14. CHALLENGES OF ASSESSMENT IN PRACTICE-BASED EDUCATION

Assessment in practice-based education (PBE) can have many different purposes: assuring the public that graduates are safe and responsible practitioners, complying with professional accreditation bodies’ requirements, certifying achievement of learning, stimulating further learning, or informing curriculum development and program reviews. Assessment and its conduct are of concern to students, universities, the professions and more broadly to our communities, as the awarding of a qualification is based on assessment and represents the legitimacy of the student to become a professional.

PBE assessments must attend to four distinct sets of demands by stakeholders interested in the outcomes. Universities focus on learning and the fitness for conferring the award. Professions are interested in graduates who are competent and fit for professional practice according to particular professional norms. Students are interested in the experience of their education and opportunities for future employment. Workplaces are interested in work readiness and that graduates fit the workplace culture. These potentially competing demands complicate the use of assessment when practice is involved.

Assessment practices in PBE affect stakeholders at individual, professional and social levels. At an individual level, assessments can hinder or enhance student learning and performance. They have a powerful impact on students’ confidence, self-esteem, autonomy, professionalism, and sense of belonging to a professional group. Assessments hold power over students and this power is manifested when assessors make decisions about passing or failing. A fail can set students back, delay or even deny them gaining a university award, accreditation from a professional body and/or certification to practise. At a professional level, assessors take on the role of gatekeepers for their profession. At the social level, assessment practices shape the skill sets of graduates and the future workforce and have implications for service provision. Although there is ambiguity in the interpretation and purpose of assessment, its potency remains a certainty. Despite the varied purposes and interests, there is agreement among stakeholders that assessment is influential in driving what students learn and what teachers teach (Boud, 1995; Rust, 2007).

Critical rethinking of key questions, such as what is assessed, what can be assessed, what is the purpose of assessment, who assesses and how students experience assessment, expose theoretical and practical assumptions about the assessment of practice. Assessment of practice remains contested, under-theorised, and ill-understood (Yorke, 2011). Although practice theory has been used to
understand and research practice and performance, less attention has been given to using this theoretical understanding to illuminate the challenges of assessing practice and to frame assessment in PBE. In this chapter we present a way of thinking about assessment in PBE that is underpinned by practice theory, with the aim of critically discussing the complexity of assessment and arriving at assessment principles that enhance student learning for future practice.

THEORETICAL UNDERPINNINGS OF ASSESSING PRACTICE

If PBE has the purpose of preparing students for their future practice then assessors need to ask themselves what practice is, and what kind of practice they are assessing for. It is no easy task to settle on what practice is: definitions and understandings are highly contested. Kemmis (2009) contended that practice is not self-explanatory. A sweep of practice theories highlights that practice is no simple unit of prescribed behaviour (Green, 2009; Higgs et al., 2010; Kemmis, 2009). Green, for example, listed four ways of understanding professional practice. Practice can be seen as a notion of practising a profession (such as practising law or medicine), practising professionalism (in the sense of practice identity), practising ethically and morally, and practising professionally (as opposed to lay people). Practising within a profession implies specific disciplinary knowledge and skills. Professions have social privileges and responsibilities that are conferred on the basis of competency in their exclusive practices. Professionalism implies that certain values underpin professional reasoning and decision making and that practitioners belong to communities of practice. Practising ethically and morally implies a chosen purpose and is closely related to practising professionally; both are underpinned by values and wider social goals.

Theorising about practice reveals that practice is purposive, experiential and situated within sociocultural contexts. It is a complex assemblage of individual, social and material factors. Green (2009) suggested that practice can be thought of as an interrelationship between activity, experience and context. Activity is purposeful action to achieve a goal and is embedded in structure and culture. Individuals interact with others, and practice is not just an individual activity but a social relational one. Experience is described as becoming conscious of the being, feeling, and sensing in and of practice. Practice is always experiential. And the practice context is understood as the wider arena within which practice happens.

