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DEVELOPING HEALTHY ATTITUDES TO ASSESSMENT FOR TEACHERS

CHAPTER FOCUS

After reading this chapter, you should be able to:

- > reflect on your own attitude to assessment
- > explore some of your own beliefs about twenty-first-century learners and what they can achieve
- > examine the relationship between learning and assessment
- > leverage assessment to motivate student learning
- > develop some strategies to enhance your assessment literacy, including maintaining professional learning networks
- > manage marking for the best student-learning pay off.

KEY TERMS

assessment literacy

behaviourism

constructive alignment

diagnostic assessment

schema

situated learning

social constructivism

social practice

transmission approach

zone of proximal

development (ZPD)

STUDENTS REVIEW SUMMATIVE ASSESSMENT

Isabella had taken over a senior History class at the beginning of Year 12. The class had completed a summative essay task and Isabella had duly marked it according to the rubric that had been set. The students quietly reviewed their mark and feedback for a few minutes, then stood up and began returning their tasks to Isabella's desk at the front of the room. Isabella, completely perplexed by this, asked them what they were doing. The students told her that their previous teacher had never let them keep their tasks for more than a few minutes, before handing them back in. Isabella, who had prepared for most of the lesson to be taken up with students reviewing the task and learning from the feedback, was quite shocked by this

approach. She wondered how her students would ever learn from what they'd done if they were not able to reflect on the assignment. She returned all of the papers to the students once again and they were very happy. Most were eager to know what they could do to improve the next time they wrote an essay and they had new attitudes to assessment: now, they could see how properly reviewing feedback could help them to be more successful in subsequent assessments. For Isabella, a recent graduate teacher, the lesson was similarly enlightening, as it prompted her to reflect on the variety of approaches that teachers have to assessment and the role they see assessment playing in student learning.

This chapter introduces you to some important underlying theories of learning and identifies how these affect assessment principles. We encourage you to examine how learning and assessment are intertwined, and to see assessment through lenses that will not only help your students have a more positive attitude to assessment tasks like that shown in the opening vignette, but that will engender positive attitudes in you and among your colleagues as you conduct assessments.

We begin with an activity that we do at the beginning of our undergraduate course on assessment. It is premised on our belief that assessment is central to learning.

Start by taking a piece of paper and writing down something that you do well.

Take a second piece and write down everything you did to become good at whatever it is you do well. Try to write down at least 10 activities or strategies.

If you're reading this with others, discuss the common strategies that you undertake to master a particular activity.

In every group we've ever done this activity with, the most common strategy is *practice*. We need to practise things to become good at them. We

also need to see an example of it being done well, to talk to peers or mentors about our current level of achievement and our difficulties, get feedback on what to do next, make mistakes, persevere and be passionate or determined to succeed.

Our question to you is: ‘What are the implications of this for assessment?’

In a traditional assessment model, when the teacher wants to find out what has been learnt, they might set a once-only, individual task to test that learning before moving on to the next piece of learning. This does not allow for the sort of practice that you, as adults, agree is necessary to become good at something. This need for practice suggests that if we want to focus on student achievement, we have to think about assessment in ways different to our traditions or to what we may have grown up with. In this chapter, we look at ways to approach assessment that are healthy for teachers; in the next chapter, we look at how you can develop healthy attitudes to assessment among your students.

ASSESSMENT IS ...

Another exercise we do at the beginning of our assessment course is to ask students to complete this sentence: ‘Assessment is ...’.

We do this to bring to the surface our pre-service teachers’ understandings of assessment. All pre-service teachers have had a great deal of experience with assessment before they decide to become teachers and we want to know about their experiences so we know where to begin. In some ways it is a form of **diagnostic assessment**.

diagnostic assessment:

the products of day-to-day learning activities used to diagnose what students know and can do in relation to the topic, usually early in a period of learning.

Some of the responses to ‘Assessment is ...’

Assessment is ... how teachers are able to measure how well students understand the material being taught.

Assessment is ... a tool used to understand the student’s position with the assigned work.

Assessment is ... a useful tool for tracking a child’s development.

Assessment is ... learning and although it can seem strenuous at times, is a vital part of the learning cycle.

