Chapter 5 Towards Theorising Assessment as Critical Inquiry

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Introduction

Throughout the past two decades assessment has operated on two fronts. First has been the continuing interest in large-scale, standardised testing, which affords governments and countries data for accountability and reporting purposes. Second has been the increasing interest in assessment within a learning culture (Shepard, 2000). Broadly speaking, this has concentrated on formative assessment for improving learning and has generated a proliferation of phrases seeking to highlight vital connections between assessment and learning (for example, 'assessment for/as learning'). Each of these fronts can be understood as giving priority to particular assessment activities and contexts. In the case of standardised testing, usually undertaken to generate data for systems' purposes, the context is necessarily controlled, with variables such as time and place fixed and regulated. Priority is given to common conditions for taking the same test, for example. Where assessment for learning occurs, there is more scope for a range of assessment opportunities, and usually the teacher can tailor these for individual students and circumstances. Assessment opportunities can extend, for example, to include feedback from others, with tasks being completed over an extended time and, at least in part, outside the classroom. Against this background, we seek to progress the argument that there is a need to take theorising assessment practices across a range of assessment contexts into the 21st century. To this end, we propose a framework of assessment as critical inquiry and discuss its application in an Australian study. The framework is prompted by the lack of a general theoretical position that connects assessment to 'meaning making' (Delandshere, 2002), including concepts of knowledge, learning and language. It serves to raise a suite of issues around the nature of quality assessment, the factors that underpin and motivate how assessment is developed and enacted, how the option of teacher assessment for summative purposes might be adopted with confidence, and how we understand, interpret and use the evidentiary base that assessment practices call forth, in system and local school contexts.

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In contributing to current debates about the nature and purposes of assessment, the chapter is written in three parts: first, it presents three main issues of direct relevance to the present educational context in Australia. These set the scene for part two, which presents the framework of assessment as critical inquiry within an assessment, teaching and learning nexus, the aim being to generate new conversations about the factors shaping how assessment is planned for, and implemented, with evidence interpreted and given value. The third part considers the framework in relation to what is known already, and possible education and assessment futures.

Part One: Setting the Scene

The development of this chapter has been motivated by consideration of three main issues. First is the relationship between students' social backgrounds and their performances on tests, as evidenced in international comparisons provided by the PISA¹ data. Second is the predisposition in some education settings in Australia to conflate socio-economic disadvantage with educational disadvantage, with underperformance in schooling being accounted for in terms of the expected, inevitable influence of students' social backgrounds. The third is the all-too-obvious observation that, currently in Australia, standardised testing continues to gain strength in public policy priorities, with policy firming around the necessary contribution of large-scale external testing for public accountability and credible reporting.

In relation to the first issue, analyses of the PISA data have consistently concluded that, overall, Australian school students perform at high standards in comparison with that of other countries. In relation to subgroups of students, however, the data show a key nexus between social backgrounds and educational performance in the country. The report of the steering committee for the Council for the Australian Federation (Dawkins, 2007) addressed the PISA data as it relates to equity in Australian school education. The writers made the useful distinction between results that show high quality and those that show low equity. They indicated that, in the case of reading, 'disadvantaged students in Australia do better than those in Germany but they are significantly behind their counterparts in Finland and Canada' (Dawkins, 2007, p. 11). In elaborating, they stated that:

Australia's results in reading are high-quality but are low-equity. The challenge for Australia is to match the performances of countries like Finland and Canada (and Japan, Korea and Hong Kong-China) which are high-quality and high-equity. (p. 11)

While there may be some who would wish to discount this use of the data as reliant on a limited data sample, it is not easy to dismiss the following:

Domestic evidence shows that Australia has not been making any progress on this [improving the balance between equity and quality] front. Data from the 1975 survey of literacy and

¹ PISA—the results from the Programme for International Assessment undertaken by the Organisation for Economic Cooperation and Development (OECD, 2004, 2006).

numeracy levels of Australian students, and subsequent Longitudinal Surveys of Australian Youth (LSAY), show that differences in social background had as much impact on differences in educational achievement in 1998 as they did in 1975. This should be of concern to all Australian governments as well as to the Catholic and independent school sectors.

(Dawkins, 2007, p. 11)

In the extract above, the clear challenge is to strive to re-balance quality and equity in educational outcomes, the aim being to achieve high quality and high equity. Moreover, the clear message is that the responsibility for redressing the balance should fall to all governments and sectors.

The second main issue is the dangerous predisposition to conflate socio-economic disadvantage with educational disadvantage. Teacher expectations are key in this mix. There is ample research evidence suggesting that teachers' assumptions about students' backgrounds and their communities are carried forward to classroom practice, impacting on the learning opportunities provided to students. A study that explored literacy practices in and out of schools in low socio-economic urban communities in Queensland, Australia (Freebody, Ludwig, & Gunn, 1995), for example, showed how teacher expectations were lowered in accordance with what they knew about students' social backgrounds. It was found that sites of poverty offered cognitively less demanding opportunities to learn and to demonstrate achievement. Similarly, a study of teacher judgment practices (Wyatt-Smith & Castleton, 2005) showed that some teachers adjusted their sense of standards with what they knew of the community surrounding the school, and more specifically, with the socioeconomic status of the area, as well as their reported knowledge of individual students. The potentially more serious insight, provided by teachers informally, was their reported perception that relative to the weight of influence that socio-economic variables can have on achievement in schooling, specifically, poverty and family contexts, their influence—their agency as teachers—can be relatively weak. This sense of the inevitable power of social backgrounds to determine schooling outcomes is a serious concern for those working towards improvement of teaching and assessment practices.