Kemmis (2009) suggested that practice is constituted in sayings, doings and relatings. Practice is what people say they do and how they describe their practice. Practice is discursively shaped by language. The doings relate to the mode of action. Practice is action that relates to material as well as ethical matters. Finally, practice occurs not in isolation but within relationships. Relationships can be simple professional–client relationships or complex webs of connections between diverse groups of people. Practice thus can be perceived as purposeful action that results in products and productivity, as mindful and engaged critical dialogues with others that attend to ethical and moral issues, and as shaped by and shaping historical, social and political dimensions of the workplace and society at large. Practice is not a static
concept. Some aspects of practice are perpetuated whereas others are transformed. Practice is fluid and to some extent always remains uncertain (Kemmis & Trede, 2010).

This understanding of practice reveals that it is wider and more inclusive than technical skills and theoretical knowledge. Practice comprises knowledge, practical and critical understanding, moral and ethical dispositions, social and relational ability, and performance that is flexible and creative to meet contextual needs. All these aspects need to be seen in relation to each other to form a judgment on practice. Further, good practice or performance in one context does not predict good practice in another context. From this understanding of practice we suggest that assessment of fragmented knowledge and of individual skills, ignoring the wider context and the complex interrelationships that shape practice, does not do justice to assessing practice. It is not textbook knowledge but knowledge that is appropriately applied in particular practice situations that counts in social practice theory. However, and in defence of pragmatism, such wide theorising about practice makes appropriate assessment a challenging if not impossible endeavour, and speaks to the second question we posed: what can be assessed? From the above theoretical discussion we now engage with the practical issues that make resolving and developing good assessment in PBE so complex.

### COMPLEXITY IN PRACTICE-BASED ASSESSMENT

PBE may be considered as a set of strategies to prepare students for practice environments (Higgs, 2011). As a set of strategies, PBE occurs in real practice contexts and in classrooms. Although the validation of learning is ultimately the graduate’s performance at work, the assessment of PBE in universities often results in fragmentation of the components of practice to evaluate the achievement of its constituent elements or to adapt to the practical concerns of assessing large numbers of students. Some examples of assessment tasks used in PBE include written examination of the theoretical knowledge underpinning practice, objective structured clinical examinations, performance, vivas, simulated practice scenarios, reports of performance in the work environment, reflective portfolios, project reports, presentations and written essays. These vary in the degree to which they can predict how a student might actually perform in the context of future work practice. Assessment of students’ performance during workplace learning appears to best fulfil the expectation of authentic assessment of practice capabilities.

### Purpose of Assessment in Practice-Based Education

There are several purposes of assessment in PBE, with many parties interested in the outcomes. Assessment can be a mix of assessment of learning, or learning as a product, and assessment for learning, or learning as a process. PBE, and the workplace learning components of PBE in particular, might be considered the most authentic conditions in which to derive assessment of students’ potential capabilities in the workplace (Crossley & Jolly, 2012).
Fish and Coles (2005, p. 169) defined assessment as “an all-embracing term for the educational activity of recognising and recording learners’ achievements and their development within a specific context and in the light of the quality and scope of the education provided for them.” This definition confirms that assessment is about the learning process as well as its achievement and that it occurs in socially-situated contexts. Hodges (2011) identified two main purposes of assessment, summative and formative, which reflect this duality of its purpose. Summative assessment certifies achievement, with a focus on the end-point of learning and limited emphasis on how assessment can shape and guide future learning. Summative assessment is needed to affirm preparedness for practice at the point of entry into graduate practice, but certification that individuals are capable of the practices society expects is not necessarily a dependable prediction.

Formative assessment emphasises developing performance and helping students learn by providing feedback (for the purpose of learning as distinct from defending grading decisions). Formative assessment is more clearly linked to assessment for learning. Recent work of Boud and associates (2010) on “Assessment Futures” clearly depicts formative assessment as assessment for learning. The seven propositions developed in the Assessment Futures initiative articulate the type of reform needed to move assessment back into learning. They are:

1. Assessment is used to engage students in learning that is productive
2. Feedback is used to actively improve student learning
3. Students and teachers become responsible partners in learning and assessment
4. Students are inducted into assessment practices and cultures of higher education
5. Assessment for learning is placed at the centre of subject and program design
6. Assessment for learning is a focus for staff and institutional development
7. Assessment provides inclusive and trustworthy representation of student achievement.