Assessment is ... many things, but in my experience as a student, falls broadly into two categories—what it should be and what it is.

Assessment is ... a necessary evil.

The last response might have been tongue-in-cheek, but it might also have been genuine and there are many repetitions or echoes of it in previous responses. We have found that some experienced educators from schools and higher education are negative about assessment for a variety of reasons that are usually related to their own experiences of schooling. It is very unhealthy for them to take those attitudes into teaching.

ASSESSMENT, TEACHING AND LEARNING

Ken Robinson (2006) argues that we have to ‘disenthrall’ ourselves from some of the ideas about learning that have developed in previous decades but which no longer serve twenty-first-century goals for learning. He’s speaking specifically about theories that support a **transmission approach** to teaching, stifle creativity and ask students to reproduce what the teacher has told them. This, as Robinson reminds us, ‘will no longer serve’.

In school we learn nothing that i want to learn ... they think im lazy.
(Anonymous comment posted on YouTube in response to Ken Robinson’s clip ‘Do schools kill creativity?’)

Many pre-service teacher-education programs have at least one subject that focuses on how people learn and how we might apply that knowledge to learning in schools. You may be familiar with some of these theories. Learning theory has developed a number of distinct models over time, informed by theorists who have contributed greatly to our understanding of learning. Mary James (2008) illustrates how teachers’ understandings of assessment directly affects their views of assessment and the types of assessment they provide for students. With this in mind, we will introduce some of the major theories, then consider their impact on assessment.

transmission approach:
usually an authoritarian approach to teaching whereby the teacher transmits information to students for them to learn. Students’ scope of practice is limited to receiving the information and restating it for the teacher during tests and other traditional forms of assessment.

HISTORICAL OVERVIEW OF LEARNING THEORIES

Understanding how people learn has been a focus for thousands of years. Greek philosophers Socrates, Plato and Aristotle all examined the process of learning that has since been developed in Western societies. These early understandings posited that people learnt either through self-reflection—finding truth within oneself (rationalism); through scientific method—examining phenomena occurring in the world (empiricism); or through conversation with others (dialectics). Consideration of how learning occurs often returns to these early understandings. Practices such as rote-learning and transmission can be traced back to medieval societies, which were influenced by the Catholic Church; the ability to share knowledge relied

on people memorising and reciting what they were told, often passages from scripture (Darling-Hammond et al. 2001). Each of these traditions and understandings can be traced through the history of learning theory and can be seen in current approaches to learning.

In the late nineteenth and twentieth centuries, empirical (research-based) studies of learning began to occur, with psychologists conducting tests to discover how people learn. James (2006) argues that the psychological measurement model has impacted significantly on approaches to assessment. The first psychological school of learning was known as the ‘Behaviourists’ as these scientists searched for the types of behaviours that students exhibited in successful learning, although many of the experimental studies used animals, such as BJ Skinner’s use of pigeons. Edward Thorndike, an early behaviourist, argued that learning was incremental and that people learnt through trial and error, a process he called ‘Stimulus–Response’ (Thorndike 1898). Skinner took this further with his ideas of ‘operant conditioning’. The central ideas were that there were stimulus that prompted correct responses, but an incorrect response would lead to undesirable consequences. Our common-sense understanding of how learning occurs would support the view that trial and error, or more deliberate practice, plays a part in learning and that we can learn from our mistakes (think of your responses to the opening activity of this chapter). However, schooling quickly moved from the more positive or natural consequences to consequences delivered by the teacher as punishment.

Many current assessment practices are designed on the understanding of learning as a behaviour that can be taught by breaking down what is to be learnt into a series of small steps and repeating those steps until reinforcement occurs sufficiently that the steps can be reproduced independently, for example, in a test situation (Skinner 1954). Rewards for learning and reproduction of information further reinforce the desired behaviour. Many highly structured approaches to learning and pedagogy are based on this understanding, which is called **behaviourism**. Repetition of skills, rote-learning and memorisation are all examples of behaviourist pedagogies. Another feature of behaviourism is the belief that learning can be transmitted from teacher to student unproblematically. While this may be true for some tasks that have particular ways of knowing the subject matter and for some students who can learn effectively by this means, it is not an effective pedagogical approach and has been largely rejected. It is a particularly poor pedagogy if you are trying to develop in students the higher-order cognitive functions—problem solving, critical reflection, evaluation, appraisal, hypothesising and predicting—because of students’ passivity in the learning transaction.

behaviourism:

learning is viewed as a behaviour that can be taught by breaking down whatever is to be learnt into a series of small steps and repeating those steps until reinforcement occurs sufficiently that the steps can be reproduced independently. Rewards for reproduction further reinforce the desired behaviour.

