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Assessing work-integrated learning programs:

a guide to effective assessment design

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Purpose

The purpose of this guide is to foster high quality assessment practice in formally assessed work-integrated learning (WIL) programs. That is, in-work activities that are included as part of the curriculum rather than as co-curricular events. This guide is designed for those responsible in making WIL assessment design decisions. The emphasis is on active engagement by students with assessment activities that are generative of learning.

Variations in WIL experiences

WIL experiences are diverse and might include placements, industry projects, major simulations or virtual WIL activities. Some WIL programs (e.g. in nursing or teaching) are tightly coupled to other parts of a student's program, include professional/external accreditation processes and have very specific outcomes. WIL experiences in other courses are more loosely coupled and the potential outcomes much more varied. While this guide has been prompted by the paucity of studies of assessment in loosely coupled WIL, it is applicable to any WIL experiences taken for credit.

Why is assessment in WIL important?

Assessment directs student attention to that which is most important, what is intended to be learned and what has been achieved. Poorly constructed assessments distort what is learned and do not acknowledge what has been achieved. WIL assessments serve several purposes and stakeholders: for the educator, there is assurance of learning; for students, it can prompt and help articulate learning and skills; for industry partners, it can create products or artefacts and can contribute to production. This means that each assessment must adapt to the particular learning outcomes and purposes of each WIL activity and what students gain from it.

Challenges for work-integrated learning assessments

Work-integrated learning influences the development of students' employability (through developing diverse capabilities for future careers) and informs their pre-professional identity formation. While WIL activities can be inherently authentic and engaging for learners, the assessment aspect reorients learners to their 'student' rather than 'professional/worker' role. This can lead to perceptions of misalignment where students view assessment as less authentic than the 'real world' they have experienced. Assessment design must therefore meet both the demands of the course, client/industry expectations and students' needs and expectations.

Assessment principles for WIL

These principles take the view that assessments must be carefully designed to achieve their different purposes and they must be judged in terms of them. The following principles are drawn from studies of WIL assessment (e.g. Ajjawi et al, 2020; Ajjawi et al, in press).

Principle 1: Assessment generates learning

Assessment activities should be worthwhile learning activities in their own right and not just be measures of the achievement of learning outcomes. Engagement in the assessment should lead to students monitoring and making judgements about their own learning and the quality of their work. Care must be given in the formulation of learning outcomes for WIL to enable them to accommodate the range of learning that can result.

Principle 2: Assessment engages students in active portrayal of their achievements and developing professional identity

Learning from a complex experience, such as a placement, requires considerable processing and reframing of what has occurred. Such learning is not simply about what takes place during an assessment but involves consideration of how students present themselves and what they see themselves as becoming. This is important for students beyond the education context, in their future lives. Assessment provides an important mechanism through which this 'making-sense' and reappraisal of professional identities can occur. It also provides students with the opportunity to practice articulating to others their achievements, capabilities and professional identities – an important part of employability.

Principle 3: Assessment involves collaboration among the students, academics and industry partners

WIL activities often take place in the absence of university personnel, but with the overall guidance of a client or workplace supervisor who may exert strong or weak supervision. Each party has a different role to play in assessments, but they must act in concert if students are to be fairly assessed.

Principle 4: Assessment reflects the nature of the actual learning undertaken by individual students during WIL activities

Except for a small number of tightly coupled WIL programs, much more occurs in a workplace than can either be anticipated in advance or related directly to designated learning outcomes. The serendipitous learning that occurs in these real or simulated settings, or through projects, is often as important as that which is planned. Authentic assessments must have the capacity to incorporate unplanned and unexpected learning outcomes.

Decision points for designing assessment activities for WIL

The following prompts in relation to key decision points may be helpful in designing or reviewing WIL assessments. They can be used pragmatically in relation to the overall purpose or goals of the WIL program. In specific contexts, some points may be more important than others. There will also be considerable variation depending on the nature and duration of the WIL experience, as well as the overall weighting of the assessment within the entire suite of assessment events. It is therefore inappropriate to be too prescriptive with regards to assessment design.

A. Aligning assessment to learning outcomes and the needs of a particular activity

1. How well are the assessment tasks aligned to the stated and implied learning outcomes of the WIL program?

2. Is any particular alignment of WIL activities and course work needed for professional reasons (e.g. through external competency or accreditation frameworks)?

3. Which learning outcomes can only be addressed through WIL? Have they been prioritised in this activity?

4. Is there any form of negotiation between those involved with respect to what is expected and flexibility on what will be assessed? If so, in what ways will this be recorded, e.g. in a learning plan?

