselves.

Assessors from the WIL setting may require training.

To ensure that all students will be assessed fairly and objectively despite the variety of workplaces and supervisors:

* review potential marking biases (e.g. cultural issues and subjectivity) to identify what may advantage or disadvantage any students;
* conduct a consensus marking exercise including second marking or cross marking using a moderation process to ensure that all assessors are fair and objective in their judgments (See [Moderation of Assessment resources](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/moderation-of-assessment) on the Learning Intranet).

Videoing performances with appropriate permissions and sign offs may be valuable for assessment. Such evidence may also be useful for students’ learning.

### Identify when an assessment should take place

Assessments may take place before, during or after the WIL experience. However, the most valid judgments will be made during WIL in the workplace setting.

Considerations:

* Give students more than one opportunity to demonstrate their competencies at that skill.
* Students’ preparation and readiness to operate effectively in the new environment of a workplace may be assessed before the WIL experience.
* Consider formative assessment. (See [Assessments resources](http://intranet.ecu.edu.au/learning/for-academic-staff/curriculum-2012-resources/assessment) on the Learning Intranet.)
* It may not be practical for students to have all their assessments at the final stages of their WIL experiences. Yet assessing at the end of the WIL experience allows students the most time to acquire the skills required for assessment.
* Several types of assessment may be used after the WIL experiences. For example, students may be assessed in an oral presentation showcasing their learning to industry assessors.

### Define indicators of learning clearly – for assessors and students

Put an assessment approach in place that will ensure that all assessors (you, other academic staff, workplace supervisors, other industry assessors) are certain that a student has a specified knowledge or skill. This may require students to demonstrate a skill in more than one context.

To ensure consistency of marking such that all assessors would agree that an achievement level has been attained:

* Use stated indicators of learning that form the basis of the marking criteria; and
* Check that the indicators of learning are clear for all assessors.

It is useful to share these indicators of learning with students too – preferably before their placement. Sharing exemplars of performance standards can go a long way to avoiding later dissatisfaction with grades.

## Example 1 - Assessing by direct observation

Many employability skills cannot easily be assessed by getting students to write about them, but are more authentically assessed in ‘real-world’ contexts by direct observation of performance. Direct observation can be used in the workplace by supervisors (either employer or university supervisors) or back on campus in a simulated environment.

### Consider background/context

The work-integrated learning (and authentic assessment) in this unit is realised through a performance by drama, music and visual arts students in front of their peers who perform the role of audience. This example is preparation for a more formal work-integrated learning (WIL) that occurs for these education students in their practicum.

At the end of this unit, students go out to schools for four weeks so this is preparation for practicum as they will use this same assessment process in schools. Soon after their “prac”, many students graduate so this unit ultimately prepares students to facilitate primary school students’ understanding and experience of processes and techniques of drama, visual arts, media arts, dance and music as well as to work effectively in groups.

The practical aspects of the WIL in this unit that affect the design and implementation of assessment strategies are:

* Forming sustainable groups, facilitating learning about how to work in groups and supporting those in difficulty so that each group completes the task.
* Students’ availability based on some common time outside tutorial and lecture times so that they can conveniently work together. One free hour is timetabled for this unit after the lecture before the two-hour tutorial so that all students have a common hour for group work.
* Boundaries are set for accessible resources but there are no boundaries on creativity.
* Lecturers’ availability for formative feedback and discussion. In this unit, several tutorials worked on “unpacking” the integrated task and promoting creative ideas, then rehearsal time when lecturers were available for support and guidance.

### Identify what knowledge and skills you are trying to assess

#### Learning Outcomes

On completion of this unit, students will be able to:

* Demonstrate how the arts inform contemporary learning processes to create, convey and contextualise meaning;
* Demonstrate how the arts offer unique ways of thinking, exploring and communicating;
* Demonstrate skills, techniques and processes of drama, music and visual arts which enable exploration of several areas of the curriculum;

Use the Arts as a means to engage learners in problem solving and to develop appreciation of multiple perspectives;

* Use structures that support children participating, creating, expressing and reflecting in a personal, social and cultural context; and
* Critical reflection of own work and work of others.

This assessment item assesses these outcomes:

* Demonstrate skills, techniques and processes of drama, music and visual arts which enable exploration of several areas of the curriculum;
* Use structures that support children participating, creating, expressing and reflecting in a personal, social and cultural context; and
* Critical reflection of own work and work of others.

### Determine what constitutes evidence of learning and attend to validity and reliability

In this assessment, a performance that is creative, has a clear purpose and demonstrates all members interacting as a group and using skills of drama, visual arts and music is evidence of learning. The reliability and validity of this evidence is enhanced by students’ peer assessments and their self-assessments, a clear marking rubric and collaboration between three assessors.

This assessment has several moderation checks. The three assessors’ iPads are synchronized. They collaborate and give each other feedback during the performance and over the following few days to complete the students’ assessment.

The video record of the performance enables the assessors to review and rewrite and the students to check that comments and marks are valid.

### Choose authentic assessment strategies that are aligned to learning outcomes

This is a performance based unit so an authentic assessment item would involve performance. The practical creative performance by each student group is assessed by:

* Direct observation of skills and performance by academics.

The live performances are videoed and assessed using an assessment app on iPads. Each of the three assessors completes the grading of the assessment using the app which gives them access to the rubric. The assessors complete their marking and comments anywhere anytime within the following few days. All iPads are connected such that assessors’ written notes are seen by others during the performance. The assessors sit in the audience to minimise students’ anxiety. This online collaboration between assessors during the grading process has been helpful, easeful and efficient. When completed, the video is emailed to the student together with the completed rubric.

### Identify where the assessment will take place and who will do the assessing

Students and lecturers assess the performances which occur at University in an authentic environment – a theatre and audience. The three academics who have coordinated the drama, music and visual arts tutorials assess the group performance. One assesses drama. Another assesses music while the third assesses visual art aspects. Each student assesses the performance of their other group members. Also each student assesses the performance of one other group.

### Identify when an assessment should take place

The performance is observed and assessed as part of the final tutorial on campus.

### Define indicators of learning clearly – for assessors and students

The assessment rubric is negotiated with students during a lecture after an example is given and made available in Blackboard. A sample student assessment rubric with a video embedded is available on the Learning Intranet.

The marking rubric defines satisfactory, commendable and exemplary for group work, arts skills and creativity for music, visual art and drama. Each lecturer assesses the implementation and understanding of three specified arts elements.

**Group Work** on stage is assessed by observing the extent to which group work collaboration is shown on stage. Group work is demonstrated by a unified production showing a clear purpose and interaction between all members with regard to music, drama and visual art.

**Arts Skills** include the use of sound production and texture; music/sound effects; use of voice, space and physicalisation on stage in positioning, movement and gesture; use of colour, line, form and shape through painting and printmaking to produce mood and atmosphere, communicate meaning and emotion and create visual emphasis.