The third issue is the public policy priority given to education, and more specifically to accountability and standards. There can be no doubt about the Australian federal government's commitment to monitoring performance, primarily through assessment of all students at particular year levels, and to public reporting of external assessments of students in state and national testing programs. What we are yet to see is how teachers respond to these moves as they face the competing demands in their classrooms. On the one hand, there are the imperatives to develop and implement assessments that have high 'site validity'. Characteristic of such assessments

² Validity refers to what is assessed and how well this corresponds with the behaviour or construct that it is intended to assess (Harlen, 2004). In the case of 'site validity' it involves assessments that intend to assess the range of skills and knowledges that have been made available to learners in the classroom context or site. High 'system validity' involves assessments that intend to assess an often narrower range of skills and knowledges, deemed essential by the particular government body or system.

are the teachers' efforts in establishing connections between in-school and out-of-school knowledges, ensuring that school activities are relevant to the demands of contexts outside schooling (Cumming & Wyatt-Smith, 2001). On the other hand, as McClay (2002) highlighted, there is increasing downward pressure to rehearse standardised testing conditions, to make students 'test-savvy' and to demonstrate quality assurance. These pressures can lead the teacher to adopt narrow forms of assessment that are likely to have high system validity.

Against the backdrop of these three issues, we propose a way of thinking about assessment as critical inquiry that connects assessment to concepts of knowledge, learning and language. This move towards an expanded theorising of assessment and meaning making opens a way of thinking about assessment as a key element in leveraging educational improvement. The proposition on offer is that the challenges mentioned above, namely to re-balance equity and quality in education outcomes and to ensure that teacher agency can affect real improvements, call for a considerably expanded understanding of assessment, how it is enacted in particular contexts and its dynamics with learning and teaching. In this chapter we propose that assessment be understood as not only being aligned with learning and teaching, but that it also be foregrounded—'front-ended'—in designing learning and teaching, with a sharp focus on quality task design.

Foundational to the proposal is that assessment needs to be understood as generating an evidentiary basis for teacher and system decision making and action. The latter centres on quality and how learning is occurring; how learning can be improved and how standards—when central to classroom practice—can serve the best interests of systems, school communities, teachers and students. Linked here, as well, is the understanding that assessment events are inevitably social and cultural in nature: reflective of a nest of assumptions, often implicit, about knowledge and what counts as valued knowledge; about the relationship between learning, teaching and assessment; about teacher judgment practices and understandings about the relationship between literate capabilities and curricular knowledges. At issue, therefore, are the dynamics of how classroom assessment occurs—the shaping factors—and the urgent need to better understand these, if we are to improve outcomes for all students and especially those most at educational risk.

Part Two: Proposing a Framework for Enacting Assessment as Critical Inquiry

Delandshere's (2002) notion of 'assessment as inquiry' highlights how 'the call for change in assessment follows an almost unanimous recognition of the limitations of current measurement theory and practice' (p. 1461). In responding to Delandshere's call and to Sadler's (1989, 1998) orientation towards student empowerment that focuses on standards, discussed later in this chapter, a four-part framework is proposed for enacting assessment as critical inquiry within a teaching, learning and assessment nexus. Essentially, the proposition put forward is that, when assessment is understood as critical inquiry, the practices and processes of assessing—social and

cultural acts of doing assessment in actual contexts—can be considered in relation to four main lenses:

- 1. conceptions of *knowledge* including the nature of the knowledge domains and the related capabilities to be assessed
- 2. conceptions about the alignment of *assessment, learning and teaching* and how teachers enact their conceptions in practice
- 3. *teacher judgment* practices, especially as these relate to standards, moderation opportunities, requirements of assessment tasks and expectations of quality performance
- 4. the *curriculum literacies*³ required to participate in and contribute to knowledge domains, including those represented in formal curriculum.

Each of the four elements shown above can be thought of as a lens that enables particular characteristics of enacted assessment to come to the fore. Collectively, the set of four lenses works to reveal what is at play in how student achievement is evaluated and therefore valued. These lenses are interrelated and interdependent, each informing the other, and are taken as the desirable considerations and conditions for realising quality assessment. These mutually informing lenses work to align curriculum and assessment with the potential to inform ongoing pedagogical work. Focusing the dynamic interaction of these four elements is task design. The pedagogical outcome of the framework is desired learnings, which should articulate into improved outcomes for students, particularly those at educational disadvantage. The focus is on identifying and examining the suite of conceptions, values and assumptions at play in decisions about ways of doing assessment. In this way the framework has clear implications for identifying and examining the practices used to establish how quality is judged and reported. As suggested earlier, the framework is prompted by the lack of a general theoretical position that connects assessment to meaning making (Delandshere, 2002), including concepts of knowledge, learning, language and context.