At the time that behaviourist understandings of learning were being conceptualised, other psychologists and educators were cultivating different understandings, sometimes in reaction to the negative outcomes of behaviourism. For example, Maria Montessori, whose pedagogic approach embraced the students' total learning environment, responded to the labelling and grading of students as 'low ability' or 'unteachable' by demonstrating how taking a child-centred approach resulted in different learning outcomes (Leach & Moon 2008). Cognitive understandings of learning began to gain traction during the twentieth century, with three major theorists contributing much to what we now understand about learning: John Dewey, Jean Piaget and Lev Vygotsky.

Some time before Montessori began developing her pedagogy, *John Dewey* was experimenting with a student-centred approach that was a reaction against the factory model of school education then common in the United States. He was a proponent of learning by experience and of connecting students' prior knowledge to knowledge being introduced in the classroom. His 'pedagogic creed', published in 1897, states his belief that education is an active, social and experiential process. He also argued that education is not a preparation for life, but is life itself; school is not just for learning content but more importantly for realising the potential of each child such that they might live a full and fulfilling life. Dewey believed that the teacher's role was to partner with students in the pursuit of learning, to engage with learners actively and to encourage reflective practices. Many of the messages that originated with Dewey over 100 years ago are still current and informing educational development today.

Jean Piaget took a similarly student-centred view, stating that learning is a developmental, cognitively constructive process, emphasising the role of the individual child. Piaget identified stages of development that children must progress through in a linear fashion in order to discover knowledge (Darling-Hammond et al. 2001). He emphasised the child's active role in the discovery process by explaining how they use different cognitive **schemas** depending on their stage of development to explain the world around them. Piaget's impact in educational terms was significant. One teaching approach informed by his theories is to fashion learning experiences in response to the child's stage of development in order to extend their existing mental schemas and either accommodate or assimilate new information (Leach & Moon 2008).

Lev Vygotsky extended constructivist theories to incorporate and acknowledge the social dimension of learning. He believed that learning occurs in specific cultural contexts and involves social interactions

schema:

a simple or complex set of associated ideas or perceptions that are the basic framework for thinking and learning. Piaget believed that schemas become more elaborate as children reach a new stage of cognitive development.

zone of proximal development (ZPD): what a child can achieve when their activity is guided or scaffolded by a more knowledgeable peer, who may be a classmate, teacher or parent/carer. In conceptualising this important pedagogical construct, Vygotsky highlights the social nature of learning.

cognitive constructivism: people have to construct knowledge for themselves from the various experiences and information they receive, and then adapt or assimilate new ideas within existing mental schema.

social constructivism: people work together to construct shared and accepted meanings for their knowledge and experiences. Individuals' learning is created as a consequence of their interactions in a group.



Constructivism is the basis of constructive alignment, which is one of our non-negotiables discussed in Chapter 3, 'Non-Negotiables in Assessment'.

(activities); he emphasised the role that culture and language play in developing the capacity to think and the ways that teachers and peers contribute to learning (Darling-Hammond et al. 2001). Kaptelinin and Nardi (2006) describe Vygotsky's central interest as the relationship between the mind and society and the social nature of learning itself. He is probably most well-known for his term '**zone of proximal development**' (ZPD). Vygotsky extends Piaget's idea of developmental stages by talking about the actual stage of development, indicated by what a child can already do independently, and the stage of development they can reach when guided by a more knowledgeable peer or teacher—when their development is *scaffolded*. This is what Vygotsky referred to as the zone of proximal development. Vygotsky (1978) was critical of IQ tests and the like because they only 'looked backwards', without taking account of what a child could do with scaffolded support. As mentioned earlier, Vygotsky also highlighted the role of peers. He demonstrated that learning is a social activity and that the collective knowledge of a class group has the capacity to move its members forward if it works collaboratively.