**Creativity** applies to design and implement original sound effects/music, where the performance employs dramatic elements to create imaginary setting for characters, with original, innovative and elaborate visual effects.  
The assessment criteria are elaborated below:

**Assessment Criteria Elaboration for Creative Performance**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria**  **Aspect** | **Group Work** | **Artistic Skills** | **Creativity** |
| **Music** | Group members work and interact together to **produce well timed sounds and music.**  *For example: Use of music/ sound effects to depict movement*  *or action* | The production of **music/ sound effects to create atmosphere and/or mood and /or movement**. *For example:*  *Expression: use of tempo and dynamics.* | **Creative and original use of sound effects and /or music** appropriate to presentation. *For example: Inventive, interactive with actions, use of different sound sources*  Interesting. Relaxing. Stimulating. Unusual. Effective. Contrasting. |
| **Drama** | **Members contribute to create a unified performance space** - engaging with each other and reacting - **to deliver a dynamic performance.**  *Examples of an effective collaboration in the performance’s delivery include authentic listening, supportive synchronicity and collective awareness.* | **Use of voice** (verbal communication) **and the use of space** (non-verbal communication) **to convey and communicate meaning and emotion in engagement with an audience.**  *Examples could include a range of movement possibilities like direction, levels, speeds and energies and the exploration of vocal expression using Readers’ Theatre and Choral Speaking conventions.* | **Performances are devised employing the elements of drama** (dramatic tension, contrast, space, focus, symbol, time and mood) **in innovative ways that create imaginary environments and characters.**  *Examples include the exploration of the physical space in unconventional ways that engage and entertain, and creating an atmosphere through the experimentation of vocal and verbal dynamics.* |
| **Visual Art** | **Group artwork is used in a unified way in the**  **final performance that shows the group collaborated one of two ways:**   1. where artworks were designed and created by individuals, followed by group collaboration where at least three individual’s artworks were incorporated into the final performance   or   1. the group collaborated, negotiated, created ideas together to produce group sets of artworks from the start where a minimum of three artworks were used in the final performance. | Artistic principles and elements are used with **particular knowledge about colour and emphasis** demonstrated in all artworks used on stage. Art works are produced by **painting and printmaking**.  Artworks have been produced with quality craftsmanship (e.g. Although the artworks are designed for a one-off performance, the design, painting and printmaking is done with practice and drafting; the audience cannot see how artwork has been joined together; the workmanship is done with intention, overall the products have been finished off well). | Artworks created and used on stage show that they have **elements of visual originality and demonstrate elaboration in visual design.**  Students employ innovative methods of using ordinary objects, they use representation and symbolism. Evidence that imagination was used in the creation of artworks and that ideas used were selected from a visual repertoire (not just one idea or the first idea).  All stage materials fits into the given box. |

## Example 2 - Assessing student reflections

Students’ reflections form part of several assessment strategies. Students may be required to reflect on some of the many perspectives that they may encounter that challenge their beliefs, values and assumptions. There are many ways to guide students’ reflection and their writing of reflections as evidence of their learning. Reflection may be scaffolded through four learning phases that may affect timing of assessment. The four phases of refection (learning to reflect, reflection for action, in action and on action) are deliberately different types of reflection.

### Consider background/context

The WIL (and authentic assessment) in this unit is realised through a reflective journal.

Engineering students at ECU are required to gain at least 12 weeks practical work experience before they can graduate from their degree. This practical experience, most likely undertaken during the summer and mid‐semester breaks, enables students to work with professional engineers in office, laboratory and/or site‐based environments. Students are supervised and engaged in productive work.

At the beginning of each practicum, students are required to complete the

* [Work-Integrated Learning Risk Assessment Checklist – Student](http://intranet.ecu.edu.au/__data/assets/word_doc/0009/473733/WIL-Risk-Assessment-Checklist-Student.docx),

while the employer is requested to complete the

* [Work-Integrated Learning Risk Assessment Checklist – Host Organisation](http://intranet.ecu.edu.au/__data/assets/word_doc/0010/473734/WIL-Risk-Assessment-Checklist-Host-Organisation.docx).

### Identify what knowledge and skills you are trying to assess

Check the unit outcomes for this unit and identify which are assessed by this item. A reflective journal may be used to assess students’ critical appraisal skills (graduate attribute) if students’ reflections demonstrate that they have analysed and interpreted situations, behaviours, events, strategies and actions.

#### Learning Outcomes

On completion of the unit, students should be able to:

* contact and liaise with prospective employers to secure employment;
* demonstrate teamwork and leadership skills;
* apply and test knowledge gained at university in a real world engineering environment;
* demonstrate industry-specific knowledge;
* constructively contribute to workplace practices;
* reflect on the learning outcomes from work experiences;
* document and communicate their experiences as professional engineers.

This assessment item assesses these outcomes:

* reflect on the learning outcomes from work experiences; and
* document and communicate their experiences as professional engineers.

In this assessment, each student chooses to describe and reflect on situations in the workplace that led to a learning experience for them. So this assessment may also assess these outcomes:

* demonstrate teamwork and leadership skills;
* apply and test knowledge gained at university in a real world engineering environment;
* demonstrate industry-specific knowledge; and
* constructively contribute to workplace practices.

### Determine what constitutes evidence of learning and attend to validity and reliability

Evidence of learning from WIL experiences is demonstrated in students’ reflections – which are students’ descriptions and explanations of their processing of what they have experienced in WIL. The learning they derived from a variety of situations in the workplace includes analysing their mistakes and solving problems. Students are required to write their reflections of a particular experience that they choose from each week. Students are also required to write their reflections about their overall workplace experience. Students are encouraged not to hide their limitations, ignorance and doubts but to identify and learn from them. In some WIL units, there is a specific request for students to reflect on team work, problem solving or use of particular equipment.

Evidence of learning through reflections includes more than descriptions of experiences in the workplace. To guide students in their learning from workplace experiences and in their writing about their learning, a model may enhance validity and reliability of this assessment. In the DIEP model, students are expected to

* describe,
* interpret,
* evaluate and
* plan

as phases of their reflective practice.

Students’ writing style and communication skills may be assessed as a part of reflection. To manage any potential bias that assessors may have while reading poorly written reflections, it is important to segregate marks for writing style from marks for actual reflection. Word count suggestions and the use of dot points rather than sentences may be appropriate.

Academic and workplace supervisors’ observations, meetings and reports provide validity and reliability checks. Peer reflections in discussion online and in tutorials also provide validity and reliability checks, especially if more than one student is in the same workplace.

### Choose authentic assessment strategies that are aligned to learning outcomes

For this example, a rubric and marking criteria for assessing reflections on students’ WIL experiences were developed. Reflections are also a major part of learning portfolios/e-Portfolios that also contain external evidence of learning.

For each completed week of work, students are required to write a

* Reflective journal; and a
* Work-Integrated Learning Professional Log Report.

### Identify where the assessment will take place and who will do the assessing

The academics who may supervise students in the workplace assess students’ reflections online and workplace supervisors assess students’ reflections in the workplace.

### Identify when an assessment should take place

The academic assesses the students’ reflections before, during and after the whole of the WIL has been completed. Workplace supervisors assess students’ reflections throughout WIL.

Before WIL, students’ anticipation of the WIL experiences forms the basis of their reflections as preparation. This first reflection ensures that students are well prepared for the assessment and the WIL.

During WIL, students’ reflections guide their learning as they review their experiences at the end of every week. The weekly log is formative assessment with feedback to enhance their learning. Over successive weeks, students refer to the feedback to provide evidence of their learning from previous weeks.

After WIL, students’ reflections are part of the processing phase in which debriefing of critical incidents is important. The process of writing reflections helps students to find meaning and learning in their experiences. In writing reflections, students often connect their experiences, patterns of experiences and their responses to workplace situations to coursework, readings and research. Students may be asked to write about their reflections on their professional and personal development and improvement of skills throughout the WIL. Students may benefit from sharing their reflections and assessing their peers’ reflections, especially if they had several similar experiences.

### Define indicators of learning clearly – for assessors and students

For this example, reflections of learning from students’ WIL experiences should include:

* descriptions, interpretations and evaluations of WIL experiences and how they align with coursework;
* descriptions, interpretations and evaluations of how learning outcomes were achieved;
* connections between WIL experiences, readings and research beyond coursework;
* planning of how WIL experiences apply to career choices and the profession; and
* references to feedback provided during WIL and how the student used the feedback to improve their knowledge, skills and attitudes.

## Example 3 - Assessing from supervisors’ reports

This example demonstrates how workplace supervisors can be supported to assess student performance in a manner that is clear and transparent, resulting in workplace assessments that can be used to grade students with confidence.

### Consider background/context

Students are local to ECU, at the *Northern Suburbs Community Legal Centre* on Joondalup campus but also at other community legal centres in regional areas. This is an elective unit available to all students.

Selected students must sign a volunteer agreement then attend and participate in the work for approximately 70hours throughout the semester with no dates specified. This time excludes time required for research, reading and drafting which may be expected to be done outside formal contact hours.