These propositions reconceptualise the roles of teacher and student as partners in learning; they focus on feedback and learning through assessment, and they place assessment in the centre of subject, program, curriculum and even institutional development. If these propositions can be realised they will stimulate, motivate and challenge learning. The propositions are useful for PBE because they provide a framework that can help us to map student learning for professional practice to a more appropriate mix of formative and summative assessment strategies. However, the massification of higher education and industry demands for work-ready graduates make the goal of integrating formative assessments more difficult to achieve. Lecturers are pressed to look for time-efficient solutions that simplify assessment for practice, such as using competency checklists to assure standardised and transparent approaches to assessment, which risk leading to fragmented elements of skills. Focusing on competencies in assessments will be to the detriment of meaningful learning.

Assessment both of learning and for learning is needed, but their complex coexistence needs to be appreciated and well engaged with by all assessment stakeholders. Unfortunately, tensions can arise between these different assessment
purposes, and one can undermine the other. We contend that the boundaries between the different intended purposes of assessment are blurred when enacted in PBE. For example, assessors in workplaces may also be supervisors, teachers or mentors, who blend instances of formative assessment with their summative assessment as they guide students in their developing practice. Using assessment for learning can be at odds with using assessment to determine the outcome of learning. Assessors can struggle to separate the two assessment purposes, because assessing for learning potentially influences assessment of learning.

The challenge for those designing assessment is how to judge performance, the concrete activity, without weakening the focus on developmental processes. Hodges (2011) suggested that the solution lies in making assessment purposes clear to those involved, and urged assessors not to blend the two at the level experienced by the student. The distinction between assessment of performance versus assessment for learning might be clear to teachers but not to students. Students might doubt that assessors make a clear distinction between the two purposes, particularly when they experience little distinction between the two approaches to assessment. Although making a distinction between assessment for learning and assessment of performance is desirable, we acknowledge that it is difficult to achieve in practice.

**Authentic Assessment of Students’ Practice Capabilities**

Authentic assessment embraces many complexities. Here we discuss the complexity of assessing reliably in unique practice situations and assessing individuals when practice is a social rather than an individual activity. Effective assessment of practice must be true to the practice context and must allow assessors to make judgments of students’ achievement of learning “practice.” As we have argued, practice as it occurs in real world scenarios is inherently uncertain, complex and diverse, and therefore requires sophisticated ways of knowing, doing, saying and relating that are difficult to assess validly and reliably. The need to make assessment fair, objective and consistent has resulted in attempts to perceive it as a science (Fish & Coles, 2005). Assessment standards and criteria have been designed to objectify assessment, but instead of enhancing assessment for learning they underscore management and regulations. A course curriculum that focuses on assessment of learning and on teaching for assessment would measure competencies, skills, knowledge, and performance but could neglect the understanding, dispositions and reasoning that underpin measurable performance. Further, it would not encourage learning from assessment.

We need to gain more trust in judgment in assessment and let go of the belief that assessment in PBE can be objective and scientific. Frameworks for competency-based skills training attempt to reduce the assessment of practice to checklists of achievements of skills. Such approaches misrepresent the complexity of assessing practice, simplistically viewing it as a technical skill informed by propositional knowledge specific to the profession and assessed by observing performance and behaviour. Assessment practices that target behaviours and technical skill performance can also encourage students to replicate practices they
have observed without promoting depth of understanding. These approaches are likely to poorly represent students’ capability in practice unless the professional reasoning that informed decisions and actions is not articulated and concurrently assessed. Practice includes reflecting, learning from actions, and responding to contextual practice situations. There would be little indication that students could translate their assessed skills into different work situations if their underlying principles and reasoning processes have not been scrutinised.

If practice is understood as an activity of integrating cultural, relational and collective ways of knowing, this needs to be reflected in assessment. The dominant assessment practices in use in PBE focus on individual autonomy. As we have discussed, practice is relational and collective, and hence requires integration of self within social and team-based practice models. Boud and associates (2010) have suggested that collective assessment practices are needed rather than assessment of individual competency. Individual performance is influenced by workplace culture, unforeseen situations and other people who contribute to practice, which makes reliable assessment of individual performance questionable (Yorke, 2011). Performance is influenced by others in the setting, and a student’s individual performance might be difficult to distinguish from that of the team.

