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THE PLACE OF STUDENT ASSESSMENT IN PURSUING EMPLOYABILITY

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Imagine final year students putting together various job applications. Some of these jobs require the specialist content of their degree and others do not. The students look back at the various kinds of assessment they have experienced and the documentation they received from the university and wonder: how does this equip me for what I want to do and how does it help me get there? They readily appreciate that they have learned a great deal, but is it what they need now and in the future? How can they identify and find a way of showing what they are able to do in ways that connect with those who may wish to employ them? These students are not going to be employed because their exam technique is good or their transcript makes a compelling case about all the things employers are looking for, or even if they possess a lot of technical knowledge. What else needs to be considered in this context?

Assessment in an employability context has two aspects. Firstly, assessment which through its focus and the ways in which it is organised contributes to students' employability. That is, it ensures that students develop and have met outcomes relevant to employability. Graduate employability requires that students 'can discern, acquire, adapt and continually enhance the skills, understandings and personal attributes that make them more likely to find and create meaningful paid and unpaid work' (Oliver, 2015, p. 59). Therefore, assessment needs to do more by preparing students for longer term learning beyond the immediate task. However, assessment can inhibit employability outcomes if structured inappropriately through creating a false impression of how learning occurs and is judged and the role of the learner in it. For example, that learning is simply about acquiring and applying knowledge. Secondly, assessment portrays what students can do. That is, assessment outcomes are represented in such a fashion that they communicate effectively with those who employ or use or work with graduates. Different forms of representation might be needed for different purposes here. Assessment needs to address appropriate learning outcomes and show what a graduate can do.

The chapter pursues these two themes. Firstly, the nature of assessment practices and how they foster or inhibit employability. Secondly, the ways in which assessment in the form of students' achievements is communicated to others,

including employers. This chapter explores these issues through a critique of common assessment practices and how achievements are documented and communicated. It identifies new ways assessment is being practiced that contribute to employability and how graduates and indeed universities can represent what they can do in productive ways. It suggests that assessment needs considerable reform if it is to become fit for purpose in preparing students for life after graduation.

On the first theme, we explore what authentic assessment is and features of assessment that look forward. We argue that assessment is not about preparing students for immediate employment, but to equip them to respond effectively to whatever situations they find themselves in, both in work and in life. That is, how they can read the requirements of whatever it is that they are expected to do, respond effectively, monitor their own performance and plan the learning in which they need to engage. It focuses on the need for sustainable assessments and the development of students' evaluative judgement.

On the second theme, we examine assessment as portrayal and suggest that we need new forms of portrayal of student achievement that are more transparent and address the needs of the multiple audiences that consider them. The chapter explores representations of achievement that are more directly linked to the learning outcomes of a course than is often the case and which also involve students in a more active role in this portrayal. As an illustration of this it uses digital portfolios which can be validated and curated by students to present themselves for different purposes and to different groups, and the notion of validated digital micro-credentials that portray distinctiveness in student outcomes.

It is important to note that a focus on assessment for employability does not imply that this is the main function of assessment. Employability is used here as a shorthand for preparation for a world beyond the realm of educational institutions. Assessment for employability describes how assessment in its many forms can equip students to operate effectively in a complex and ever-changing world in which new knowledge and skills will need continually to be acquired and developed in unpredictable contexts with a variety of other people.

WHAT HAS ASSESSMENT CONVENTIONALLY PRODUCED THAT CONTRIBUTES TO EMPLOYABILITY?

It is impossible to consider assessment independently of the substantive learning outcomes which it seeks to judge. In a typical course or course unit there are likely to be a number of assignments, tests and examinations that together represent what a student is being assessed on for the purposes of certification. Struyven, Dochy, and Janssens' (2003) review of the assessment literature identified a typical view as:

Many students perceived traditional assessment tasks as arbitrary and irrelevant. This did not make for effective learning because they only aimed

to learn for the purposes of the particular assessment, with no intention of maintaining the knowledge for the long-term. (p. 206)

Commonly, conventional assessment when done well can ensure that students have an understanding of the key concepts in the field, can address problems that embody these concepts and that they can do so at a sufficiently high level to warrant them being awarded a pass grade for them. In other words, assessment certifies that students have met disciplinary standards sufficient for them to be recognised as having completed what is required in that discipline. Yet, here the focus is short-term and oriented towards whether students have met a requirement at a particular point in time. Assessment in this view is retrospective and doesn't seek to influence students subsequently. When marks are aggregated over time and over course units, then what is recorded is even more historical. Such a practice does not recognise that students can learn and better their achievements as they progress through the curriculum: they do not even show what they can do once they have completed their course.