An academic work-integrated learning (WIL) coordinator is available on campus, by phone and via email to provide support and feedback during placement.

How students achieve the required objectives and learning outcomes is left to the discretion of the experienced supervising legal practitioners.Practical legal tasks form the subject of an individual learning contract to be formulated between each student, the supervising legal practitioner and the Unit Coordinator.

A high degree of professionalism is required in terms of dress codes and communication skills.

### Identify what knowledge and skills you are trying to assess

Check the learning outcomes for the unit and identify which are assessed by this item.

#### Learning Outcomes

On completion of this unit, students will be able to:

* Conduct a good client interview;
* Manage a variety of clients and themselves in a sometimes stressful environment; and
* Research, write and manage legal documents appropriate to the legal workplace setting.

This assessment item assesses these outcomes:

* Conduct a good client interview; and
* Manage a variety of clients and themselves in a sometimes stressful environment.

### Determine what constitutes evidence of learning and attend to validity and reliability

In this assessment, evidence of learning comes from a client interview that

* identifies relevant legal issues;
* demonstrates analytical and problem solving abilities;
* demonstrates effective communication;
* demonstrates awareness of ethical concerns of privacy and confidentiality; and
* displays evidence of the integration of theoretical learning and practical application.

Skills such as client interviews, professionalism and communication can be difficult to assess reliably. This assessment with a real client in the workplace provides an authentic setting. This may be formative or summative. The reliability and validity of this evidence is enhanced by use of the supervisor’s report which acts as an assessment tool to guide both the student and assessor. Most importantly, the reliability and validity of this evidence is enhanced by a compulsory structured feedback session immediately after the student is observed interviewing a client.

### Choose authentic assessment strategies that are aligned to learning outcomes

For this example, a rubric for the host supervisors was developed as a checklist to guide direct observation of skill or performance by host supervisor.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Please rate the student against what you would expect of a student in that stage of their course. Please note that not all the skills may be examined during each encounter – this is a guide to show what may be observed and rated.** | | | | | | | | | | | |
| **Skill / Task** | **Rating** | | | | | | | | | | |
| **Unsatisfactory** | | **Novice** | | **Developing** | | **Competent** | | **Exceptional** | | **Did not observe** |
| **Client Interview** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
| **Professionalism** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
| **Communication** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
| **Teamwork** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
| **Critical Thinking** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
| **Performance of a Skill** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **N/ O** |
|  | | | | | | | | | | | |
| ***Conduct Client Interview*** | | | | | ***Professionalism*** | | | | | | |
| Interacts with client effectively; recognises client’s wishes and gives them priority | | | | | Shows respect for clients and staff at all times | | | | | | |
| Directs questions at key issues | | | | | Shows awareness of issues surrounding confidentiality | | | | | | |
| Uses questioning to optimise focus | | | | | Pursues and uses feedback to improve oneself | | | | | | |
| Incorporates information from questions with other information | | | | | Demonstrates ethical decision-making and behaviours | | | | | | |
| Identifies and responds appropriately to non-verbal clues | | | | | Shows awareness of own limitations and seeks appropriate support when required | | | | | | |
| Offers appropriate range of options to manage issues | | | | | Practices in accordance with legislation and protocols | | | | | | |
| Avoids personal opinion and bias | | | | | Successfully completes tasks in a self-directed manner | | | | | | |
|  | | | | | | | | | | | |
| ***Communication*** | | | | | ***Teamwork*** | | | | | | |
| Explains ideas fluently and coherently | | | | | Contributes to discussion and management of team | | | | | | |
| Listens without interrupting, ensures that others have the chance to contribute | | | | | Engages in processes to create and maintain team | | | | | | |
| Asks, adapts and sequences questions appropriately and effectively | | | | | Works collaboratively with others to foster a positive team environment | | | | | | |
| Varies language, expression and questioning to suit audience and situation | | | | | Demonstrates social awareness by responding appropriately with others | | | | | | |
| Uses appropriate body language | | | | | Builds rapport and cooperates with others | | | | | | |
| Demonstrates consciousness of potentially embarrassing or difficult interactions | | | | | Recognises and responds to potential conflict constructively to enhance relationships | | | | | | |
| Shows awareness of issues surrounding confidentiality in communication | | | | | Works productively with people from diverse backgrounds | | | | | | |
|  | | | | | | | | | | | |
| ***Critical Thinking*** | | | | | ***Performance of a Skill*** | | | | | | |
| Recognises patterns in detailed documents and scenarios | | | | | Selects and uses appropriate tools for task | | | | | | |
| Demonstrates ability to weigh potentially conflicting data | | | | | Selects and uses appropriate procedures for task | | | | | | |
| Demonstrates ability to determine best choice of procedure and/or management | | | | | Demonstrates knowledge and understanding of potential risks | | | | | | |
| Synthesises data quickly and efficiently | | | | | Shows sensitivity to client | | | | | | |
| Determines options | | | | | Performs and completes task in a timely fashion | | | | | | |
| Considers the risks and benefits of options | | | | | Completes task by ensuring that all equipment is appropriately stored or disposed of | | | | | | |
| Comes to a firm decision based on available evidence | | | | |  | | | | | | |

The supervisor then used the checklist to write the report.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supervisor’s Report for Direct Observation of a Skill or Performance** | | | | | | | | | | | | | |
| **Student’s Name:** |  | | | | | | | **ID:** |  | | **Stage of course / unit** |  | |
| **Assessor’s Name:** |  | | | | | | | **Assessor’s Position:** | | |  | | |
| **Date of Assessment:** |  | | | | | | | **Workplace Setting:** | | |  | | |
| **Workplace Task:** | Client Interview | | | | | | | | | | | | |
| **Task Complexity:** |  | **Low** |  | **Medium** | |  | **High** | | |
|  | | | | | | | | | | | | | |
| **Strengths** | | | | | | | **Suggestions for development** | | | | | | |
|  | | | | | | |  | | | | | | |
|  | | | | | | | | | | | | | |
| **Time taken for observation (minutes):** | | | | |  | | **Time taken for feedback (minutes):** | | | | | |  |
| **Assessor’s Signature:** | | | | | | | **Student’s Signature:** | | | | | | |

Supervisor’s reports are also a major part of learning portfolios/e-Portfolios as evidence of learning.

### Identify where the assessment will take place and who will do the assessing

The host supervisor will assess in the workplace.

### Identify when an assessment should take place

The host supervisor will assess the student twice throughout the 70 hours participation time. These times may be determined by the tasks required (e.g. client interviews), host supervisor (availability) and in negotiation with the student (readiness for success at the task). Individual formative assessment of specific skills will be followed by a summative assessment of those skills.

### Define indicators of learning clearly so that all assessors can be consistent in their marking

During a client interview, students should

* Interact with client effectively; recognise client’s wishes and give them priority;
* Direct questions at key issues;
* Use questioning to optimise focus;
* Incorporate information from questions with other information;
* Identify and respond appropriately to non-verbal clues;
* Offer appropriate range of options to manage issues; and
* Avoid personal opinion and bias.

See the Supervisor’s Report.

### Align teaching with learning outcomes and assessments

Teaching during practicum includes the student shadowing and observing a client being interviewed by the host supervisor. A mini-tutorial before and after the interview provides teaching time that aligns with the assessment.

Section Three - Examples

# Self-directed Internships

### CONTEXT

Professional Placement (CMM3104) is a self-directed and self-motivated work integrated learning (WIL) unit available as an elective in all 22 Majors in the School of Communication and Arts. Students with a grade average of at least 70% across their course can apply automatically, but where the average is less than 70%, they will be assessed for inclusion on a case by case basis. The unit is offered both semesters to increase flexibility for the student.

### TASK DESCRIPTION

The work integrated learning is 160 hours (or 20 days) negotiated with the Unit Coordinator or Tutor and can be completed in one or two different placements. The students timetable the hours in negotiation with their workplace supervisor and take into account the workload of their other units. Some students complete the bulk of their hours during university holiday periods. Prior to starting the placement, students must negotiate timing with their Tutor so that approvals, insurance and learning agreements are in place to ensure it is a genuine working experience.