**Educators as Assessors**

Assessment practice is fundamentally a reasoning process, requiring those planning and conducting assessment to integrate many inputs and to problem-solve to generate decisions and judgments on the quality of student learning relevant to the intended plan and the required practice. A distinguishing factor in PBE is that in professional entry courses that include workplace learning, practitioners located in the work setting become involved in assessment. In such situations the professional authority to make decisions about students’ performance may be delegated by higher education institutions to practitioners. These practitioners have a primary responsibility towards their workplace and employer, but assume the secondary responsibility of mentor, trainer, and assessor for students undertaking workplace learning. Potentially stressful work conditions can create tensions for workplace educators performing both roles, undermining their sense of agency and professionalism and their capacity to assess students, in turn profoundly affecting what and how students learn and what type of future professional is produced.

Workplace learning educators typically have strong backgrounds as professional practitioners but may have limited preparation and support for their education and assessment roles. They are not necessarily involved in curriculum development. Further, the pool of workplace educators may change rapidly in a workplace, and maintaining close partnerships can be difficult. The diverse, transient and disparate nature of assessment practitioners makes developing and maintaining quality assessment in PBE more complex. Universities have limited capacity to adequately prepare external assessors for their assessment role and to moderate the assessment process. It is too difficult to even try to ensure the reliability and validity of externally assessed performance when a large number of assessors are used who
each see a limited sample of the whole cohort. Johnson (2008) argued that greater reliability and validity are achieved by increasing the sample and controlling conditions. Grading can have a negative effect on assessors, who might be pressured to engage in finer discrimination of marking with insufficient time and experience to support them to engage in detailed assessment practices. However, practice cannot be dissected into the exact elements demanded by some objective assessments. For these reasons, we concur with Amin (2012, p. 5) that there should be “a higher tolerance for subjective value-based judgment.”

Harman and McDowell (2011) investigated the discourses of assessment used by academics who taught design and found that the chosen dominant discourse shaped the practice of the assessor. They identified five discourses:

A discourse of apprenticeship is used when assessment through feedback is used to guide learners to be able to practise to the level expected by experts or custodians in the field. In this discourse the student is encouraged to converge to expectations. This discourse particularly applies to the application of convergent formative feedback, as described by Pryor and Crossouard (2007, p. 5), where assessment “starts with the aim to discover if the learner knows, understands or can do a predetermined thing.”

A discourse of personal development is used where the assessor is concerned with the use and impact of assessment on the wellbeing and confidence of the student. Assessors may be concerned with the impact of their judgments on students’ careers, access to their profession, and self-esteem.

A discourse of regulation is applied where assessment is used to measure students’ achievement of certain behaviours. In regulated professions, particularly the health professions, it is a requirement to assess that students achieve competency in the practices of their profession.

A discourse of objectivity is applied where the assessor focuses on the desire to judge against determined criteria. This is a dominant discourse for those seeking to achieve notions of consistency and reliability in assessment.

A discourse of vocationalism encompasses the discourse of assessors as judges of students’ suitability for the workforce and the profession. Notions of gatekeeping, protection of professional standards, protection of the community and job-readiness are encapsulated in this discourse.

Harman and McDowell (2011) contended that an individual’s assessment practices could be dominated at any point in time by one discourse to the exclusion of others. They also identified that assessors negotiated and felt the tensions between these discourses. At some point, the balance between an external judgment of fitness for practice may need to be contested against students’ internal judgments of their own capability and self-esteem.

The authors suggested that the means to enhance assessment practice was not to promote a dominant discourse but rather to assist assessors to reconcile and work within these tensions. Their discussion also reveals that understanding assessment practices by PBE assessors requires acceptance that there is not one single practice; multiple discourses shape and influence the assessment. A dominant discourse can undermine other discourses, even in contexts where they might be more relevant.
These findings reveal a need for a programmatic and systematic approach to assessment, to reconcile the identified discourse tensions.

Of note in the findings of Harman and McDowell (2011) is that the range of identified discourses position the assessor as a decision maker and judge exercising power over the student. The discourses of student learning, student agency and self-assessment were absent in their study. This is of concern, since one assessment purpose in PBE is to promote assessment for learning. Boud’s (2010) recent work highlighted that it is vital that students learn to self-assess, because poor self-judgment has more serious implications than knowledge gaps for the development of future work capability.

Here we have argued that assessors’ intended purposes of assessment shape their enactment. We have also introduced into the discussion the notion of collective assessment and student participation. The student’s experience of assessment is another complex layer of PBE assessment, which we explore next.