B. Considering student needs and goals

1. How are students' goals and aspirations accommodated in the assessment task?

2. Are the assessment activities responsive to the diversity of learners?

3. Are reasonable adjustments for assessment available?

4. Is scope provided to enable students to adapt or negotiate the required learning goals and tasks?

C. Designing assessment tasks and feedback

1. How many different assessment activities are required? What is the role of each? (These may vary according to the length or purpose of the program.)

2. How does each task enable students to develop the capacity to make judgements about their own learning? E.g. how does it promote forms of self-assessment or develop evaluative judgement?

3. Do the assessment tasks enable students to reflect on the development of their own practice through the WIL program?

4. What opportunities are there for students to engage with feedback processes on a day-to-day basis and on work prior to final submission for assessment? Will this involve their workplace colleagues?

D. Adaptation and authenticity

1. Do the assessment tasks accommodate unique features of the activity, the availability of supervision and students' actual experience of learning?

2. Will workplace supervisors and students regard the assessment activities as authentic for the kinds of experiences in which students have been involved?

3. Do the assessment activities reflect the kinds of authentic assessment or performance management of staff occurring in the workplace?

E. Ensuring collaboration in assessments

1. Who needs to be involved in assessment and feedback? How will it be coordinated across different individuals?

2. What is the particular role of the workplace supervisor, client or industry stakeholder? Is it purely formative or will they be involved in making judgements for the summative assessments?

3. How will shared understanding of the criteria used for assessment be established?

4. Are peers to be involved in feedback? In what ways will they be utilised? Will there be structured processes for this?

5. Are there ways for students to share and benefit from the learning of each other?

F. Embedding assessment into WIL

1. Where are the various assessment activities located in time relative to the program's demands and relative to other course requirements?

2. What is required of students during the WIL activities that contribute to or prepare the ground for assessment tasks? E.g. keeping of records, notebooks, logbooks, diaries or portfolios.

3. How is a shared understanding of the assessment purposes, expectations, roles, standards and criteria achieved between the different stakeholders (academic, student and workplace)? (Note: provision of a unilaterally devised marking scheme does not constitute shared understanding)

4. How will students come to an understanding of the assessment activities and how they relate to their own goals and the opportunities available throughout the WIL events? In particular, how will students be oriented to the purposes of assessment for the university, their own learning and the practice setting?

5. Will students have opportunities to present their experiences to colleagues and peers within the workplace and beyond?

G. Portraying assessment outcomes

1. How does the task enable students to represent the nature of their learning and the situation in which it occurred?

2. Does the assessment activity enable students to portray what they have learned to particular audiences? That is, does it show what students learned in context?

3. Does the task enable students to reflect on and portray aspects of their developing professional identity? That is, does it help students see themselves as a developing practitioner in a particular field of work?

4. How does assessment capture some of the challenges and dilemmas that students experience in practice?

5. In what forms will students produce a record of their achievements? That is, are modes other than written reports appropriate for students to portray their achievements? (E.g. blogs, graphics, video of performance with reflective commentary, audio-diaries, learning portfolios.)

H. Moderation and grading

1. If multiple and/or workplace assessors are involved, is there a need for moderation of assessment to ensure consistency of judgements? How will the relevant parties be included in these processes?

2. Is it necessary for the assessments to be graded? If so, why? Avoid marking scales that imply a level of precision of judgement that cannot be achieved.

3. Would the construction of specific rubrics for each assessment activity be appropriate or useful in this context? If so, how would this be achieved in ways that involve key others, such as students or supervisors?

4. Are special measures needed to ensure the integrity of the assessment? Will there be a need to cross-check students reports of their experiences against other records?

Illustrations of assessment processes

Scenario 1: Learning agreements

A learning agreement, sometimes known as a learning contract, is a common approach for assessing WIL programs that puts responsibility on the student to manage the process. These involve explicit statements about the purpose of the WIL activity, performance expectations about what a student will do, as well as clarifications of assessment requirements. Such plans spell out the obligations of each party and what is their role in the WIL experience. A learning agreement is a written understanding between the key stakeholders. Typically, it will be negotiated between:

- a student,
- a teaching team member/learning adviser, and
- a client/industry person/workplace supervisor.

In some settings, a member of an appropriate professional body may also need to be involved.

Such an agreement is typically drafted by a student drawing on designated learning outcomes, other requirements of the institution and the client/workplace, and goals of their own. Common headings are: Learning objects/goals/learning outcomes; strategies and resources; evidence which will indicate that outcomes have been met; and, the criteria to be used to judge this evidence.

The agreement is discussed at an early stage with a learning adviser and the workplace supervisor and signed by each party to indicate that they support it. An important feature of it is the possibility of renegotiation of the agreement, as needed, if the activity does not allow for the developments outlined, or if other circumstances change.

A learning agreement allows for the possibility of different students being assessed in different ways, so long as all meet any non-negotiable requirements (e.g. learning outcomes and criteria) which are to be embedded in the agreement. Learning agreements are often easier to implement if assessment is non-graded. (See Anderson, Boud & Sampson, 1996 for more details).