In consultation with their Unit Coordinator, students create their own learning agreement and use this to guide their placement activities. Students must then negotiate how their learning aims can be achieved with their workplace supervisor: in many respects it represents a management by objectives process. The learning agreement helps students to maintain a focus on their aims and familiarises them with the formal documentation of goals.

During the placement, each student is required to maintain a portfolio showing examples of work undertaken, with a self-reflection on his or her performance and the value of the experience. The format of the portfolio is flexible and will often reflect the student’s field of study. The portfolio and a report from the student’s workplace supervisor form the primary assessment for the unit. The unit is pass/fail so that if a student’s submission is below standard it is returned to them to adjust and resubmit. This allows for a more holistic view of the learning experience rather than the just the mark.

The learning expectations of students focus on workplace skills and include:

* the ability to plan and execute a strategy to find a professional placement;
* the ability to make a substantial professional contribution to a workplace;
* a demonstration of the skills required by the workplace; and
* a display of initiative, reliability and competence in their duties.

### BENEFIT TO STAFF AND STUDENTS

As the primary responsibility for finding placements and the advancement of administrative processes are in the hands of the student, the unit provides each student with experience in the activities required for an actual job search when they graduate. These activities include job-searching, preparing a resume, writing application letters, and compiling a professional portfolio.

Many students say it is great to see the profession in action, although in some cases, it is not what they anticipate. Thus the placement allows students to confirm, adjust and better understand the expectations of industry.

For the Unit Coordinator, placements and portfolios are staggered throughout the semester which distributes the marking load more evenly.

### HELPFUL TIPS AND ADVICE

The difficult part for students is finding the host organisation. Students are told early in the course that they need to start networking to find their own placement. Some students are already active or sufficiently networked in their industry. To assist those that are not, the school provides a list of organisations that have taken students in the past and advertises information from organisations that have approached the school looking for students. It is also useful to provide standard program information for students to present to outside organisations.

For insurance/legal reasons there have been changes to the timing of placements and cut-off dates need to be in place if a placement organisation is not found. As a result some students will over enrol or audit classes in case they have to withdraw from this unit.

It is important to consider the style of assessment and grading schema when coordinating different requirements across the school.

#### Unit Coordinator: Mr Kim Harrison

#### First Year Coordinator SCA: Dr Hanadi Haddad

#### Design

The placement allows students to confirm, adjust and better understand the expectations of industry.

# Consulting with Industry to Continually Improve Placements

### CONTEXT

The placement Unit Coordinator schedules meetings with industry hosts where they discuss the strengths, weaknesses and the skill sets students may need to meet industry trends and demands. The discussions assist staff to refine teaching and learning frameworks. Work integrated learning (WIL), employability skill development and authentic assessments are continually adjusted, updated, and improved within the Bachelor of Science (Web Technology) course and across the school.

### TASK DESCRIPTION

The importance of generic employability skills in industry is evidenced by the following quotes from Justin Brown (JB):

“It’s not just the technical skills, it’s the working skills. Are you easy to work with? Are you flexible? Do you learn quickly? These are all of the things that are coming out as key employability practice.

“If you want to be a lone wolf then you’re going to struggle to get a job in industry because all of our employers are saying we would rather have someone we can work with as a team and who we can occasionally put in front of our clients.”

### BENEFITS TO STAFF AND STUDENTS

Industry expectations that have been identified within the WIL program have been integrated into other units and courses throughout the school. In addition, teaching staff have been able to use industry feedback to improve students’ employability outcomes.

“Students that got employed the quickest worked hard, they fit in, they were flexible, and they learnt quickly” (JB).

The benefits of industry/university relationships have even extended to previous students who are now employed by host organisations. ECU alumni are increasingly tasked with managing new placement students, thereby developing their management experience.

### HELPFUL TIPS & ADVICE

One of the key elements contributing to the success of the program is the effort placed on the development and maintenance of industry relationships. Regular and frank discussions are important for real improvement.

#### Unit Coordinator: Dr Justin Brown

#### Computer Science

“The more I run the WIL program, the more I adjust my assessments to reflect the sorts of things that people in industry are saying” Justin Brown.

# Taking a Course-wide Approach to Employability

### CONTEXT

ECU’s broadcasting major is the only one of its kind in Australia. The major provides an introduction to contemporary broadcast media, from radio and television to web-based and mobile technologies. A cornerstone of the major is the development of the students’ ability to generate ideas (and one of ECU’s graduate attributes), a valuable attribute in editorial decision making. The major was developed in close consultation with the industry and teaching staff seek to maintain a close, ongoing and mutually beneficial relationship with their industry partners. This relationship includes the review of unit content and assessments by professional practitioners, ensuring it meets industry requirements. As David Smith explained:

“Our whole focus is to get people into jobs, and so as a result, we use assessment points that are closely related to industry expectations.

“We tell students that there is an industry standard and we are helping them to reach that standard. It is no use setting the bar low for students because this is a very demanding industry and students will need to be ready to make the best of it when they get the chance.”

Employability skills highlighted in the learning and assessment tasks include working in teams, and receiving and providing feedback about students’ own and other’s performance.

### BENEFITS TO STAFF AND STUDENTS

All tutors and lecturers within the major are professional broadcasters or journalists. They work closely with the students to build both their theoretical and technical abilities throughout the major. Work produced by students is often published or broadcast to the wider community.

Teaching staff instruct students on the behavioural expectations and workplace culture of the industry.

“If someone has the wrong attitude for the industry it becomes even more difficult for them to succeed. So graduate attributes and positive employability skills become even more important at enhancing individuals’ chances of staying in the industry.

“We are trying to work with the industry so that it becomes obvious that the only place students need to come to advance is here. We want to be a centre of excellence” (Smith).

### HELPFUL TIPS & ADVICE

Incorporating the industry knowledge of teaching staff to support student learning can be a cornerstone of course presentation. The broadcasting major is popular with students, as they recognise and appreciate the ‘edge’ staff provide them when seeking employment.

“As the only undergraduate broadcasting program in the country, we give [students] an extended skill set above students from other institutions” (Smith).

#### Course Coordinator: Mr David Smith

#### Broadcasting

Students learn employability skills from industry professionals.

# Using Simulations to Prepare for Practica

### CONTEXT

Health assessment Skills and Practice (NPP1101) is the first workplace integrated learning (WIL) unit in a series of six clinical practice units within the Bachelor of Science (Nursing). Due to the practical nature of the unit, it is offered on-campus only with enrolments of approximately 420 students across the Joondalup and Bunbury campuses. Health assessment is a foundational skill for nurses in all contexts of care. The unit is designed to develop the knowledge, techniques and skills required by the professional nurse to perform holistic, comprehensive, health assessments, including the physical examination of individuals.

### TASK DESCRIPTION

The unit includes both simulation workshops and a clinical practicum (aged care, 40 hours in allocated rotation). The practicum requires students to assume management of 15–30% of the Registered Nurse (RN) workload and develop competency in the workplace in accordance with the Australian Nursing and Midwifery Council Competencies for the Registered Nurse. Clinical practice agreements require that students attend their placements on a full-time basis, which includes working the ‘real-world’ hours of an RN (weekends, night shifts and public holidays). To simulate real-world expectations, students must supply medical certificates for days missed.

The simulated workshops involve students practising general, physical and mental health assessments relevant to nursing practices in a health care setting, using instruments commonly used in clinical practice. In addition, case-based learning simulations enable students to distinguish between normal and abnormal findings and apply infection control skills to safely participate in a real health care setting in preparation for their practicum.

### BENEFITS TO STAFF AND STUDENTS

The simulations provide an opportunity for students to prepare for and practise the skills required for participation in the practicum, in a safe environment. The nature of the practicum gives students exposure to the real-world experience of the nursing profession.