In what follows, these four lenses are discussed as separate components of a framework for enacting assessment as critical inquiry. In practice, the lenses, as a complementary set, are understood as interrelated and mutually informing. The framework is necessarily a construct and has been developed as a way to map and explore the complexities inherent in curricular pedagogic-assessment practices in diverse pedagogic and geographic contexts. It builds on research insights from already published work (Wyatt-Smith & Bridges, 2006) in assessment, some of which have been incorporated into practice and policy. For example, the chapter draws upon an evaluation study (Wyatt-Smith & Bridges, 2008) that investigated the impact of the alignment of inclusive assessment, pedagogy and curriculum on

³ 'Curriculum literacies' refers to the discipline-specific literacy demands that students meet in completing set tasks, these typically remaining implicit in teaching, learning and assessment practices (Cumming et al., 1998; Wyatt-Smith & Cumming, 2001). Refer to 'Lens 4: Curriculum literacies' later in this chapter for further detail.

students in the middle phase of schooling in Queensland, Australia. This evaluation study was part of a larger Queensland government initiative (federally funded), which aimed to increase teachers' knowledge, understanding and professional skills development in literacy and numeracy assessment, curriculum planning and teaching instruction for their school contexts. The aim was to support the development of teachers' professional capacity to assess and teach explicitly curriculum literacies and numeracies, in order to respond to the needs of educationally disadvantaged students and provide opportunities for teachers and schools to work together and model effective assessment practices and approaches. The initiative, among others (for example, Lincoln & Neville, 2006), put into practice some of the components of the framework that are the focus of this chapter and, by doing so, acknowledged that optimum outcomes for teachers and students rely upon effective communication and strong connections across theory, research and practice.

Lens 1: Knowledges

This lens brings to the fore the conceptions of knowledge and the assumptions made about the nature of valued knowledge and learning that inevitably underpin acts of assessment. When coming to grips with conceptions of knowledge, Freebody (2006) emphasises the need to consider 'what schooling is for, and about what kinds of futures individuals and communities can expect to be put on offer through schooling' (p. 2). This includes consideration of 'the distinctive logical and content structures of particular bodies of human knowledge and understanding', or the epistemological domain (p. 8), along with the connection of 'learning with the social, cultural, and economic elements of the surrounding community and "the world" outside the classroom', or pragmatic domain of curriculum (p. 15).

Despite the influence of such undergirding conceptions and assumptions, their operation in and influence over what comes to count as assessment evidence is rarely acknowledged. More than a decade ago, Gill (1993) observed that '[a]mong the many and various articles and books on the quality and direction of American education, one searches in vain for an in-depth discussion of how knowing takes place, of who knowers are, and of what can be known' (p. 1). Drawing on this observation, Delandshere (2002, p. 1462) asserted:

Until we come to grips with, or at least frame the issue of, knowledge and knowing in ways that can guide education practices (including assessment), the enterprise of education runs the risk of being fruitless and counterproductive. In its current state, assessment appears to be a process of collecting data about phenomena or constructs that we have not adequately defined, to answer questions that we have not articulated, and on the basis of which we draw inferences about the quality of the education system.

Essentially, Delandshere's argument is that there is some urgency in reconnecting assessment and, more generally, educational practices to theoretical considerations as a means of clarifying assumptions made about what counts as valued knowledge, and therefore what should be provided for students in the name of quality teaching and learning. These two related matters raise a suite of issues around how

knowledges, and more specifically curricular knowledges, are conceptualised and how different conceptualisations lead to quite different assessment possibilities for students to demonstrate what they know and can do.

In drawing on the work of James (1998), Harlen (2004) concurs with Delandshere's assertion of the importance of a clearly defined and articulated domain of knowledge as the basis for teaching and assessment:

The argument is that an assessment cannot require the use of the knowledge and skills or other constructs that are supposedly assessed unless there is clear definition of the domain being assessed, and evidence that in the assessment process the intended skills and knowledge are used by the learners (p. 25).

While interrogation of what counts as valued knowledge was outside the scope of the Wyatt-Smith and Bridges (2008) study, the researchers worked from the premise that knowing the learning domain and relevant syllabus materials are foundational to planning and effective practice. While this may seem to be self-evident in good practice, within a period of reform and change, time to reflect critically on the knowledge demands of units of work is often felt by teachers to be an academic luxury when faced with the challenges of daily operation. Participating teachers were supported in collaborative networks of schools. Further, they were provided with additional time dedicated to focused and critical planning for learning and assessment. This is reflected in the following observation:

... so there's a much better knowledge of the syllabus, at least in terms of the units—the two units that we developed and other needs that we might have had like making things authentic ... planning process ... [has] ... been a very genuine learning process for everybody ... (Wyatt-Smith & Bridges, 2008, Appendix 1, p. 44)

A key observation from the study was the need for time to be committed to teachers' working with domain knowledge. This was beneficial not only in planning for learning and teaching, but also in regard to teacher knowledge of the assessment demands that students faced in completing set activities. While the role of the teacher as designer of in-class assessment tasks was not new, most had not extended this role to writing up the assessment criteria and standards related to the tasks. By critically interrogating task demands through the application of assessment criteria and standards (see Glossary), teachers were asked to question what they were assessing in classroom tasks, this focus extending to the knowledge and skill requirements of syllabus materials, as well as literacy and numeracy capabilities. Participating teachers were asked to develop standards specifications that were locally relevant, all the while critically reflecting on issues such as task complexity and knowledge demands.

Additionally, the participating teachers in the study were asked to interrogate and verify the suitability of their assumptions about students' prior knowledges and capabilities as these related to curriculum, literacy and numeracy. Such assumptions are not readily brought to the surface, and the teachers reported that they had limited experience in this type of critical reflection. However, with support, they reviewed earlier assumptions about student readiness to proceed and how these assumptions could impact upon student engagement and achievement. This part of the teachers'

work also extended to deconstructing the demands of the task so as to focus on realistically attainable goals. In these ways, teachers reflected critically upon the implicit knowledge they brought to curriculum planning. Awareness was raised in terms of the students' prior knowledge; the physical and cultural resources of the community in which the school was located, and how this could inform efforts to connect students' in-school learning with their out-of-school learning.