Illustrative example

Jan undertakes a second year placement in an organisation unfamiliar to her for two days a week over eight weeks. She has researched the organisation and identified the kind of work that occurs in the area in which she will be placed. Before she arrives, she drafts a learning agreement starting with the non-negotiable learning outcomes in her course unit outline, but then adds a goal of her own that she thinks will possible to pursue in that area. She completes the other headings after she has been in the organisation for a few days having downloaded some examples of typical learning agreements, and seeing what it might be possible to do in the environment in which she is placed. She submits the draft to the academic coordinator of the unit and her workplace supervisor and, after making some modifications in the light of their comments on the evidence she needs to assemble for successful completion, gets their approval. After a few weeks she realises that her work will not allow her to do some of the things she anticipated and then submits a variation to the agreement. As the learning outcomes or evidence of success are unchanged, she doesn't need to have the change formally approved. In the last week of the placement she checks that she has assembled the evidence for completion identified in the agreement and prepares it in a form for it to be assessed. In her case, the workplace supervisor makes comments on it which she sees, but it is formally assessed only by the academic coordinator.

Scenario 2: Reflective assessments

WIL involves students in many complex experiences. Considerable reflection on these experiences is necessary for learning to be extracted from them. However, the relationship between reflection and assessment is problematic; literature suggests that assessment inhibits the processes of reflection and can prompt students to manufacture 'reflection' to satisfy assessors. Students can be strongly resistant to written reflective assessment which seeks to represent a complex and holistic activity that is 'infused with emotion' with a unidimensional, cognitive activity (Dean, Sykes, Agostinho & Clements, 2012, p. 111). The use of reflective writing for assessment purposes therefore needs to be conducted with great care—direct assessment of the reflection act can undermine reflection (Boud, 2001).

A common strategy is to separate reflective processes from assessment activities which draw upon the raw material of reflection to produce an assignment which is examined by others. This can be put into practice by encouraging students to keep a reflective journal throughout a WIL sequence (which is for their eyes only), and having an assessment towards the end which draws selectively from the journal to produce an account (sometimes called a personal learning statement) which portrays their learning from the program (e.g. Boud, 1992).

Potential avenues to limit instrumentalism in reflective assessment might involve:

- Keeping the reflective process as a learning activity, while an assessment product selectively draws on excerpts from this as 'evidence'.
- Close coupling of reflection and experiences in practice. Artefacts created for and in practice might be used to prompt close reflection on the experience of use of the artefact in practice.
- Offering models of reflection as scaffolds to aid students' own reflective processes. Exact forms of reflection should not be dictated, nor should it be assumed that all reflection is written. For example, video blogs or audio diaries might be used that prompt a more informal (less staged) dialogic reflection. These may be used to prompt reflection-in-action as well as reflection-on-action.

Illustrative example

Laura is a student undertaking an elective WIL project with the National Disability Insurance Scheme (NDIS). She is working with a peer on a project to assist members of the community to understand their entitlements. She is expected to keep a longitudinal multi-modal reflective journal and her assessment requires her to select material from that to produce a written report of the project approach and outcomes which identifies challenges she encountered and how she overcame them. Laura has negotiated her learning goals and the project goals with the client, and she is encouraged to reflect in her journal on her progress in relation to her learning goals and progress of the project, and to document her experiences and dilemmas. She discusses these with the client on a weekly basis and with an academic mentor for feedback at the half-way mark. Other media included in the journal might be video interviews with end-users, others who work at the NDIS office, reflections on meetings and workflow. Laura is encouraged to report on the fit with her future working self and to narrate the transferable skills she might be gaining.

Scenario 3: Workplace feedback from peers and co-workers

Workplaces contain a variety of opportunities for formal and informal feedback embedded in everyday tasks. These can be harnessed to aid a student's assessment. Authentic feedback is important for students to experience, with opportunities to incorporate that feedback into their future performance (Dawson, Carless and Lee 2020). Similar to any peer feedback situation, co-workers and peers should only be asked to provide feedback information in areas on which they are capable of commenting. Areas for feedback could include communication and teamwork skills, and/or context and subject specific skills and knowledge.