### HELPFUL TIPS & ADVICE

The assessments are graded either pass or fail due to the professional competency skill development associated with the unit. Student participation in both the workshops and the practicum is compulsory and those who miss some or part of a workshop will need to negotiate a make-up session or a demonstration with their lecturer. Students need to be clearly briefed on these expectations.

#### Unit Coordinator: Ms Mary Ryder

#### Nursing

Giving students the opportunity to develop the knowledge, techniques and skills required by the professional nurse.

# Building a Professional Portfolio

### CONTEXT

Transition to Teaching (EDU4260) is a core fourth year unit in the Bachelor of Education (Primary) course, attracting approximately 60 students in a semester. The unit prepares students to make an effective transition, from university to employment as a classroom teacher, in a range of teaching contexts. Students familiarise themselves with workplace operations, support mechanisms and policies, in readiness for employment.

### TASK DESCRIPTION

As part of their assessed tasks, students are required to create a professional portfolio. They have the choice of presenting information in an electronic or hard-copy format, however they are encouraged to use an e-portfolio\* and are provided training in its use. In 2013, a little over half of the students submitted an e-portfolio.

The professional portfolio comprises:

* an updated CV/résumé;
* referees and references (both personal and professional);
* a personal teaching philosophy statement; and
* evidence of graduate teacher standards.

Students are required to address graduate teacher standards as selection criteria, demonstrating their competency for each.

\*PebblePad is the e-portfolio software used by pre-service teachers. Under a licence agreement with PebblePad, ECU graduates have free access to PebblePad for one year after graduation, and if they wish to extend their use of the software they can enter a paid agreement with the company.

### BENEFITS TO STAFF AND STUDENTS

A professional portfolio enables undergraduates to think about career options, show their knowledge and skills, and match their experiences to industry standards, to promote and position themselves to potential employers. Students are encouraged to use a variety of media to illustrate their experiences (e.g. video, sketches, pictures and written documents). The task encourages them to become job-ready, self-aware and reflective individuals. It is a long-term, professional growth plan.

### HELPFUL TIPS & ADVICE

Staff need to be familiar with the basic functions of PebblePad. Dr Ken Robinson and the e-portfolio team, who showed staff and students how to use PebblePad, were instrumental in the successful implementation of this task.

It is useful to streamline features of PebblePad available to students to suit this specific task. For example, if you prefer that students don’t share their work with each other you can disable this particular function.

Timelines need to be very clear to avoid students claiming submissions that may not be made, and advanced booking of computer labs will avoid disappointment due to their high demand.

#### Unit Coordinator: Ms Gail Berman

#### Primary Education

e-Portfolios provide a long-term storage option for undergraduates when collating, documenting, reflecting on and showcasing their real-world experiences and ideas.

# Raising Role Awareness through a Joint Training Initiative

### CONTEXT

In early 2010, the ECU journalism program and the Western Australia Police Academy Detective Training School (WAPADTS) launched a unique training initiative involving joint training sessions.

### TASK DESCRIPTION

The training sessions involve mock scenarios providing an opportunity for trainee detectives to practise being interviewed by a ‘media pack’ of journalism students, while journalism students get valuable practice interviewing police and writing their stories. Initial questioning is led by the Lecturer until the journalism students understand what is required, only interjecting with a question when students go ‘off track’ (teaching through demonstration). The Lecturer also takes photos to allow students to view and reflect on their facial expressions and other body language that may impact the interview.

A typical training session involves approximately 4–10 journalism students working as a ‘pack’ interviewing 10–20 detectives in training. The detectives are interviewed individually and talk about a mock crime. With each new detective, a journalism student is selected to write up the interview. Students retreat to the Police Academy canteen for lunch to write up their stories and determine what details they do not yet have, and what information they have been asking for but cannot use. Students must email their stories to the lecturer by the following morning to simulate industry deadlines. The stories are marked with tracked changes and emailed back to the students as well as the WAPADTS, so they too can learn from the written stories.

The sessions run two or three times per semester and the opportunity to participate is promoted to all journalism students. The sessions are compulsory for students enrolled in work placements and treated as an extra-curricular activity for those who are not. WAPADTS kindly provide participation certificates for students.

### BENEFITS TO STAFF AND STUDENTS

Prior to this initiative, ECU students had no specific training for interviewing detectives for crime reporting and WAPADTS’s training was conducted in-house. The training has improved the trainee journalists’ and detectives’ understanding about the constraints each party faces. Both parties feel more confident about their ability to elicit and convey accurate information, and are more willing to attempt to do so, than prior to the training.

#### Unit Coordinator: Dr Kayt Davies in conjunction with WAPADTS

#### Journalism

“It was an excellent experience how you need to think on your feet in those situations, as well as great insight into the Police perspective.” (student feedback)

# Creating an Inter-professional Learning Opportunity

### CONTEXT

Current initiatives towards inclusion policies (e.g. students with special educational needs are catered for within mainstream classrooms), has highlighted the need for workplace competencies to include skills linked to inter-professional collaboration. In order to support inclusion policies, and to provide an opportunity for inter-professional learning and collaboration between education and speech pathology students, an authentic learning opportunity was created between two schools from different faculties. This collaborative practice enabled students to explore and learn about each other’s role and work through cases to expand and strengthen notions of collaborative teaching and learning within the University and fieldwork settings. The rationale behind the initiative was that effective inter-professional collaboration could be fostered during their undergraduate training, as well as the continuing professional development options provided in their prospective courses.

### TASK DESCRIPTION

The task is a three hour professional development workshop attended by second year speech pathology students and third year secondary education students. The workshop comprises an initial lecture on inclusion, outlining relevant theoretical background and legislative underpinnings, and then a tutorial to discuss some of the practical implications of an inclusion policy for teachers and speech pathologists in schools. The students form small interprofessional groups where they share their perceptions of their respective role when supporting mainstreamed children who have special needs, and review and discuss two video case studies of school students with disability in the classroom.

For the education students, the topic of collaboration formed an assessable part of their course. In contrast, for the speech pathology students, the session was part of a unit covering principles underlying intervention, including teamwork and collaborative and interprofessional practice.

### BENEFITS TO STAFF AND STUDENTS

This task initiates students to continuing professional development as pre-service practitioners. Furthermore, as inclusion policies will require interprofessional collaboration between speech pathology and education professionals within a workplace setting, this initiative exposes students to these alternate fields whilst at the same time providing an opportunity for them to develop collaboration skills within a (simulated) professional setting.

An evaluation of the initiative revealed that students valued the collaboration, teamwork and opportunities to understand how they could work together in a ‘real life’ setting. Some of the highlights for students included:

“Learning how SPs (Speech Pathologists) can aid me as a teacher in the classroom” (education student).

“Sharing what we each learn and using the knowledge in a team to work towards a goal” (SP student).

### HELPFUL TIPS AND ADVICE

Students noted the sessions were too short and they would prefer more time for interacting and more opportunities for collaboration throughout the semester. Speech pathology students also noted collaborating with primary school pre-service teachers would be beneficial as they would likely be working with primary school-aged children.

The facilitators experienced logistical difficulties in finding a suitable time for all participants, and the additional requirement to arrange travel across campuses for students.

#### Unit Coordinators: Dr John O’Rourke & Associate Professor Deborah Hersh

#### Secondary Education + Speech Pathology

“Sharing what we each learn and using the knowledge in a team to work towards a goal.” (student feedback)

# Preparing to Work in an Effective Team

### CONTEXT

Health and Healthcare Systems (NCS1101) is a core first year, first semester, theory unit within the Bachelor of Science (Nursing) degree. It is offered on-campus and off-campus and has annual enrolments of approximately 500 students. The unit explores the role of the Registered Nurse within the Australian healthcare system, with learning outcomes centred on an understanding of the concepts of health, professionalism, accountability and clinical governance. Critical to the role are the essential skills of reflective practice and group work. The following assessment task was designed for students to practise these skills while demonstrating their understanding of theoretical concepts.