While the impact of the critical pedagogy movement has been felt at the intellectual or 'inside the head' level, participating teachers had limited experience in subjecting their own classroom practice to examination, either by themselves or with others. In this study, they were asked to discuss and evaluate their understanding that, as social beings, teachers' bring their personal, sociocultural backgrounds to classroom interactions. One intention of these discussions was to question the conventional ways of thinking about 'difference' in terms of student backgrounds and knowledges and to confront latent connections across difference, social class and performance expectations. A related intention was for the teachers to consider what they actually knew and how they knew about the varied learning experiences their students brought through the school gate.

Teachers from different sites and sectors came together around syllabus and other policy materials to focus on their curricular choices. One outcome of this exercise was greater knowledge of assessment task design, as this relates to intellectual rigour, and a greater awareness of students' prior knowledge as a factor impacting upon academic engagement and ultimate success. Consider, for example, the segment below:

... probably the biggest learning for a lot of our teachers was the scope of the task that they were asking their kids to do and just understanding the burrowing down, drilling down of that was what the biggest learning I think for a lot of our teachers, what they were asking for their kids to do, from the beginning was just miles too big, we were trying to achieve too much and for some of our teachers that was the biggest learning they had, the expectations that they had, their awareness of what the kids knew before ...

(Wyatt-Smtih & Bridges, 2008, Appendix 1, p. 45)

Similarly, in a current study investigating standards-driven reform in the middle years of schooling in Queensland, Australia, one teacher clearly articulated the potential impact of the opportunity to reflect on issues relating to domain knowledge, the design and complexity of assessment tasks and the relationship of this to actual classroom practice. In the following extract, the teacher emphasises how consideration of the centrally developed assessment task was expected to have a beneficial effect on classroom practice in science.

... So those discussions they had [about the assessment task] and they came to that same conclusion that in their class, the textbook that they were using didn't require students to do that [higher order thinking], it actually didn't value writing and thinking ... so they actually started questioning the programs that they were using that were restricting them in the way that they allowed their students to answer their work [in assessment tasks], and were in fact

⁴ See http://www.griffith.edu.au/education/faculty-education/research/research-projects/ investigating-standards-driven-reform-in-assessment-in-the-middle-years-of-schooling>.

deciding that they were going to change the way that they did a lot of the work in class and get students to have different ways of showing their thinking. So that was a massive, for me, pedagogical leap that will make a difference down the track . . . and we're looking long-term, two or three years down the track, to an improvement in student outcomes as a result of it.

The above comment points to the direct carry-forward of domain knowledge to the teacher's design of assessment tasks. More specifically, it highlights the teacher's realisation of how assessment can open up (and close down) opportunities for students to demonstrate what they know and can do. More than this, the comment points to the need for teachers to be able to critique the breadth and depth of learning that students should engage in, and how this articulates with suitably demanding assessment opportunities. In this case, it was the assessment that challenged the teacher to rethink the pedagogy—'a massive pedagogical leap'—expected to flow on to improved outcomes.

In summary, the first lens of the framework highlights a need to understand the relationship between curricula; the sociocultural contexts of members of the classroom; and the knowledges and capabilities to be assessed. This leads to further examination of a second lens of the framework for assessment as critical inquiry—the relationship between assessment, learning and teaching.

Lens 2: Linking Assessment, Learning and Teaching

In the past two decades, studies of assessment have shown increasing interest in how classroom assessment can be used to improve the learning experiences and outcomes of students. More specifically, the emphasis in educational assessment reform has increasingly been on meaningful, contextualised and purposeful activity that focuses on demonstrations of what students know and can achieve, rather than on students' shortfalls in knowledge and failure to achieve (Cumming & Maxwell, 1999; Gipps, 1994). Essentially, assessment has been reframed in relation to its role in a learning culture (Shepard, 2000).

In the study referred to earlier (Wyatt-Smith & Bridges, 2008), the key to reshaping teachers' conceptualisations of assessment was the issue of 'front-ending' assessment. The underpinning belief was that being explicit about assessment expectations would have a focusing effect on pedagogy, facilitating deeper student learning. Front-ending assessment was a process whereby the planned, culminating tasks for assessment were critically analysed to identify the explicit knowledges that needed to be built into the unit planning and learning opportunities. This conceptualisation of assessment as a driver for curriculum design has been used in other contexts (for example, Harris, McNeill, Lizotte, Marx, & Krajcik, 2006).

Specifically, in the Wyatt-Smith and Bridges (2008) study, the notion of frontending assessment was applied by middle schooling teachers across curriculum domains such as mathematics, literacy, science and studies of society and environment (SOSE) as well as in units designed as integrated or cross-disciplinary studies. The teachers employed this notion to place the unit assessment task/s at the heart of planning. Planning teams critically evaluated the proposed formative and summative tasks when planning the unit. This evaluative process required deconstruction of the knowledges, curriculum literacies, numeracy demands and potential blockers for students at educational risk. This extended to consideration of resourcing requirements, both human and material, and how these related to student engagement in and completion of set tasks.