These three theorists, along with many others, have contributed greatly to theories of **cognitive constructivism** and **social constructivism**. All speak to how individuals learn by constructing meaning. People do not simply absorb all that they are told, but rather they fold new ideas into all of their previous experience, making sense of them in relation to all that they already know and in their various social and cultural contexts. They either assimilate new ideas into their existing models of thinking—schema—or accommodate new ideas by altering and adapting their previous schema. Learning is an organic rather than linear process, requiring learners to double back, confound themselves, make connections and rebuild previously held frameworks in light of new information. Increasingly, we learn by creating pathways in which we seek out the information most likely to help us answer a particular inquiry, which may cut across several established learning areas or subjects. We also are guided by the view that knowledge construction is not always individual—it is often socially constructed with a group. We learn with our peers and teachers and, increasingly, with others across the world.

Most recent theories of learning have turned to the existence of learning as a situated or **social practice**. Drawing on Vygotsky's notion of activity, Kaptelinin and Nardi (2012) explain how Vygotsky conceptualised culture and society not just as influencing the mind but as generative forces in the development of the mind. They give the example of technology, which they argue no longer exists merely as a set of neutral tools but is closely connected

to our personality and identity. Through this connection, communities of practice and social networks develop.

Lave and Wenger (1991) significantly resituated learning, taking it out of its previous confines of the school and formal education and placing it firmly as an everyday practice of engagement with the world. Lave and Wenger's model of **situated learning** and process of engagement, which they call 'communities of practice', has grown in prominence in recent years, particularly for organisational or professional learning. The most radical argument of situated learning proponents is that learning does not exist in individual people, but in the various social contexts and relationships of which they are a part (Smith 1999). Jones (2008, p. 619) describes learning from this perspective as 'an activity to be understood not only in terms of objectives and outcomes but also as a set of located practices ...' and that the location is 'outside the head'.

An 'ism' that closely aligns with situated learning is 'connectivism'. Connectivism was initially dismissed because it proposes that learning exists in activities and practices, and that knowledge can be stored in digital repositories and drawn on when required, rather than being internalised (Siemens 2005). While this seemed impossible until relatively recently, the now ubiquitous mobile learning and cloud computing demonstrate that we can carry knowledge virtually rather than internally, and access it at will. Jennifer Howell says:

Connectivism sees learning as the process of creating connections and developing a network. Not all connections are of equal strength in this metaphor; in fact many connections may be quite weak. This network metaphor allows for a notion of 'know-where' (the understanding of where to find the knowledge when it is needed) to supplement to the ones of 'know how' and 'know what' that make up the cornerstones of many theories of learning. (2012, p. 28)

Two more theoretical views of learning need identifying. The first is the set of theories around cognitivist psychology. Here, two important types of memory are fundamental. There is *working memory*, the 'processing' memory function where a learner brings together sensory information—for example, what they read, hear or see, or occasionally touch, during a lesson—with information retrieved from their long-term memory, to make a computation, apply an algorithm, solve a problem, apply a new skill or make sense of something. Then there is *long-term memory*, that limitless storehouse of information that people develop—with effort—but which lacks any processing function. Cognitive understandings of learning are important in helping teachers understand:

social practice:

learning both shapes and is shaped by those people, events, societies and cultures that the learner interacts with. These experiences exist in a social context rather than being located within the individual.

situated learning:

a model of learning that exists within a community of practice brought together formally or informally through a joint interest.



The role that technology plays in learning and assessment is discussed in Chapter 16, 'Using Emerging Technologies to Engage with Assessment'.

- > cognitive overload, when students' working memories become overloaded and can no longer function efficiently
- > how to assist students with storing knowledge, skills and understandings into long-term memory, and with retrieving them
- > the extremely important principle of forgetting.

These understandings impact not only on teaching but on assessment—not least the need for formative assessment.