*Students in Assessment*

Assessing learning for future practice requires engaged, transparent learner-assessor relationships that empower students to learn genuine self-assessment and self-regulation. Reflection, feedback and assessments that stimulate learning need to be grounded in a spirit of truthfulness, criticality and transparency, underpinned by a desire to learn and improve practice. The development of future practice and its assessment are based on the ability of all involved to respond to and learn from mistakes, to engage with practice observations and critical insights, to consider others, to meaningfully connect theory with practice, to ask curious and innovative questions, to search for possibilities, and to find good solutions in given practice contexts. These pedagogical approaches are intended to develop students’ capabilities for practice and for imagining other possibilities. Most importantly here, they relate to the processes required for students who are preparing to join, contribute to, and develop a sense of belonging to relevant practice communities.

What assessors think they are doing may not be congruent with how students experience it (Mentkowski and associates, 2000). The potential for conflict between assessors and students arises when both parties privilege and expect different outcomes, particularly if those outcomes are not articulated and negotiated prior to assessment. Assessor and student perceptions of assessment experiences can differ and even contradict each other.

According to Boud (2010, p. 252), “assessment is not only something done to students but a necessary process in which they need to develop expertise, if they are to continue learning throughout their careers.” A good assessment culture challenges students and encourages their active participation (Price, Carroll, O’Donovan, & Rust, 2010). Some assessors might invite students to choose their own grade, with the intention of encouraging student self-assessment. That, however, is a naive view of self-assessment if it does not include a respectful, open and critical dialogue between student and assessor. Students may deliberately underrate their achievement to avoid being judged as arrogant and over-confident.
Failure to openly discuss assessment judgments and perceptions represents a risk to assessment that is intended to develop students as critical, agentic learners.

Assessment practices of assessors are often underpinned by best intentions to adhere to principles of justice such as fairness, equity and objectivity, as well as assessing what was taught. Complex issues are often debated, such as making reference to the learning achievements of the individual to desired standards of performance or compared with their peers. Assessors need to concede to the situated and subjective nature of learning achievements and of peer comparisons in PBE. Rather than appealing to the non-defendable objectivity in assessment, assessors could preempt this debate by drawing on their professional judgment in assessments. Assessment tasks may be inconsistent, ill-defined and non-controllable, due to the diverse and changing contexts of practice. In practice settings, the conditions of assessment may change frequently and not be replicable, raising important concerns regarding the academic traditions of parity and objectivity of assessment across cohorts. With students exposed to such variable conditions of assessment, concerns over fairness and the value of providing grades suggest a rethinking of performance ratings among peers.

**IMPLICATIONS**

We began this chapter by discussing practice theory and framing it as a relational, discursive, contextual activity that requires participation in order to be learned and developed. Workplaces, work roles and professional relationships strongly shape practice. Such a framework of practice calls for judgment-based assessment. Further, we identified key tensions in assessments: assessing for learning versus assessing of learning; focusing on assessing individual practice rather than collective and team-based practice; assessors occupying the dual role where they are also mentors; and the power-laden relationship between students and assessors. From this discussion we imply that assessment in PBE is no easy task. A simplified approach is to assess what is measurable, but what is measurable is not necessarily important in practice (Crossley & Jolly, 2012). Rather than succumbing to simplistic and unsustainable solutions that ignore lifelong learning and self-assessment, we contend that assessment requires purposeful engagement with its accompanying complex and contextual issues. That engagement is based on multi-layered designs which include assessment input from students, assessors and others involved, as well as consideration for the learning and practice environment.

Taking a holistic view of the role of assessment can reveal serious inconsistencies but can be used to engender greater consistency in practice by taking into account and managing the interconnected factors that support the assessment process. (Price et al., 2010, p. 12)

For example, educators may feel tension if they seek to assess cohorts of students under identical and controlled conditions in an effort to obtain consistency, but when doing so may create assessment conditions that poorly represent the normal variation in client conditions to which students must adapt. Instead, we argue, there
are times when educators need to value the consistency of authenticity and complexity inherent in managing the conditions of real practice more highly than the need for consistency across students. We assert that there is no room for shallow compromise and there is no other way for assessors than to engage with the identified complexities. Failure to do so can lead to students contesting their assessment results because they perceive them to be biased and unfair; students exiting degrees with statements of competency but being unable to form judgments of their own skills to guide their practice in situations of low or absent supervision; students whose capability for practice has been only partially assessed and inappropriately judged as acceptable to the standards of the profession; workplace learning educators who decline further involvement in student placements due to discomfort with their role as assessor. The question needs to be asked whether assessors are fit for assessing practice.