The assessment process has typically varied for courses which provide a pathway into the professions. In these there are designated course units, placements and accompanying assessments that focus on application of the concepts and ideas to professional work and the development of the professional practices needed for it. In other words, employability features have been incorporated into parts of professional courses because it is clear what kind of employment is being prepared for. It should be noted though that even in the professions that exhibit these features (e.g. teaching, medicine) it is not expected that graduates be fully work-ready, merely that they are sufficiently competent to start on a professional pathway.

Today, there are many courses that could be identified as quasi-professional. That is, they lead to graduate level types of employment, but they are not as fully prescribed with highly integrated placement elements as teaching or medicine are. Some are clearly related to practice, such as business, others are more exclusively academic such as the sciences and the arts. Nevertheless, most graduates from these programs go into the workforce rather than further study. Either directly, or indirectly, employability features are incorporated into such courses. This is manifest through university graduate attributes that emphasise communication, working with others, intercultural awareness and other attributes that are not intrinsic parts of a traditional academic course. Courses are expected to develop and assess in relation to these attributes in addition to their substantive disciplinary or professional content.

AUTHENTIC TASKS AND AUTHENTIC ASSESSMENT

Starting in professions relatively new to higher education, such as nursing, and moving rapidly across the disciplines, the uptake of learning tasks and assessment

tasks which more fully reflect problems and issues confronted in practice has been notable. The argument in favour of authentic assessments has been that courses should reflect the world in which they operate and use examples and problems which are recognisable beyond the academy. This means that rather than undertake tasks which are abstractions designed to solely test students' appreciation of the concepts and ideas of the discipline, tasks should have the character of real ones extracted from what practitioners do. This is a move beyond the mere use of authentic examples in lectures, but providing students with embodied, contextualised problems to address that can be seen to represent the kinds of tasks undertaken by professionals (Ashford-Rowe, Herrington, & Brown, 2014). Authentic assessment does not typically use the form of multiple-choice or short answer tests, but richer tasks which may involve several components embedded in a wider issue. Such tasks seek to explore whether knowledge from within a course can be applied in settings beyond the immediate context (Gulikers, Bastiaens, & Kirschner, 2004).

Authentic assessment encompasses a variety of features as practiced in different contexts. However, it is commonly made up of three elements: realism, contextualisation and problematisation. *Realism* refers to the linking of knowledge to everyday life, *contextualisation* to characterising a situation where knowledge can be applied, and *problematisation* to how what has been learned can address a problem or need (Benner et al., 2009; Raymond et al., 2012). It is claimed that such assessment tasks are more likely to promote higher-order thinking, motivate students and lead to greater commitment and develop their capacity to regulate their own learning.

It is easy to critique such approaches as authenticity is often in the eye of the beholder. What a student experiences as authentic may not fully correspond to what occurs in practice. It is also difficult to judge how authentic a task may be: what is the difference between a case study and an authentic case study? Authentic assessment has also been critiqued as being more time consuming than what it replaces. This may be true if a rich task replaces a multiple-choice test, but if it is one type of task replacing another similar one (say, a report to a potential client replacing an academic essay), that is not so clear. Notwithstanding these concerns, authentic assessments are commonplace in many higher education courses and are finding their way into schools (Gulikers et al., 2004).

While there appear to have been substantial moves in the direction of more authentic assessment tasks in the context of wide-ranging learning outcomes, it is difficult to judge specifically how far this movement has gone. However, the use of authentic activities and authentic assessment tasks in itself may not be sufficient to enhance employability. If students remain subjected to unilateral assessment designed and judged by others, in which they have little role other than to complete the designated task, then they may not be equipped for situations in which they are required to be more proactive.

ASSESSMENT THAT LOOKS FORWARD

Even if authentic assessment does what it claims, it is still embedded in a view of assessment that is retrospective and not prospective. It focuses on what a student has done and does not seek to contribute to what comes later. How then can we consider a different view of assessment that looks forward to what a student will do after the completion of their course? Assessment for certification purposes (summative assessment) necessarily records what has been achieved, but assessment for learning (formative assessment) aims to assist in what students need to learn. However, formative assessment has been focused almost exclusively on what a student has to learn within the confines of the current course. It gives students useful information so they can meet present learning outcomes to the required standard. This is not enough for our present purposes. For this reason, the notion of sustainable assessment was established (Boud, 2000). The purpose of sustainable assessment is to look beyond current tasks to contribute to students building the capacity to judge their own work. It does this by taking a fresh look at assessment tasks and asking of them the following question: in what ways can the assessment task, and activities connected with it, be adjusted so as to enable students to make increasingly sophisticated judgements of their work? It goes beyond the notion of self-assessment to look at the elements needed for students to judge their own work and how students can be effectively scaffolded into it.