The second of these last two perspectives comes from neuroscience. By using functional multiple-resonance imaging (fMRI), neuroscientists are able to track how and where the brain is activated during cognitive processing. Synaptic connections among neurons determine how we remember, and later recall, knowledge, skills and understandings. This has implications for assessment. Although our brain structures are common across most individuals, neuroscience shows us that individual brains are shaped by personal experience. The brain is continually adapting to its environment and develops in response to the individual's experiences, which seems to confirm what Piaget and Vygotsky were telling us much earlier. As Masters (2013) tells us, '[N]euroscience reveals learning to be a highly personal process, with the consequence that individuals of the same age can be at very different points in their learning and development' (p. 13). These understandings have considerable implications for relating assessment to learning progressions (see Chapter 4).

JISC, a UK organisation with expertise in digital technology for education and research, has compiled a table outlining the various perspectives on learning and their implications for assessment and feedback. See Table 1.1.

Pause and reflect

- 1 How do you teach so that students learn?
- 2 Do you believe that knowledge should emanate from the teacher—the transmission approach (see page 5)? When is it appropriate for this to be the case? How does this assist learning?
- 3 Do you conceptualise yourself as the more learner-focused 'guide on the side'? What do you do when in that role? What learning theory is that notion derived from?
- 4 McWilliam calls for teachers to act as 'meddler in the middle', disrupting students' existing knowledge schemes by challenging them to re-examine what they thought they knew. She calls for a more experimental approach to pedagogy to combat assessment experiences where 'assessment tasks focus on how well the young apprentice has been able to perform "knowing" the discipline' (2005, p. 5). What are the possible advantages and disadvantages of this approach?

Table 1.1 Perspectives on learning

Perspective on learning	Assumption	Assessment	Feedback
<i>Associative</i>	<i>Learning as acquiring competence</i> Learners acquire knowledge by building associations between different concepts. Learners gain skills practising progressively complex actions from component skills.	Concepts and competencies frequently assessed through micro- and macro-level tasks.	<ul style="list-style-type: none"> > Expert feedback focusing on weaknesses in skills and conceptual understanding > Interactive environments for knowledge and skills acquisition
<i>Constructivist</i>	<i>Learning as achieving understanding</i> Learners actively construct ideas by building and testing hypotheses.	Assessment by means of experimentation, discovery and inquiry-based tasks.	<ul style="list-style-type: none"> > Self-generated feedback arising from reflection and self-assessment > Interactive discovery environments with opportunities for self-testing
<i>Social constructivist</i>	<i>Learning as achieving understanding</i> Learners actively construct new ideas through collaborative activities and dialogue.	Collaborative and cooperative tasks involving shared expression of ideas. Participation of learners in the design of assessment tasks.	<ul style="list-style-type: none"> > Peer feedback arising from collaborative activities and dialogue > Interactive environments that support sharing and peer feedback
<i>Situative</i>	<i>Learning as social practice</i> Learners develop their identities through participation in specific communities of practice.	Holistic assessment in authentic or simulated professional contexts. Participation in social practices of inquiry and assessment.	<ul style="list-style-type: none"> > Socially produced feedback from multiple sources > Feedback derived from authentic real-life tasks > Interactive environments that simulate professional practice

Source: JISC Infonet 2010

- 5 How do you respond to Jones' (2008) claim that learning is not actually situated within the learner but that an individual can only give an account of the learning they experienced in a social context? If you were to accept Jones' claim, what impact would that have on your approach to assessment?
- 6 This section of the chapter began with the claim that current approaches to assessment have not kept pace with learning theories. What is your view? Use Table 1.1 to identify which types of assessment are used in a school you are familiar with. How do each of the theoretical perspectives fit within the conceptual framework of assessment *of*, *for* and *as* learning?

TEACHERS' PERSPECTIVES ON LEARNING AND APPROACHES TO ASSESSMENT

Mary James was a member of the Assessment Reform Group, a group of university lecturers specialising in assessment and committed to improving assessment practice in the UK. Through books, conferences and journal articles, they had a large impact on assessment in the 1990s and the early 2000s. In 2008, in an essay in Sue Swaffield's book *Unlocking assessment*,

James argued that a teacher's perspectives on learning affected their approach to assessment, and illustrated how.