The strategy of front-ending helped teachers to align learning and assessment through the systematic analysis of the assessment demands of tasks. The desired effect was for an improvement in students' engagement and academic success. Therefore, by 'drawing attention to the interactivity of their assessment, teaching and learning, [participating] teachers saw that teaching and learning became fused with assessment—both formative and summative—as a dynamic process of engaged inquiry' (Wyatt-Smith & Bridges, 2008, p. 47). Further, as shown below, teachers reported their own shifts away from traditional understandings of assessment as an end-point activity, with assessment only coming into focus after teaching and learning has been completed.

So basically once you have the assessment firmly in place the pedagogy become really clear because your pedagogy has to support that—that sort of quality assessment task... that was a bit of a shift from what's usually done, usually assessment is that thing that you attach on the end of the unit whereas as opposed to sort of being the driver which it has now become.

(Wyatt-Smith & Bridges, 2008, Appendix 1, p. 48)

Fundamental and productive changes in learning and teaching practice resulted from critical reflection on the assessment evidence to be collected, with this reflection occurring before teaching began. Professional conversations focusing on assessment as evidence-based practice occurred at the stage of task design, with teachers interrogating the quality and demands of the assessment they were developing relative to the standards they planned to use in judging quality. Through such a focus on assessment expectations and quality task design prior to commencing the unit of work, the teachers reported that they developed a language for talking about quality in the classroom and gained confidence in the feedback they gave the students. Additionally, the teachers reported that in many cases the employment of statements of assessment criteria and standards as teaching tools assisted students to take ownership of the learning process and work more independently. Many reported that such statements or scoring guides supported students to have a clear and shared understanding of task expectations:

... I think to a certain extent that we've empowered students in the learning process because there's not secret teacher's business anymore in terms of what the expectations are, that students are becoming very au fait with the criteria and being able to apply them in their own work.

(Wyatt-Smith & Bridges, 2008, Appendix 1, p. 61)

Sadler's (1989, 1998) work on formative assessment provided a model for a teaching–learning–assessment nexus that shows how improvement follows when students are inducted into assessment knowledge and expertise. This is taken to include knowledge of standards and how to use them for improvement purposes. From Sadler's formative assessment position, the teacher's ethical practice and hence, authority as

master, follows a guild model, with students taking on the role of apprentices. For this to be realised in practice, the teacher must possess, first, a concept of quality appropriate to the task and the student group; second, an ability to judge the student's work in relation to that concept and a desire to induct student-apprentices into the appraisal process; and third, a history of evaluative decision making developed over time. Moreover, it depends on a critical ability and willingness to facilitate students' transition from feedback to self-monitoring. For this to occur, the teacher must already possess the knowledge of what constitutes quality and must value opportunities for sharing this knowledge. Stiggins (2004) has similarly highlighted the importance of student involvement in assessment practices, suggesting that maximum learning comes from productive interactions between teachers and students, with both sharing the responsibility for making learning and assessment effective. Sadler (1998) in particular argued that 'if teacher-supplied feedback is to give way to self assessment and self monitoring, some of what the teacher brings to the assessment act must itself become part of the curriculum for the student, not an accidental or inconsequential adjunct to it' (p. 82).

While the use of stated assessment criteria and standards to facilitate teacher and student conversations about quality and learning has been common practice in the senior years of schooling in Queensland, Australia, this has not been routine practice for teachers in the early years of school (years 1–10). In recognising this, Wyatt-Smith (2008) developed a set of reflective questions that explored a number of features for consideration when developing quality-assessment opportunities. These included questions about the following features: (1) alignment; (2) intellectual challenges and engagement; (3) assessment scope and demand; (4) language used to communicate the task; (5) literate capabilities involved in doing and completing the task; (6) performance contexts; (7) knowing what is expected both during and on completion of the task; (8) student self-assessment for improvement; and (9) intended purposes of assessment information. In part, this was motivated by an interest in enabling teachers to probe for themselves the demands of assessments that they developed for classroom use. More specifically, the questions enabled teachers to focus on 'front-ending', whereby the planned, culminating tasks for assessment were critically analysed to identify the explicit skills and knowledges that needed to be built into the unit planning and learning opportunities.

This leads to the third lens regarding the fundamental elements that need to be in place to ensure confidence in teacher judgment practices within the assessment, teaching and learning nexus.

Lens 3: Teacher Judgment Linked to Standards and Moderation Opportunities

Central to the proposal for a critical-inquiry approach to assessment is the understanding that teacher judgment is taken to be nested within a range of decision making relating to curriculum frameworks, assessment practices, the school–community interface and individual student learning needs and goals, as suggested earlier. Beyond this is the principle that the teacher and students are active in gathering information about and reflecting on learning and performance over time. Generally speaking, there is support for this position in the field of educational assessment research. Sadler (1998) argued that there is strong support for the view that stated standards can be productive in informing not only judgment, but also teaching and learning. As mentioned earlier, he advocated that the teacher's role extend to development of students' evaluative experience by involving them in applying standards to their own work. For Sadler, standards and improvement were directly connected. Working from a similar stance, Stigler and Hiebert (1997) presented the cautionary note that 'A focus on standards and accountability that ignores the processes of teaching and learning in classrooms will not provide the direction that teachers need in their quest to improve' (p. 19–20). Even though judgment is a routine part of each teacher's work, it is difficult to subject it to scrutiny, even by the individual teacher concerned, unless scaffolded opportunities are provided to do so (Phelps, 1989). Studies of teacher judgment have shown that individual teachers carry with them not only evaluative experience, but also, more specifically, their own judgment policies that typically remain private, though they work to shape in powerful ways the processes by which judgments of quality are reached (Wyatt-Smith & Castleton, 2005). Moreover, operating within these policies can be evaluation practices that are as much tied to recollected observations of in-class learning and behaviours as to the qualities of the piece to be assessed.