### TASK DESCRIPTION

The task is structured in two stages and is summatively assessed. In stage one, students work collaboratively (in groups of five), to produce an information poster explaining learned aspects of the unit content. Tutorial time is dedicated to this work and wiki spaces are set up on Blackboard for correspondence and exchange of ideas for both on-campus and off-campus students. On-campus students present their completed poster to their peers in tutorials and online students submit group presentation notes.

In stage two, students compile a written report about the group work process undertaken in stage one. The individual report is structured by a given model of reflection. Students relate their group work experiences to the models, concepts and theories about group work taught in the unit, including leadership, delegation and shared goals.

### BENEFITS TO STAFF AND STUDENTS

The task enables students to practise the skills of reflection and group work, deepening their appreciation and understanding of the underpinning theories. Students reported that despite some initial reticence around group work, they realised the benefit of this approach, and in particular, the sharing of different skills, prior knowledge and experiences. Importantly, students are given the opportunity to develop supportive social relationships in this early stage of their learning journey, which aligns with ECU Curriculum Framework principles about the first year experience.

The utilisation of a range of oral, written and visual communication modes are integral to the assessment task and helps improve the students’ confidence and technology skills. In addition, the task develops ECU’s graduate attributes for communication and teamwork.

### HELPFUL TIPS AND ADVICE

During the group work process, students are encouraged to keep a reflective log of team interactions which they can draw upon to write their report. Students require support in setting up and using wikis which record individual student contributions and overall group interaction. Groups should be set up after census date to reduce the impact of attrition on group dynamics and productivity.

#### Unit Coordinator: Ms Lesley Andrew

#### Nursing

Students are given the opportunity to develop supportive social relationships in this early stage of their learning journey.

# Communicating Professional Knowledge through an Industry Format

### CONTEXT

Marketing Principles and Practice (MKT1600) is a core first year unit in the Bachelor of Business course that introduces the principles and concepts of marketing. There are roughly 400 students enrolled across a number of majors and the unit is taught online, on-campus, onshore and offshore. The previous unit assessments (a poster and a theoretical essay) scaffold the necessary academic skills so that students are ready for the final authentic task below.

### TASK DESCRIPTION

Students are required to review the available information on Apple Computers. They research newspaper articles, magazine articles, You Tube, Google financials and biographies to explore the business story that is Apple, with specific attention to the marketing concepts that are presented in the lectures. Apple was chosen because there is much data that is freely available, they are exemplars in marketing concepts, there was a change in leadership of the CEO due to the death of Steve Jobs, and they were coming under fierce competition from a number of rivals. Students are then required to four-page article reviewing this information and integrating the marketing concepts taught in the lectures for a popular business journal such as Business Review Weekly or the Harvard Business Review. The learning outcomes addressed in this assessment include the students’ ability to: [1] analyse and evaluate the role of marketing in business organisations; [2] apply the marketing concepts and principles to goods and services markets; and [3] become a more knowledgeable consumer.

### BENEFITS FOR STAFF AND STUDENTS

Apart from developing the core employability skill of writing, students extend their technology and creative skills enormously when producing the poster and the magazine article. The article also provides a ready portfolio piece to show a prospective employer.

For staff, it is incredibly rewarding to see students stretch themselves and to share their pride when they produce work that they thought was beyond their capability. An unintended benefit for staff is the bank of exemplars produced each semester that provides the basis for review and critique for the next cohort of students. Market changes neatly captured in previous years can be used as learning points for subsequent cohorts.

### HELPFUL TIPS AND ADVICE

For a first year unit, it is better to nominate the company rather than allow the students to choose because they tend to spend too much time making this decision instead of getting on with the task. Also, if there is one company for the whole cohort, there is a greater chance of students collaborating and sharing ideas, than if they are each working on different ones.

Choose a company that has the potential to provide an authentic context for the concepts and theories that will be taught. This way, concepts can be taught in a lecture, illustrated by the chosen company and then incorporated by the student into their assessments. A company (or context) that is topical, complex and with a high degree of future uncertainty provides a vehicle for very wide and yet fully aligned learning.

#### Unit Coordinator: Dr Stephen Fanning

#### Marketing

It is incredibly rewarding to see students stretch themselves and to share their price when they produce work that they thought was beyond their capability.

# Promoting Evidence-based Practice to All

### CONTEXT

Addiction Studies: Social action (aDS3355) is a third year unit embedded in a number of courses across the faculty. The unit helps prepare students for public health roles where health professionals are required to convert research findings into accessible formats for public consumption. The assessment is comprised of three interdependent tasks that build in complexity. The feedback from each task helps students improve the next, leading to the final task which develops key academic skills required of honours programs and higher degrees by research, as well as graduate attributes such as critical appraisal skills and communication.

### TASK DESCRIPTION

In class, students read a journal article related to the weekly lecture and extract the main points to share with the group and with the Lecturer. This gives the Lecturer the opportunity to provide direction and assist students to identify key concepts and facts. Students then locate their own research article (published in the last 12 months) and discuss the key findings with their peers in small groups. In class, they write the introduction for an academic essay that will summarise the findings and they receive peer feedback on their work. Students then go on to write the rest of the essay independently.

For the second task, students are required to write a 200-word letter to the editor of a daily newspaper explaining the significance of their chosen article, but importantly, for a different audience.

For the final, more complex task, students take the Lecturer’s feedback received for the initial summary and the letter to the editor, and incorporate the views and findings of at least five other journal articles into a more extensive and critical essay that examines the subject area more fully.

Throughout the semester (and in a timely manner), specific skills need to be developed to help students complete each task. Aspects of writing such as the ‘academic voice’ and the flow and segue of concepts are taught. Resources are provided such as a list of verbs that students can use to describe research outputs (e.g., described, discussed, analysed, suggested, argued, proposed, etc.).The marking key for assessments is explicitly debriefed in class so students can get a clear understanding of the expectations for each criterion. This is clarified further when students use the marking key to ‘mark’ an exemplar paper from the previous cohort in class.

### BENEFITS FOR STAFF AND STUDENTS

The tasks are closely linked and each clearly builds upon the one before. As a result of this design, students have to use feedback from each task when they write the next. Academic and writing skills are refined in the first task, so that critical aspects can be the focus of feedback on the more complex final task. For staff, there is great satisfaction in seeing improvements in the writing ability of the students, and the final essay is much easier to mark as a result of earlier feedback.

Anecdotal evidence from graduating students confirms that the conversion of research outputs into more accessible formats is very much a ‘real-world’ task as this is, in fact, part of the daily work of a public health graduate.

### HELPFUL TIPS AND ADVICE

Provide students with plenty of opportunities both in class and online to ask questions about the assignment tasks. Discussion boards are useful ways of facilitating these exchanges and reducing email traffic for both delivery modes. Bring backup articles for analysis if students are having a hard time finding something suitable for the first summary task, and provide examples of letters to editors.

The letter format is an important agent of change in communities because of the potential political impact, so students are encouraged to be as emotional as they wish as long as they do not get any facts wrong.

#### Unit Coordinator Dr Shelley Beatty

#### Public Health

There is great satisfaction in seeing improvements in the writing ability of the students, and the final critical essay is much easier to mark as a result of earlier feedback.

# Simulating Working as Part of a Consulting Team

### CONTEXT

Managerial Accounting (ACC2360) is a second year elective unit in the accounting major in the Bachelor of Business course. There are approximately 70 students in the unit and they are placed in tutorial groups of 20.

The unit develops an understanding of how managerial accounting adds value to organisations’ strategic and operational decision making processes. It emphasises the skills required in the managerial planning and control of decision making process (e.g. problem solving, critical thinking, data analysis, communication, collaboration and teamwork skills). In addition, it introduces the principles that are relevant for internal decision making and reporting. These skills enable accountants to work within national and international companies, and the private and public sectors.

### TASK DESCRIPTION

The assessment presents students with a real work scenario: a fictional entrepreneur approaches a managerial accounting team (comprised of four students) to assist in the establishment of a new organisation within a selected industry. The teams take part in the strategic planning process for their newly proposed organisations, which involves planning meetings, investigating an industry, applying their knowledge of managerial accounting practices to the scenario, and submitting an industry standard report to their entrepreneur client, advising them of their findings.