James identified three major perspectives teachers have about learning:

- 1 *To learn is to be taught*: that is, learning is absorbing what the teacher has said/transmitted in class.
- 2 *Learning is individual sense making*: each learner makes their own sense of knowledge and skills and incorporates them into their own schema (a cognitive/constructivist perspective).
- 3 *Learning is building knowledge as part of doing things with others*: learning is a social activity (a social-constructivist perspective).

If assessment is based on the *first* approach to learning, to learn is to be taught, then:

- > the individual's learning is assessed on a test/examination under strict conditions
- > success is demonstrating the ability to recall facts or information, or to demonstrate skills
- > the focus is on performance under test conditions; that is, the performance is timed, because speed of completion is a measure of the learner's knowledge/skills
- > there is no access to learning materials in the test/examination
- > testing always occurs at the end of the learning period
- > any assistance is deemed cheating
- > responses are either correct or incorrect
- > responses are generally norm-referenced—compared to the performances of others
- > results imply levels of attainment only—students have no opportunity to review, re-do or improve; that is, results imply that the student has either done well (A); could do better (B or C); or failed (D or E).

Here assessment is purely assessment *of* learning: simply assessing what students have learnt.

If assessment is based on the *second* approach to learning, individual sense making, then:

- > the learning of the individual is still assessed
- > there is more of a focus on problem solving and evidence of understanding
- > assessment provides opportunities for students to apply knowledge/conceptual frameworks; to find solutions to problems; and/or to demonstrate higher-order skills
- > a greater range of assessment types is now possible

- > assessments still occur largely at the end of learning, and may still be time-limited, but time may be extended, or terminal assessment occurs with some continuous assessment too
- > access to support materials is possible
- > assessments make greater use of criteria/standards referencing, as answers can vary
- > the use of criteria gives evidence of a sense of progression within the assessment; opportunities to improve performance during the assessment now exist
- > areas for improvement can be identified by relating performance to the criteria; therefore, there is evidence to help the learner to improve (especially if the student is given the opportunity to conduct a similar assessment).

Here we are moving towards assessment *for* learning (students are learning from their assessments) as well as assessment *of* learning.

If assessment is based on the third approach to learning, building knowledge through doing things with others, then:

- > assessment cannot be separated from learning; it has to be carried out *alongside and during* learning, not after it
- > greater opportunities exist for self-assessment, peer-assessment and community assessment
- > in addition to assessment of individual learning, assessment of group learning is important
- > assessment can take place while the learning/performance is occurring
- > one focus is on how well the learners exercise ‘agency’ in their learning/assessment—that is, exercising **metacognition**: doing their own planning, monitoring and evaluating
- > learning outcomes can be assessed through a wide variety of assessment types and methods; for example, video/audio recording; narratives; authentic performances; portfolios
- > collated assessments/portfolios can be used, encouraging a sense of ‘assessment as inquiry’
- > broad criteria/standards referencing are required, as assessment outcomes will vary greatly in terms of products and processes.

Now we have assessment *as* learning (assessment is part of the learning) as well as assessment *for* learning and assessment *of* learning.

As Darling-Hammond and colleagues (2001, p. 18) remind us, ‘the teacher is also a theorist’; so you must do your research by observing, consulting with, diagnosing and assessing your students, their progress and their resilience, and

metacognition:

literally ‘thinking about thinking’. It involves monitoring one’s thinking as one approaches and conducts a task, and adapting one’s thinking to meet new challenges or learning needs.

by encouraging them to be social and learn from others. You are in a position to consider that data and make a plan of action informed by theory and your own experience as a teacher. Trowler (2012) quotes Oakeshott (1962), arguing that the knowledge that underpins the teacher's work is a form of practical knowledge acquired through experience, which is sometimes difficult to express. Aristotle called it 'phronesis': the virtue of practical thought.

STRATEGIES TO DEVELOP A HEALTHY ATTITUDE TO ASSESSMENT

There are a number of things you can do to maintain a healthy attitude to assessing your students' learning. We've highlighted a few that we've found to be important to our practice. These are:

- > enhancing your own personal assessment literacy
- > being collegial in your assessment practice
- > making tasks worthwhile for students and yourself
- > managing marking to achieve the best student learning payoff.

ENHANCING YOUR ASSESSMENT LITERACY

assessment literacy: the assessment-related knowledge, skills and attitudes needed for a teacher to be competent at assessment.