A way forward is to recognise that teacher judgment, in conjunction with clearly specified standards and opportunities for moderation, are a linchpin of a robust assessment culture in schooling. The study reported by Wyatt-Smith and Bridges (2008) aimed to support sustained professional conversations around matters including planning for assessment; how assessment activities are designed; how evidence is collected, interpreted and recorded; what contexts are suitable for undertaking particular assessment activities; and what standards are in place to assist teachers in assessing quality. Such conversations were seen as enabling judgment practices to be de-privatised and judgments made defensible. In effect, these ongoing professional conversations started at the stage of task design and continued throughout the assessment, teaching and learning cycle. This can be achieved when judgment practices involve a process of matching work samples to stated assessment standards, with attention focusing on the features or qualities of performance as these were evidenced in the work. Teacher judgment can therefore be understood as evidence based, with standards playing a useful function in informing, substantiating and making judgments defensible. In distinguishing this practice of standards-referenced assessment from judgments relying on direct inter-student comparison as the basis for judgment, Sadler (1987) stated:

The primary function of educational standards is to enable statements about a student's quality of performance or degree of achievement to be made without reference to the achievement of other students, which conceivably could be either all poor or all excellent. In addition, fixed standards enable long-term changes in a phenomenon to be detected. (p. 196)

Several writers (Harlen, 2005; Sadler, 1989; Wyatt-Smith, Castleton, & Ryan, 2004) have emphasised how common standards provide external reference points for

informing judgment and are pivotal in achieving comparability and confidence in teacher judgments. Further, opportunities for teachers to integrate 'judgments of students' responses to the various modes with those of other teachers' judgments are essential (Wilson, 2004, p. 11). Such opportunities for sustained professional conversations to support teacher judgment are defined as 'social or consensus moderation' and described as a 'form of quality assurance for delivering comparability in evidence-based judgments of student achievement' (Maxwell, 2007, p. 2). Maxwell highlighted two functions of moderation, namely quality assurance and comparability. The former he linked with the status of the assessment as high (or low) and comparability with common standards:

- Quality assurance refers to methods for establishing confidence in the quality
 of procedures and outcomes. Confidence is seen as a matter of degree with
 more stringent quality assurance and greater confidence required for high-stakes
 assessment.
- Comparability 'requires assessment against common characteristics or criteria, such as provided by a subject syllabus or other frame of reference' and 'requires consistency in the application of common standards so that all achievements given the same grade or level of achievement have reached the same standard' (Maxwell, 2007, p. 2).

Here, social moderation is considered key to standards-referenced teacher judgment, whereby the frames of reference (standards, scoring guidelines, assessment criteria, etc.) are defined and disseminated to allow for common interpretation (Maxwell, 2007). This calls for clear recognition of the social nature of moderation, whereby teachers interact with one another, sharing judgments of student work samples. Such sharing is an act that necessarily involves an openness to making available information about interpretations of the standards; disclosures that may otherwise remain private and unarticulated.

In order to achieve high reliability while preserving validity, it is important for teacher assessors to develop common understandings of stated standards and reach 'similar recognition of performances that demonstrate those standards' (Maxwell, 2001, p. 6). This is especially the case where standards are written as verbal descriptors and as such remain open to interpretation. Sadler (1989) argued that exemplars or samples of student work provide concrete referents that can be used to illustrate standards that otherwise remain abstract mental constructs. He made the point that the stated standards and exemplars work together to show different ways of satisfying the requirements of say, an A or C standard. Smith's (1989)⁵ study of standards in senior English curriculum in Queensland, Australia (years 11 and 12 as the final 2 years of schooling) showed the utility of exemplars in the form of student work samples, together with an accompanying commentary, in illustrating standards and how they apply at particular levels. In particular, Smith showed how the commentary could make available insights into the teacher's cognitive processes in combining

⁵ Smith—now writing as Wyatt-Smith.

or *trading-off* strengths and limitations of the work relative to the required characteristics of the standards at various levels. In short, annotated exemplars and commentaries can show the processes of formulating an overall or on-balance judgment. In the absence of such materials and, in particular, the commentaries, the treatment of compensatory factors and the complex features of teacher judgment necessarily remain unarticulated. More specifically, a final grade recorded on a student piece of work bears no trace of, or resemblance to, the complex decision making involved in arriving at a grading decision.

While standards and commentaries such as those discussed can serve to make clear expectations of quality, they do not necessarily account fully for the factors that shape teacher judgment. In a large-scale Australian study of teacher judgment in middle schooling, Cooksey, Freebody, and Wyatt-Smith (2007) reported high levels of variability in teachers' notions of quality and also unearthed the range of factors that shape how judgments are reached. While this study pointed to the need for the promulgation of stated standards to include exemplars, it also opened a vital space for consideration of social moderation as focal in quality-assurance processes at local and systemic levels. Specifically, it suggests how social moderation can act as a context or social space for teachers to make available for scrutiny to themselves and others the bases of their judgment practices and their use of standards in those practices. It is in this context that the legitimacy of the mix of factors impacting judgment can be opened for scrutiny.