Taking this idea further, beyond the immediate assessment task, is the notion of placing the development of students' evaluative judgement as a central curriculum focus and outcome. That is, ensuring that "the capacity to make decisions about the quality of work of oneself and others" (Tai et al., 2017) is an aim to be pursued across the curriculum. The rationale for this is that having a well-developed capacity to make evaluative judgements is a key requirement both for learning and for operating effectively in life beyond the educational institution, and thus employability. To be seen to be competent in a workplace, the individual must be able to monitor their own work, identify what are appropriate standards to apply to what they are doing, involve other people as necessary and appraise the quality of the outcome. If they wait for someone in authority to pass judgement on what they do, they are putting at risk their own identity as a person capable of managing their own work and knowing what is required of them. Seeking feedback about the wrong things from one's line manager can compromise a good working relationship (Hughes, 2004). It may be that one of the reasons that employers are critical of universities in producing employable graduates is that they do not pay sufficient attention to developing the abilities of their students to work with others to identify and produce good work in a new context.

There are a number of features of initiatives that help students develop their evaluative judgement. Boud et al. (forthcoming) propose five components worth considering: discerning quality, judgement processes, managing biases, assessing the trustworthiness of sources and others, and seeking opportunities for practice.

While some of these are not thought of as part of assessment *per se*, they are all a part of the learning, teaching and assessment nexus and need to be planned in association with assessment tasks designed for summative and formative purposes.

Discerning Quality

A prerequisite for students producing good quality work in any given context, is an understanding on their part of what constitutes quality for the task at hand. Conventionally, students are provided with lists of standards and criteria, or rubrics which contain them. This is problematic for the wider employability agenda as outside educational contexts, learners have to decide for themselves, or in conjunction with work colleagues, what are the necessary features of the kinds of work they need to produce. Activities that involve students in identifying appropriate standards and criteria and examining how they are manifest in examples of the kinds of work they need to produce are a key element of discerning quality.

Judgement Processes

Students making judgements about their own work and that of others is the core of developing evaluative judgement. Of course, they need to be able to discern features of quality in the work, but they also need comparators as they do not possess the wide repertoire of exposure to work of different kinds that are possessed by teachers. These are not comparators which enable them to place themselves with respect to other students, but in relation to the specific qualities of work represented in exemplars of standards and the criteria used to judge these. Feedback from others is an important part of this process. However, this may not involve comments on the work itself, but on the judgements students make about it: to what are they attuned and to what are they blind? The focus is on the refinement of judgements and the strategies they can use for this. The provision of rubrics has a limited role to play, but the construction of rubrics so that students have to engage in naming and discerning criteria can be useful.

Managing Biases

All judgements involve biases, whether they are made by teachers or students or by workplace colleagues. The challenge is to learn how to identify and manage them. The most common bias in judging one's own work is confirmatory bias – "I knew what I was trying to do in this task and therefore I have achieved it". Biases can only be identified by resorting to the views of others. There is no one strategy, but the general approach is to learn to see one's own work through the eyes of others. This may involve referring to exemplars, to input from peers or to any other party that can enable the person to achieve a critical distance through which to view their own work.

Assessing the Trustworthiness of Sources and Others

A key attribute of any practitioner is knowing whose view to trust and where to go for opinions that are reliable. This is a process of judging the potential biases of others: for example, has this supervisor seen enough of my work to justify the harsh comments I am receiving or is she assuming I am incompetent by virtue of my lowly status? Can I trust my peer to offer me fair comments when he is being marked on how critical he is? Trust is built over time and by progressive sharing of judgements, so that confidence can be gained that when the judgement of the other is important, it can be trusted.

Seeking Opportunities for Practice

Evaluative judgement cannot be developed by single isolated opportunities for practice. Such activities can demonstrate the importance of the skill but not enable expertise to be attained. This implies that courses need to provide multiple opportunities for practice in exercising evaluative judgement over time. The obvious occasions on which practice can be considered are with respect to normal assessment events included for summative or formative purposes. These are occasions on which judgements are already being made by others so additional resources are not usually needed. What is required is for the assessment event to be accompanied by activities which prompt students to make judgements and to receive feedback information about them. A common way for this to occur is to have students make and record judgements about their work, prior to having it assessed, and for comments to be provided by markers on the extent to which the student is able to discern the requisite qualities in their own work.