Assessment literacy is an important component of teacher education. William James Popham (2009) believes that assessment literacy will help teachers to fulfil their role as advocates for learning. He says: 'Assessment literacy is present when a person possesses the assessment-related knowledge and skills needed for the competent performance of that person's responsibilities.' He argues that teachers have a responsibility to be assessment literate themselves, make sure their students are assessment literate and ensure that parents/carers of their students are well informed about the impact of various assessment approaches.

In addition to being an advocate, a teacher who is literate in assessment knows how to seek appropriate information from students about their learning, design tasks most likely to challenge all or most students to show what they have learnt, articulate more completely what levels of achievement are likely to look like and utilise assessment data in service of further learning. Being assessment literate also means taking a principled approach to all facets of assessment. Rick Stiggins argues that teachers who are assessment literate 'seek and use assessments that communicate clear, specific and rich definitions of the achievement that is valued' (1991, p. 535). Like all forms of literacy, assessment literacy doesn't just happen. It involves staying current with theory and practice and being engaged in ongoing formal and informal learning.

Ongoing activities that could inform your assessment literacy include:

- > reviewing your own assessment practices against the Australian Institute of Teaching and School Leadership's (AITSL) Standard 5 (2011) and identifying both the level you are currently practising at and the level you would like to be at. Write a professional learning plan including how you will know when you've reached your goal.
- > engaging in peer review of assessment tools, tasks and feedback
- > making the most of opportunities, for example, attending a 'consistency of teacher judgment' (CTJ) day in your region or attending a senior secondary panel moderation or verification meeting. Then compare your judgments with those of other teachers.
- > beginning an action research project either individually or with your peers. You could begin with any aspect of assessment practice.
- > reading (our book is a good start!). Consider also following hashtags like #assessment on Twitter or joining online discussion forums where teachers share assessment ideas and resources.

1.1 PLANNING AND ASSESSMENT IN ACTION

Formative assessment practices at Framwellgate School, England

When attempting to change their assessment practices as a whole school, the staff at Framwellgate School in Durham, England, formed a taskforce and worked collegially to find and use research to become more informed about formative assessment. They found that by focusing on improving their formative assessment practices, as recommended by Black and Wiliam (1998),

the school's assessment results in General Certificate of Secondary Education (GCSE) and A and AS levels (i.e. standardised external tests and examinations) went up significantly.

You can watch a film of their experiences at www.schoolsworld.tv/node/910, which demonstrates how they worked together to improve learning outcomes for their students.

BEING COLLEGIAL IN YOUR ASSESSMENT PRACTICE

Framwellgate School's approach to broadening their capacity in assessment literacy is also an example of a school encouraging and promoting collegiality. The need to be collegial and continue learning in a collaborative environment throughout your career is important for you to remain vibrant as a teacher. Lorna Earl gives this rationale:

Teachers need to understand their own learning and internalise learning habits of mind as well. This means showing students that you are a learner too, and you have a willingness to engage in in-depth explorations of your learning—what motivates and influences it, what hinders it, and what it feels like to be on that learning curve. (2013, p. 129)

One of the greatest sources of learning within a profession is a collegial and professional network. We encourage you to find ways to connect with others interested in improving their practice and to share what you've learnt with them. In addition, consider yourself as a resource: as you learn, what are you sharing with colleagues? The ability to articulate our learning to others is often the best form of reflective practice. Table 1.2 summarises aspects of the AITSL Standard 5 and some practical ways to apply it in collegial practice.

Table 1.2 Applying AITSL Standard 5: Assess, provide feedback and report on student learning

as a Graduate	Take opportunities to engage in professional development in assessment Ask others to work with you to produce a rubric or moderate a formative task, or to read through and 'do' a summative assessment task that you are preparing
when you are Proficient	Mark students' assessment with one of your colleagues and discuss your decision-making processes Take feedback and comments you've written for individual students on a task and analyse the themes that are emerging to inform your practice
when you are Highly Accomplished	Organise formal and informal moderation activities in your school Use assessment data to evaluate cohort and individual learning progress, identify points of intervention and develop responsive teaching practices
when you are Leading other teachers	Work with teachers new to the profession and mentor them in assessment practice, particularly around design, feedback, moderation and use of data to improve learning Contribute to the development or evaluation of your school's assessment policy