Several conditions for successful implementation of social moderation have been described in the literature (for example, Daugherty, 1997; Harlen, 2005; Matters, 2006; Maxwell, 2006; Wilmut, 2005; Wilson, 2004). These include the development of quality assessment tasks; an element of commonality among assessments such as responding to a common set of assessment tasks, standards or criteria; provision of guidelines and procedures; acknowledgement of the various referents upon which teachers draw in the judgment process (for example, teachers' personal knowledge of students and context); establishment of 'social' protocols (for example, working collaboratively, negotiation and trust); and the need for professional development in moderation processes and expectations. While moderation is one part of a robust assessment culture, it is an essential element for maintaining teacher and public confidence in a standards-referenced assessment model. An ongoing challenge in securing such confidence is, of course, the vital and continuing work of inducting the teaching profession, including successive generations of graduates, into the underpinning understandings about standards-referenced assessment and related moderation.

Lens 4: Curriculum Literacies

This fourth lens draws on a new conceptualisation of the literacy–curriculum interface that emerged from a national study of the literacy demands of curriculum in senior schooling (Cumming, Wyatt-Smith, Ryan, & Doig, 1998). For the purpose of the study, literacy was defined as including reading, writing, listening, speaking,

viewing and critical thinking and was recognised as a major determinant of success in education. The literacy demands of assessment were also viewed as providing 'a filter for or enabler of student success in all areas' (Wyatt-Smith & Cumming, 2003, p. 48). Hence, while the study focused on literacy demands of the curriculum, the interactions with assessment were also a focus. Based on the finding that crosscurricular literacy was mainly treated as a generic skill with minor adaptation for different subject areas, the researchers developed the term 'curriculum literacies', where 'curriculum' is deliberately used as a noun, rather than the adjectival 'curri cular', to demonstrate that this conjunction represents the interface between a specific curriculum and its literacies, rather than literacies related to curriculum in a generic sense, or a single literacy that can be spread homogeneously across the curriculum' (Wyatt-Smith & Cumming, 2003, p. 50). Building on this work, Wyatt-Smith and Cumming (2003) argued the need to explore the coherence of literacy demands that students encounter in managing their learning in different contexts, and for the need to incorporate these demands explicitly in instruction and assessment. Their reconceptualisation of curriculum literacies challenges current constructs of assessment and calls for the domains of assessment to be expanded to include both curriculum knowledge and epistemological domains that take account of diverse ways of working with and in semiotic systems. In a framework of assessment as critical inquiry, curriculum literacies are therefore central. It is this lens that focuses attention on the success (or failure) of systems, as well as pedagogical and assessment practices, to enable students to gain increasing control of this combination of curricular and literate knowledges and the ability to use these productively. As Wyatt-Smith and Cumming (2003) explain:

Our recurrent theme is that to be successful, students need to be able to identify and engage with these curriculum literacies within each subject, not just for learning, but also for successful negotiation of assessment within each subject... Overall student academic success in meeting expected appropriate demonstrations of performance will depend very much on how well the student can manage to understand, participate in and respond to the created intersection of the curriculum-literate environment. (pp. 49–50)

Cumming et al. (1998) found that 'an assumption prevails that students have acquired the abilities to meet the literacy demands of post-compulsory curriculum during their earlier years of schooling' (p. 10). Further, there were apparent assumptions that students could develop an understanding of the meta-language of a subject without explicit instruction, with the gap for assessment tasks appearing to be even greater. The study confirmed the key role of ongoing teacher assessment in checking how students are managing the cognitive demands and pace of curriculum delivery, including student understandings of specific subject terminology or the meta-language of the subject. Moreover, it was found that 'many students appeared not to have a clear understanding of expected performance standards and to be working "in the dark" as to the nature of a quality performance' (Wyatt-Smith & Cumming, 2003, p. 53). The study highlighted the need to make the features of quality performance, framed by curriculum literacies, more explicit. Given this, assessment requirements need to be written in student-friendly terms while maintaining the meta-language of the subject. However, the researchers concluded that

the provision of student-friendly guidelines, while a necessary condition, was not sufficient of itself. They reported a clear need for teachers 'to assist students to understand those expectations so that they can use such knowledge to self-assess and monitor learning over time' (p. 54). The researchers concluded that the literacy environment of school curriculum places highly complex demands on students and reiterated that:

Some students succeed in negotiating these, apparently drawing on resources other than those that teachers provide. Others may spend their compulsory years [of schooling] in an environment that is essentially conducted in a foreign language in which they never gain sufficient proficiency. And students need to be fluent, to negotiate the even more demanding literacy-bound assessment requirements successfully.

... the role and nature of the curriculum-literacies that are in-built in assessment activities, and which impact upon the students' performances, should be more explicit ... Assumptions of students' curriculum literacies is not sufficient. These need to be incorporated in direct instruction.