These five components of developing evaluative judgement can be summarised by saying that students need to have an active engagement in assessment at all stages. This must not be misinterpreted as saying that they necessarily need to be involved in marking or generating grades. This is probably the least important aspect of the process, but also the aspect most likely to introduce biases. It is often inappropriate for students to be put in a position of generating grades that count formally as this provides a substantial distraction from them doing so validly. Evaluative judgement cannot be developed if students are given incentives for not doing it well: many uses of students grading themselves do just this.

THE PORTRAYAL OF STUDENT ACHIEVEMENT

Employability develops over time through the accumulation of knowledge and skills from a wide range of academic experiences (including assessment) and experiences outside of academia (Jorre de St Jorre & Oliver, 2017). Assessment design for employability should enable students to practice how to conduct themselves as practitioners. This occurs through the design of the assessment task, the roles students have to take on to complete the task, how task performance is

judged, and how students interpret all of these. When students engage in assessment tasks they attain knowledge about themselves and their progress. As they progress, they perform and produce higher quality work, and should become increasingly better at judging their own strengths. Hence, assessment practices should shape how learners come to think about their practice and how to continually improve it beyond graduation.

In addition to this internal focus of assessment on the formation of the student, there is also an outward focus of assessment as a means of showing the world what a student has achieved and what they can do. When it comes to portrayal of learning achievements, the academic transcript is the traditional and most common way in which students' achievements are communicated externally. The transcript is a validated representation of a student's outcomes from having completed a course. In the transcript, achievement is reduced to a number and/or grade for each completed academic unit. This rather thin representation of what a student has attained does not portray students' achievements for each of the stipulated competencies or graduate learning outcomes. Further, it doesn't highlight particular areas of distinctiveness that the student can lay claim to. The fact that the student gained a particular grade for a particular course unit indicates little to an external audience. This may be changing however. In the Australian context under the regime of the Higher Education Standards Framework, assessment in higher education is required to certify that students have achieved the standard for each of the course learning outcomes, heralding a shift from a focus on inputs to assuring learning (Boud, 2017). For example, under the previous system, which is mostly still in use, a student may be weak with respect to a particular learning outcome such as communication and team work, yet consistently pass each unit because they are strong in their performance on disciplinary knowledge. More seriously, conventional examinations can allow students to compensate for inadequacies on certain learning outcomes by superior performance in others. Further, because of the unit-based way grades are presented, students may not be able to form a clear picture of how they are tracking in relation to particular learning outcomes across a program of study.

Assessment design is slowly being reformed to address the concerns raised around the use of grades and transcripts as the only portrayal of achievement. Assessment tasks are being developed that enable students to portray their achievements in more public ways that communicate with future employers more directly and that are controlled by the students. We see this for example in certain forms of portfolio assessment or validated digital micro-credentials. These new forms of portrayal encourage students to curate and articulate their learning achievements in relation to course or graduate learning outcomes (Jorre de St Jorre & Oliver, 2017). There are multiple drivers for these changes in assessment, one of which is the changing nature of work which is becoming less stable and more uncertain requiring individuals to assume responsibility for their own career management and employability (Sullivan & Baruch, 2009). Jorre de St Jorre and Oliver (2017, p. 46) argue that "to be marketable, graduates must be able to adapt and repack their skills and experiences to fit the changing workforce".

Portfolio Assessment

Portfolio-based assessment has been heralded in writings in the assessment literature across higher education, and many examples of it can be found in practice (see e.g. Driessen, 2009; Watty & McKay, 2015). Portfolio assessment is not a single entity, but encompasses a range of different assessment practices. What they all share is the assembling of different artefacts which represent a diverse range of achievements over a course unit or an entire program. A distinction used to be made between paper based portfolios and electronically recorded e-portfolios. This distinction is no longer relevant as portfolios are increasingly being kept in digital form for ease of use.

There are many types of portfolios ranging in focus from simple repositories of learning artefacts to reflective personal journals to promotional accounts of professional achievement (Clarke & Boud, 2016). We focus here on a particular type of portfolio that promotes: “systematic collection and presentation of artefacts and reflections that is curated and managed by the learner as evidence of their learning and accomplishments, as well as a representation of learners’ personal and professional identities” (Holt et al., 2017, p. 1). Features of this type of portfolio are that they are owned and controlled by the student and they enable an outward and strategic representation of self as well as achievement. Students are able to curate digital evidence of learning from various aspects of their lives, e.g. assessment artefacts, work, volunteering (Jorre de St Jorre & Oliver, 2017). This focus on identity starts to challenge familiar notions of what makes for authentic assessment through integrating what students know and how they act with who they are becoming (Vu & Dall’Alba, 2014).