The Unit Coordinator provides students with a potential list of industries. They may select from this list or nominate another industry to investigate. Each team member signs and submits a team contract (an MOU between members) to establish team norms, roles and performance expectations. So as to mirror a real work setting, all meetings are minuted, responsibilities allocated, and action lists compiled. These activities are reported on at consecutive meetings and submitted as part of the assessment.

Students prepare a report applying ‘Porter’s Five Forces analysis’ to advise the entrepreneur of the best generic business strategy to follow. In addition, students compile a ‘Balanced Scorecard’ for their chosen industry, which is representative of the measures and formats used in the industry.

### BENEFITS TO STAFF AND STUDENTS

This assessment exposes students to the reality of working within a managerial accounting team and the roles and responsibilities inherent. It simulates the professional requirements of being answerable to actions resulting from meetings, complying with MOUs, and working to meet the needs of their client. The assessment gives students the opportunity to apply their theoretical knowledge to an authentic situation, where they need to critically evaluate a proposal, advise and report to a client.

### HELPFUL TIPS AND ADVICE

Time spent developing the students’ collaboration skills is very important, especially as this is a second year unit comprising several international students. Opportunities to work on the project in class, and activities encouraging teamwork skills, assists students overcome some ‘group work hurdles’. At a second year level, the use of templates for their MOUs and minutes assists in developing students’ understanding of expectations and scaffolds for future activities.

#### Unit Coordinator: Mrs Martie Riemer

#### Accounting

This assessment exposes students to the reality of working within a managerial accounting team.

# Practising Professional Conduct

### CONTEXT

Professional Conduct and Communication (NCS1102), is a core first year unit in the undergraduate Nursing program and is offered both on-campus and off-campus with enrolments of approximately 300 students. Communication and professional conduct of the nurse, as a service provider and contributor to the health care community, are central to the unit. These skills are developed through collaborative learning activities, case studies and role-plays, as demonstrated in the assessment that follows.

### TASK DESCRIPTION

As part of the unit’s assessed tasks, students (in groups) choose from a selection of scenarios depicting ethical dilemmas (e.g. ‘You observe a nurse write a patient’s observations on the patient chart without the nurse actually doing the observations. What do you do?’). Students are then required to analyse their scenario and consider the communication, conflict management and professional conduct skills they could use to successfully manage the situation. They then present the scenario as a role play which is used as a prompt for a class discussion. The students are assessed on their communication and ability to work in teams.

### BENEFITS TO STAFF AND STUDENTS

This assessment and the unit are couched in employability skills related to the nursing profession, and one of the students’ first experiences of group work in the course. The following quote from a student is typical of the experience:

“[The] group assignment was a very positive experience and is evidence that when everyone is motivated and working for the same outcome it can be a real learning experience and opportunity for personal growth”.

The assessment provides an opportunity for students to demonstrate and appreciate the responsibilities of individuals working within the health care community; that is, to act and communicate empathically and effectively, to adhere to professional conduct standards, and to manage difficult situations.

### HELPFUL TIPS & ADVICE

This is a core unit for first year students so it is important to equip students with the necessary teamwork skills in preparation for the task. As the unit is offered online, all students are provided training in the use of Mindmeister (online mind mapping software). The software enables students to share their work and also differentiates student input into the group task, making marking more efficient.

#### Unit Coordinator: Ms Rochelle Russo

#### Nursing

“…When everyone is working for the same outcome it can be a real learning experience and opportunity for personal growth.” (student feedback)

# Being Immersed in a Community through a Residency Program

### CONTEXT

The Teacher Residency Program (TRP) is an innovative teacher education program offering graduate diplomas in early childhood, primary and secondary school teaching. What distinguishes the TRP from conventional graduate diploma programs are the extra time and support structures for the students (residents) in school-based learning. The recruitment process, involving both the University and the schools, identifies applicants with a high level of aptitude and commitment to become a teacher. The program emphasises integration of teaching knowledge and practice to produce higher quality graduates who are more ‘school ready’.

### TASK DESCRIPTION

The school-based learning component is comprised of two days per week, with each semester being spent in a different school. The total of 100 days residency by students is more than twice the minimum for registration required in conventional graduate diploma programs. Originally, each student’s residency consisted of observation, teaching practice and weekly reflective discussion and planning with the mentor teacher. To better integrate school and university learning, this experience was extended to include school-based assignments, an activity book structure based on week-by-week topics, and school-based professional learning workshops.

### BENEFITS TO STAFF AND STUDENTS

All residents agreed that the two days per week spent in schools is conducive to developing good teaching practice. The program enabled them to observe good teaching, to build relationships with their pupils, to bring theory and practice together, and to experience progress through a school year.

The majority of mentor teachers and school principals associated with the program believe that TRP students performed admirably in their teaching practice. The principals commented that the residency students were able to think deeply about and evaluate their teaching, were prepared to take on the role of teacher, and had experienced real-world immersion in schools.

### HELPFUL TIPS & ADVICE

It is important to provide clear guidance to residents about what is expected of them and to emphasise the integration of theory and practice. Unit coordinators must maintain and facilitate regular contact between residents, mentor teachers and university colleagues.

#### Unit Coordinator: Dr Lorraine Hammond

#### Education

The program allows for longer student residencies leading to more ‘school ready’ teachers.

# Writing and Producing an Online Publication

Faculty of Regional and Professional Studies

### CONTEXT

Vortext33 is an online publication written and produced by students as part of their assessments for Feature Writing (CCC3311) and News Writing (CCC3310), which form part of the Bachelor of Arts (Y40) program at ECU's South West Campus. The publication is populated with real news stories from the region and provides an authentic workplace context that develops students' skills, whilst working under the supervision of experienced journalists.

The concept for the e-news publication was drawn from an exemplar developed by Kayt Davies, titled 3rd Degree, which is the Mount Lawley Campus’ version of the publication. Vortext33 illustrates how an exemplar is put into practice.

### TASK DESCRIPTION

The ‘crew’ of Vortext33 is a dedicated group of journalism students who work as journalists and sub-editors. They take the publication through every stage of its lifecycle, from newsgathering to uploading the stories to the website. Students collect their news from a wide variety of sources and each story passes through a series of checkpoints to ensure that it is relevant, accurate and newsworthy (rather than advertising, for example).

The stories are sourced from within the local community through family and friends, investigation and research, by interviewing community members and by attending community events. A team of three sub-editors are tasked with grammar/spell checks, fact/legal checks and uploading to the site. Tasks are allocated based on students’ skill set (as would occur in a real-world situation), and a final review is conducted by the Unit Coordinator. The remaining students are responsible for sourcing and collecting information and writing; however, the editors also have the opportunity for story-writing.

Access to the publication is via subscription online, through ‘like’ tags of social media sites (e.g. Facebook and Tumblr), and from promotion to students enrolled at the campus.

### BENEFITS TO STAFF AND STUDENTS

The publication replicates a real-world workplace situation, resulting in students developing skills to manage interpersonal conflicts, make decisions, respect each other’s varying capabilities, and learn and enhance the practical skills required for this work. This project brings workplace integrated learning to students who have a sense of ownership over the publication. Participation gives students a holistic experience within the field of journalism including photography, editing, management, writing and formatting, team work and interviewing skills. The students, who come from various disciplines within the Bachelor of Arts, are expected to ‘stretch beyond their comfort zones’ and are challenged to develop and extend their skills.

“It’s been a great opportunity to go out into the community and have a resource you can direct people to so that they can see your stories” (student feedback).

“I have developed many skills in writing, editing, layout and design and photography” (student feedback).

In addition, a list of the existing and previous journalists who have contributed to the publication is available on the site along with their articles. The list has previously resulted in employment opportunities for students.

### HELPFUL TIPS & ADVICE

Honesty in collecting and ‘telling’ a story, and ensuring proper citations, are an important part of the process in writing and developing content for publication. The serious ramifications for not being honest and up front about where materials are sourced and story accuracy, are reiterated to students due to the public availability of Vortext33.