(Wyatt-Smith & Cumming, 2003, p. 58)

This conceptualisation of curriculum literacies has been played out in both policy and practice. First, the Queensland government literacy initiative, titled 'Literacy the Key to Learning: Framework for Action 2006–2008' (Department of Education and the Arts, 2006) focuses on actions to address identified challenges in improving literacy outcomes for all students in the state. The framework reflects the state's commitment to social justice and recognition of the diverse abilities, cultural backgrounds and life circumstances of the students it is serving, and places as central to the framework the notion of curriculum literacies, stating that 'effective learning entails developing the literacy capabilities needed to learn in the curriculum' (p. 1). Second, in the Queensland teacher capacity-building initiative discussed earlier, participating teachers were asked to examine notions of literacy in refocusing curriculum and assessment planning. Essential to the process was the strong recognition that teachers needed to teach explicitly the literacy demands of assessment requirements and to provide a meta-language for students to use in furthering their own understandings of the literacy demands of the tasks. While many had a 'broad' understanding of the literacy demands of their curriculum area/s, a critical unpacking of these demands when designing assessment tasks was not a routine, familiar practice. Clearly, teachers needed a firm understanding of the nature of subject-specific literacy demands within their own subjects to ensure continuity of literacy demands and expectations placed on students. Teachers reported that the focus on curriculum literacies had enabled direct links to be made between curriculum literacies, teaching and assessment expectations in curriculum areas (that is, Key Learning Areas—KLAs) and that such work proved to be invaluable for ongoing teacher learning and ultimately student outcomes:

We found focusing on the curriculum literacies increased teacher awareness of the curriculum literacies within the KLA, but it made some teachers more comfortable with teaching literacies within their KLA... sometimes there has been resistance to that, and the students were able to see clearly the links and the purposes of the activities and the programs that we were doing.

(Wyatt-Smith & Bridges, 2008, p. 49)

Interestingly, there is the mention here of the student being able to see clearly the links and purposes of activities and the programs. Such seeing resulted from teachers themselves attending in their pedagogy and assessment to ways of connecting curricular knowledge and language usage.

Part Three: Lessons Learned and Challenges in Shaping Education Futures

Assessment policy and practice in schooling are currently being challenged to review the nature of the knowledges and skills being assessed. In addition, opening for review is the optimum range of contexts and conditions for collecting assessment information about how students work with and reconstitute knowledges. These two related questions raise a suite of issues around how curricular knowledges are conceptualised and how different conceptualisations lead to quite different assessment possibilities for students to demonstrate what they know and can do.

The assessment-as-inquiry framework proposed in this chapter is underpinned by reconfigured relations of assessment to knowledge domains, to learning and to language. As part of this move towards theorising assessment in relation to meaning making, we suggest that the teacher's claim to expertise may be tied primarily to how they promote both quality learning and the qualities of learners so that learning will increasingly be about creating a kind of person, dispositions and orientations to the world and to ways of working with and reconstituting knowledge as problemsolvers and collaborators. The reality is that while many teachers have initiated their own professional conversations around assessment practice, both within their school and at district level, it is also fair to say that many teachers experience a sense of isolation as they go about their work as assessors, having no sustained opportunities for such sharing. A related observation is that the provision and proliferation of standards in themselves do not secure reliable judgments in which teachers and the community can have confidence. There is a clear and pressing need to support teacher dialogue around the issues of assessment and judgment, including standard setting, and how to make available for students useful information about expectations of quality.

This chapter has opened up some of the complexities that can be considered when critically inquiring into educational assessment. It has proposed a framework in order to realise the interactivity of assessment and related foundational elements for quality learning. At one level the framework represents an attempt to see educational assessment in terms of its connectedness to issues of meaning: knowing, learning, teaching and language. At another level, it is a provocation to reconsider the divergent assessment priorities and goals of various education stakeholders, both nationally and internationally, and the pressure on some to follow short-term imperatives of appearing to be delivering improved results. Deep learning and improvement take time, however. They also involve new conversations around what is to be valued both in classroom-based and system assessment policies and practices. The challenge for the educational community is to be supportive of those

assessment initiatives that focus on providing support for the long-term professional development necessary to effect change and deliver improved outcomes. As teachers know only too well, assessment procedures, of themselves, do not necessarily lead to improvement. Instead, teachers' professional knowledge and judgment practices are central, if we are serious about improving learning and student engagement for all.

Glossary

Criterion A distinguishing property or characteristic of any thing, by which its quality can be judged or estimated, or by which a decision or classification may be made (Sadler, 1987, p. 164). (From the Greek *kriterion*, 'a means for judging').

Literate capabilities Refers to reading, writing, viewing, speaking and critical thinking, as well as text production online, using written, visual and auditory channels of communication. The term extends connections made across everyday social practices, young people's literate activities and learning inside and outside schooling, and the critical, evaluative stances they may adopt.

Policy materials Documents that outline a course of action or a program of actions developed by the governing educational authority. The term is inclusive of official curriculum materials that prescribe a course of study and related assessment requirements.

Sectors The various educational authorities governing schools. For example, in Queensland, Australia, there are three main sectors: state (public), Catholic and independent (private).

Site A place where educational activity is occurring, usually a school.

Standard A definite level of excellence or attainment, or a definite degree of any quality viewed as a prescribed object of endeavour or as the recognised measure of what is adequate for some purpose, so established by authority, custom or consensus (Sadler, 1987, p. 164). (From the Roman *estendre*, 'to extend').

Syllabus A document that outlines course objectives, prescribed learning, resource materials and assessment requirements. It specifies the course of study and refers to the content or subject matter of an individual subject as well as required resources. Syllabi are usually developed (and at times mandated) by a governing educational authority.

Task An assessment activity undertaken by students to provide information on what students know, understand and are able to do. Tasks can be written for a range of modes.

Teacher judgment Involves teachers assessing and awarding a grade to student work. It involves considering the qualities of performance evidenced in the work being assessed.

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