Through such a portfolio, students are positioned as portrayers of their learning who are able to align and communicate their interests with that of future employers. Students are able to test different personas and approaches in a safe space to differing audiences before making it public. They may link in with different professional networks and digital/social media streams beginning to form important networks for future work. Students can use story (and multimedia) to stitch together different forms of evidence to portray their emerging graduate identity (Higgs, 2014).

A portfolio assessment designed with employability in mind would have particular features. Clarke and Boud (2016) highlight three key features of portfolios for assessment suitable for this. These design features are oriented towards developing students’ evaluative judgement through engaging students in acts of judgements about quality, helping them to develop more nuanced understandings of quality criteria and encouraging them to seek and work with feedback comments to calibrate their judgements (Ajajawi et al., forthcoming). These features of portfolio assessment design are:

1. Self-judgements: encouraging students to formatively and qualitatively evaluate the process of curating the evidence as well as their judgements around their choices of evidence.
2. Peer feedback: encouraging 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. Tracking progress in relation to standards and competencies: formatively this helps students identify the gaps between the standards and their work. Ideally students should be involved in discussions and co-creation of quality criteria for their work alongside set course learning outcomes.

Digital Credentials

While portfolios allow portrayal of outcomes on a wide front, other approaches are more focused. Digital micro-credentials (also known as digital badges) allow evidence of achievement to be more detailed and to be shared more broadly than is possible through grades and transcripts (Miller et al., 2017). A digital badge is a clickable graphic that contains an online record of: 1) an achievement, 2) the work required for the achievement, 3) evidence of such work, and 4) information about the organisation, individual, or entity that issued the badge (Oliver, 2016). Oliver (2016) proposes four distinct features of micro-credentials: that they are granular (offering more information than marks and grades); stackable (saved to digital repositories and readily mapped to qualifications frameworks); evidentiary (clearly point to the student-created evidence); personalised (accurately represent the student’s achievement); and machine readable (enabling rich analytics). Badges can be added to online student profiles in popular social networking sites such as LinkedIn and are therefore open for inspection by a broader audience. Such credentials promote a more authentic representation of what the student can do within a particular context than can a grade or mark (Abramovich, 2016).

While digital credentials can be offered by an educational institution alone, there can be a greater sense of authenticity and a more direct association with employability concerns when credentials are developed in collaboration with industry partners to ensure the award warrants achievement that is meaningful in the workplace. Deakin University’s *Hallmark* is an example of this type of credential that is non-award bearing, extra-curricular and provides students with an opportunity to evidence their outstanding contributions towards a particular graduate learning outcome such as teamwork (Oliver, 2016). Hallmarks present an opportunity for students to differentiate themselves; showcasing their distinctiveness to potential employers. It is their choice to seek a Hallmark and different students’ Hallmarks will represent achievements unique to themselves. Evidence can include curated outputs (e.g. web sites, photos and campaigns), endorsements (e.g. grades/feedback, peer review and letters of recommendation) and personal reflections. Preliminary research shows that students value the opportunity to evidence their employability and differentiate themselves to

employers (Miller et al., 2017). Students described the process of reflection and self-assessment involved in creating and curating the badge as more valuable than the credential itself for highlighting personal development. Further, industry stakeholders reported valuing seeing aspects of the students' professional identity and social engagement portrayed through the credential (Miller et al., 2017).

Again, the design here affords particular features that help to develop students' evaluative judgement, through engagement with standards and quality criteria, self-assessment and curation of artefacts and reflections to evidence the learning process and its achievement. The student is actively engaged in enactments and judgements of industry-credible activities which are then publicly presented and managed in more detail.

The use of portfolios and digital credentials are two indications of the shift of assessment results away from being a technical representation of an opaque internal process to a greater transparency in assessment as a whole. The aim of these developments is not only to enable students to have greater agency in assessment processes, but also to have forms of portrayal that communicate more effectively to external audiences than lists of marks and grades by course units. There are many challenges to be faced in this move, not least of which is ensuring that what students present to the world is underpinned by appropriate validation processes. Nevertheless, these changes are a large shift in assessment towards responding to the employability agenda and meeting the needs of students in presenting themselves to the world.

CONCLUSION

Assessment plays a critical role in career-preparedness through ensuring that graduates meet the expectations of various stakeholders (including future employers) and in signposting to learners what is important for them to learn. A key aspect of assessment for employability is that graduates develop the capability to judge the quality of their own work during university and beyond. Assessment design should also enable students to portray their learning achievements in particular ways suited to themselves, the discipline (or profession) they seek to join and future employers. We suggest that notions of authenticity in assessment should be recast given a focus on employability that includes portrayal of the self and integration of self- and industry-collaboration around creation, curation and judgement of learning achievements.

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