Three key principles can be crystallised from our discussion that underpins good assessment practices in PBE: dialogue, participation and critique. We suggest that all three need to be engaged with before decisions are made about assessment tasks.

Dialogue is the stimulus for learning and engaging constructively with assessment. Assessment tasks as monologues without reference to the understandings of assessment by students, workplace educators and the professions will contribute to ongoing contestation and contradictions in the use of assessment. It is important for students and assessors to at least accept each other’s position if mutual understanding and agreement about assessment judgments cannot be reached. Talking about assessment and discussing its challenges together can engender appreciation of the difficulty of assessing practice. Articulating these difficulties together enhances purpose and potentially reduces appeals about the outcomes of assessment, such as students questioning the validity of workplace assessment. The conditions for constructive dialogue are mutual respect – which needs to be earned, willingness to listen, to speak up and to reconsider (Habermas, 1987). Dialogues help stakeholders to clarify their own expectations and those of others and to reduce misunderstandings. Dialogues on their own, however, are not sufficient. They need to be closely interwoven with active participation. Dialogues require participation from all stakeholders (Boud & associates, 2010). Learning for practice is a joint enterprise between students and assessors. Students need to be agentic learners (Billett, 2006) and actively contribute to their assessment. Self-engaged students who ask questions and learn from assessment experiences are more likely to learn for future practice. We stress here that it is important to ensure that the student voice, the voice of the inherently less powerful player in assessment, is not only heard but integrated into the assessment. If the student voice is attenuated there is the risk of students assimilating and perpetuating the practices of their assessors rather than developing their own practice capabilities. Decisions about assessment practices need to be based on critically understanding the complexity and power of assessment. Assessment drives student learning, and assessors have power over students in assessments. We suggest engaging with these power relations by reversing roles, which means that as well as being assessed, students assess their assessors. Playing both roles, assessor and learner, is
helpful to appreciate the role of the other. This reverse can contribute to balancing power relations and to better understanding judgments of performance. Such mutually reciprocal participation in assessment is closely linked to critique. All assessment stakeholders need to be enabled to question and challenge assessment practices (Phelan et al., 2006). This is no easy task, and due to the inherent power relations it is best instigated through the assessors. Those assessors also need to see themselves as learners who are reflexive and responsive. Reflexivity is the ability to self-assess, to see self within the social practice context with others, and to see self from others’ perspectives. The ultimate purpose of these strongly interdependent principles of dialogue, participation and critique is to learn through assessment about what and how to develop one’s practice further. Assessment practices are most meaningful and helpful in making judgments of student learning when they reflect the demands of real practice. The ultimate goal of assessment in PBE is to purposefully use assessment as a constructive pedagogical tool for assessors to judge student learning and to help students learn for future practice. Students should be at the centre of assessment and assessments should help students to stay committed, to keep asking questions and to learn from practice experiences. Practice-based assessments need to integrate student participation within practice contexts.

PBE evokes a paradigm shift for assessment in higher education and could be the impetus for such a shift (Yorke, 2011). We argue that the greatest challenge of assessment in PBE is to redesign university assessments to become PBE assessments. They would then be assessments not for knowledge but for practice knowledge, not for individual achievement but for relational interprofessional capabilities, not for being competent within practice norms but for actively contributing towards the social common good. Such assessments include recognising a commitment to learning. Our proposed assessment framework identifies the key purposes of assessment as student transformative learning and professional preparedness for practice beyond graduation.

Enhancing PBE pedagogy may strengthen learning and teaching but we contend that as long as assessment is not engaged in the pedagogical discourse of PBE students may falter in authentically learning for practice. The most well-intended curriculum and learning and teaching design will fail as long as its assessment does not incorporate and reflect student experiences. To contribute to education, assessment needs active engagement with learning from all.

ACKNOWLEDGEMENTS

Thanks to Maggie Hutchings for her helpful comments on earlier drafts of this chapter.

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