A common concern from students is that their workplace colleagues might not be sufficiently knowledgeable or experienced in the area on which they require feedback information, have different understandings of what feedback is, or might interpret criteria in a different way to how the university expects them to be used. Several strategies may mitigate the potential for misalignment. Criteria could be communicated in a way to establish a shared understanding of performance expectations. The aspects of performance to be commented on might also be negotiated between the student and the peer or co-worker. Finally, instead of quantifying a qualitative description of performance to incorporate it into a final mark, the feedback aspect of the assessment task might be focussed around improvement or maintenance of performance between two points in time, or how the student has responded to information provided, modified their learning plan, set new goals for subsequent WIL activities, or reflected on the feedback and how it has informed the development of their professional capabilities. For a guide to giving and receiving peer feedback, see https://www.uts.edu.au/sites/default/files/Giving-and-Receiving-Feedback.pdf

Illustrative example

Thilini is undertaking a placement with a company which offers up to 10 places in each round. Students are placed in pairs in a number of departments, according to interests and background. There is a single point of contact – an HR partner – and students usually come from a number of universities. To streamline assessment processes, the universities and HR partner have negotiated for each person to participate in a "360 degree feedback" process midway through the placement. This is similar in format to performance evaluations that regular employees undergo. The 360 degree feedback involves the department team manager collecting relevant performance information on a form from four sources: the student (i.e. self-evaluation), their paired student, a graduate, and a mid-level associate. Some items are generic (e.g. communication and teamwork skills), whilst others focus on the specific goals/expectations that might be met within a particular department (e.g. client engagement; familiarity with specific IT systems), which Thilini, the university, and the HR partner set up prior to the commencement of the placement. The team manager then arranges a 30 minute meeting with the student to discuss their progress, according to the feedback information collected. They set further goals together on the basis of the discussion, and strategies to achieve them. At the end of the placement, Thilini submits the set of evaluation forms, her original and updated goals, and evidence of her achievements. The university co-ordinator can assess Thilini's progress/learning within the placement and see how she has responded to the feedback information.

Scenario 4: Portfolio assessment

Portfolios encompass a range of practices. What they all share is the assembling of different artefacts which represent a diverse range of achievements over a WIL program or an entire course. This acts as a repository of work over a particular time period. Students can use this repository in a variety of ways, for learning or for portraying their achievements to other parties. An assessment task and responses to it might represent one artefact in a portfolio; alternatively, multiple artefacts might comprise an assessment task that culminates in an integrative account, where students elaborate a narrative of their development using evidence of their learning. Students are encouraged to systematically collect and present artefacts/evidence and reflections, curated and managed by the learner as evidence of their learning and accomplishments, as well as a portrayal of their personal and professional identities (Clarke & Boud, 2018; Boud and Ajjawi, 2019).

Features of this type of portfolio activity are that they are owned and controlled by the student and they enable an outward and strategic representation of self as well as achievements. Through such a portfolio, students are positioned as portrayers of their learning able to align and communicate their interests with that of future employers. A distinctive feature of portfolio assessment is it can be used programmatically to span more than one occasion of WIL or incorporate material from all course units.

It is important to distinguish portfolio assessment as an activity, from any particular physical collection that might be labelled a portfolio. It is the former that is emphasised here. As with any assessment, it is the processes around it that create value for learning. We suggest designing portfolios that:

1. Encourage students to formatively and qualitatively evaluate the process of curating the evidence as well as their judgements around their choices of evidence.

2. Encourage feedback from peers (and/or external parties) through discussion boards, comments sections and social media threads. Students then learn how to incorporate and use others' feedback. The summative component may focus on how well the students worked with feedback comments.

3. Track student progress in relation to standards and competencies: formatively this helps students identify the gaps between the standards and their work. If it can be arranged, students should be involved in discussions and co-creation of quality criteria for their work alongside set course learning outcomes (from Boud and Ajjawi 2019).

Illustrative example

Pablo is a science student who is uncertain about potential future career paths. He recognises that he has options such as moving into teaching, doing research in a commercial lab or even working in academia but he is not sure which he would find most fulfilling. He decides to take some elective WIL units to gain insight into his options. The portfolio assessment spans several placements, requiring him to engage with various stakeholders through different work practices, including virtual WIL. Pablo includes records of feedback conversations with his industry supervisor, including his specific action points taken from each conversation or feedback report. He also includes a statement of achievement of specific competencies using evidence from a self-assessment and performance review and artefacts produced in a team project. Pablo includes mock-ups of a possible LinkedIn profile and CV which are tailored to each placement and how he has adjusted them accordingly, accounting for the transferable and domain-specific capabilities he has achieved in each placement. He is encouraged to reflect at the middle and end of each industry placement (using audio/video for memory) with regards how he might carry his learning forward and how the activities in each placement have influenced his future career identities, self-efficacy and career decision making. He could also include an organizational chart of who he has interacted with and their roles and a reflection on the complexity of the particular workspace. These artefacts and contributions are dispersed throughout the placements.

On what is this guide based?

The guide draws on an Office of Teaching and Learning (OLT)-funded project that examined the assessment design practices of academics (https://www.assessmentdecisions. org/guide/), an ACEN-funded project on assessment of WIL (Ajjawi et al, 2020; Ajjawi et al, in press) and other contemporary literature on assessment and feedback in higher education.

Acknowledgements

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