#### Unit Coordinator: Dr Donna Mazza

#### Bachelor of Arts

Just about everybody involved has risen to the challenge and produced some great stories.

# Working for a Community Organisation

### CONTEXT

Business Career Development (BES3100) is the third year capstone unit in the Business Edge program in the Faculty of Business and Law. The program was designed to explicitly develop employability skills and is core to the Bachelor of Business course. Approximately 250 students are enrolled in the unit.

The Bachelor of Business attracts a large number of international students who for a variety of reasons find it difficult to get placements and internships in Perth. The following assessment task provides a number of options for students to further develop their employability skills while engaging with the local community. To facilitate this, the Unit Coordinator partnered with Community Vision, a not for profit organisation based in the City of Joondalup.

### TASK DESCRIPTION

Students are formally recruited to be part of the Community Vision project by submitting a cover letter, a resume and selection criteria (these are products of their previous assessment). They form teams of up to four members and choose a project from a list developed by the Unit Coordinator and the CEO of Community Vision. The projects are targeted at specific student groups and majors. In the past students have been instrumental in developing or delivering sporting events for children, computer classes for seniors, community-based organic garden spaces, strategic and human resources capability reviews, FIFO assistance packages, marketing plans, promotional and fund raising activities for Community Vision, and Chinese cross cultural competence workshops.

The main assessment product from the task is a group business report which explains the key business issues for the organisation and outlines workable and innovative solutions to address them. The students also provide an invoice that details their activities working with Community Vision. The invoice itemises the work undertaken (research, writing, delivery etc.), the number of hours billed, the person who completed each task, and the charge out rate for the different types of tasks completed on the project. This part of the assessment provides a clear indication of the magnitude of work involved in such projects and prepares students for contract work when they graduate.

The task aligns to unit learning outcomes where students should be able to: [a] produce a complex piece of work which demonstrates sound knowledge of the business environment and employs a range of business writing and research skills; and [b] evaluate the importance of ethics, social responsibility, sustainability and accountability from an individual and organisational perspective. Assessment criteria are developed in collaboration with the CEO of Community Vision and are explicitly linked to ECU graduate attributes, and a list of ten key employability skills identified by industry groups and faculty research.

### BENEFITS TO STAFF AND STUDENTS

The students are highly motivated by the assessment and easily surpass the 15-hour minimum requirement to work with Community Vision. The flexibility of the program means that students can design a project to suit their major or area of interest. Students have been approached to work for Community Vision after the experience. Anecdotal evidence from surveys indicates that these projects imbue a high level of pride and empowerment for international students who are not easily able to find internships due to visa restrictions and business attitudes.

For staff, the benefits are many. Partnering with Community Vision is a good example of actively working with external partners, in what is an often neglected sector of industry. From a teaching and learning perspective, the engagement allows highly motivated students to test themselves in an environment characterised by low budgets and scant resources. The learning experience is valuable and only possible from external engagement.

### HELPFUL TIPS AND ADVICE

It is strongly advised to work with one community group that has multiple projects rather than work with multiple community groups with individual projects. Students need to be formally inducted into the host organisation and all the necessary risk assessments need to be completed.

Staff need to be flexible with their assessment criteria, especially if projects are tailored to suit the student or the host organisation. The Not for Profit sector is a willing partner but, one that is often stretched by low operating budgets and staffing issues. This places additional strain on both parties and often results in additional time allocation to ensure projects are successful. The student inductions are critical to the success of the project to ensure the appropriate students are selected to help make a difference to the sponsors.

#### Unit Coordinator: Mr Gary Marchioro

#### Business Edge

“It [the unit]…told about the real facts of life and the real situations in the workplace.” (student feedback)

References

Blackwell, A., Bowes, L., Harvey, L., Hesketh, A. J., & Knight, P. T. (2001). Transforming work experience in higher education. *British Educational Research Journal, 27* (3), 269 - 285.

Boud, D., Cohen, R., & Walker, D. (Eds.). (1993). Using Experience for Learning. Buckingham, UK: The Society for Research into Higher Education & Open University Press.

Brookfield, S. D. (2012). *Teaching for Critical Thinking: Tools and Techniques to Help Students Question Their Assumptions.* Jossey-Bass, San Francisco, CA .

Crebert, G., Bates, M., Bell, B., Patrick, C.-J., & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: graduates’ perceptions. *Higher Education Research & Development, 23* (2), 147-165.

Csikszentmihalyi, M. (1993). *The evolving self: A psychology for the new millennium.* New York: HarperCollins.

Candy, P. C. (1991). *Self-direction for Lifelong Learning. A comprehensive guide to theory and practice.* San Francisco: Jossey-Bass.

Covey, S. M. R. (2006). 13 Behaviours of a High Trust Leader. Retrieved from <http://www.coveylink.com/events-and-resources/downloads.php>

Department of Industry, Innovation, Science, Research and Tertiary Education. (2012). *Australian Core Skills Framework*. ISBN 978-1-921-47-2. Retrieved from <http://www.innovation.gov.au/Skills/LiteracyAndNumeracy/AustralianCoreSkillsFramework/Pages/Downloads.aspx>

Department of Industry, Innovation, Science, Research and Tertiary Education. (2013). *Core Skills for Work.*

DEST (2002). *Employability skills for the future: a report by the Australian Chamber of Commerce and Industry and the Business Council of Australia for the Department of Education*, *Science and Training,* Canberra.

Fetherston, T. (2001). Pedagogical Challenges for the World Wide Web. *AACE Journal, 9*(1), 25-32. Norfolk, VA: AACE. Retrieved from <http://www.editlib.org/p/10270>

Kelly, G.A. (1955). *The psychology of personal constructs*. Vols 1 and 2. New York: Norton.

Little, B., & Harvey, L. (2006). *Learning through work placements and beyond.* Higher Education Careers Services Unit and The Higher Education Academy.

Mason, L., Ariasi, N., & Boldrin, A. (2011). Epistemic beliefs in action: Spontaneous reflections about knowledge and knowing during online information searching and their influence on learning. *Learning and Instruction, 21* (1), 137-151 DOI: <http://dx.doi.org/10.1016/j.learninstruc.2010.01.001>

McLuhan, M. (1988). *Understanding Media: the extensions of man*. Routledge, UK. ISBN 0262631598

Moreland, N. (2005). *Work-related learning in higher education.* Heslington, York: The Higher Education Academy.

O’Malley, J. & Chamot, A. (1990). *Language Learning Strategies*. Cambridge: Cambridge University Press.

Osborn, A.F. (1963). *Applied imagination: Principles and procedures of creative problem solving* (3rd Ed.). New York: Charles Scribner’s Sons.

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [work-integrated learning] report: A national scoping study.* Retrieved from <http://www.acen.edu.au>

Postman, N. (1993). *Technopoly: The surrender of culture to technology*. New York: Vintage Books.

Precision Consultancy. (2007). *Graduate employability skills.* Prepared for the Business, Industry and Higher Education Collaboration Council. Canberra: Commonwealth of Australia.

Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education, 35* (5), 535-550. DOI: <http://dx.doi.org/10.1080/02602930903541015>

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63*, 384-399.

Watts, A. G. (2008). *Career Development Learning and Work-integrated Learning: A conceptual perspective from the UK*. Paper presented at the National Symposium on Career Development Learning: Maximising the Contribution of Work-integrated Learning (WIL) to the Student Experience. Melbourne, Australia.

Winchester-Seeto, T., Mackaway, J., Harvey, M., & Coulson, D. (2010). *Assessment toolkit resources: Assessment in learning through participation.* Retrieved from <http://staff.mq.edu.au/teaching/curriculum_development/pace/resources/pace-assessment/>

Zaugg, H. and Davies, R. S. (2013). Communication skills to develop trusting relationships on global virtual engineering capstone teams. *European Journal of Engineering Education, 38*(2), 228-233.   
DOI: <http://dx.doi.org/10.1080/03043797.2013.766678>