Source: Based on AITSL 2011

Even though these activities reflect the stages of AITSL Standard 5, don't let that hold you back if you are a graduate teacher who wants to learn more about assessment. You could start an assessment community of practice at your school or with other teachers in your local area. It might be as simple as critically reflecting on the elements of AITSL Standard 5. You might read a chapter of this book or a journal article and discuss it at a meeting. You could take turns to share a practice that has been effective in your classroom. All of these collaborative activities will help you maintain and improve your assessment literacy.

MAKING ASSESSMENT TASKS WORTHWHILE FOR STUDENTS AND YOURSELF

Assessment can definitely be used to enhance students' motivation to learn. In order to do this, it must have some elements that make it worthwhile. The Australian Curriculum (ACARA n.d.) in its description of general capabilities states that 'all young people in Australia should be supported to become successful learners, confident and creative individuals, and active and informed citizens'. How does this occur? Sternberg (2008) asks teachers to consider the skills that are most likely to help their students to be successful, and to make assessment focus on those things that are worthwhile to know and be able to do, rather than assessing what is easiest to assess.



We discuss the idea of 'worthwhileness' in Chapter 2, 'Developing a Healthy Attitude to Assessment Among Students'.



Pause and reflect

There is a strong consensus across Australia and other parts of the world that more needs to be done in teaching learning and assessing 'twenty-first-century skills'. These are reflected in the general capabilities stated in the Australian Curriculum and state curricula.

Let us address how this looks in the classroom. First, how would you teach to foster those capabilities in students? How would you know that students were adopting and using them? What would you do differently if *all* you had to teach were those capabilities?

Taking a more reflective stance, think about how teachers can practically and meaningfully assess these capabilities. How might you go about assessing teamwork? Or how might you assess creativity, or ethical behaviours, or active and informed citizenship?

Reflecting on these questions may take many years—in fact, they are occupying the minds of many of our leading educators and assessment experts.

First, you as the teacher must be committed to the idea that assessment and learning can work together to enhance student outcomes. The first step is to recognise that traditional approaches to assessment do not challenge students to grapple with the kinds of problems they are likely to encounter. But what can you do next? The tools are there in the form of the curriculum documents but it is you, the teacher, who can make your students' experience of assessment a worthwhile one.

To make learning and assessment work together, know what you want students to achieve. Once you have designed assessments to gather evidence about how well students have achieved something, you can introduce

constructive alignment:

occurs when intended learning outcomes, teaching and learning tasks, and assessment tasks are completely aligned. It is based on a constructivist view of learning.

authentic assessment:

an assessment task related to real-life situations. An authentic assessment for a journalism student might be to write copy about a topic, rather than just an academic essay.

learning activities that help them to learn what they need to be successful. This approach is called **constructive alignment**, and using it means that students are far more likely to achieve the goals that they have set or that have been set for them. It also makes your job more fulfilling and rewarding.

In Chapter 3, we talk about our ‘non-negotiables’ concerning assessment. **Authentic assessment** is one of our non-negotiables because we want learning in school to reflect the discipline being studied in ‘worlds’ beyond school; we want students to see how their learning is applied in context and we want them to feel motivated by the energy that a real-life experience can generate. Sambell, McDowell and Montgomery believe that ‘carefully designed authentic assessment is one of the most powerful means we have to foster students’ productive, worthwhile approaches to learning’ (2013, p. 11). While we recognise that not every task can reflect real life this way, we think many more tasks could. Those responsible for the Senior Science Curriculum in Queensland have recognised this by introducing Extended Experimental Investigations (EEI) to stretch students to apply their scientific thinking and knowledge to real-world situations or examples. Visit the Queensland Curriculum and Assessment Authority website on EEIs to learn how it encourages teachers to use these as assessments—details are at the end of the chapter.

Teachers we have interviewed have highlighted one concern in relation to their ability to have healthy attitudes to assessment, which is the risk of students not authentically engaging with tasks. There are clear examples of students trying to ‘go around’ the learning rather than engage with it, so teachers are right to be concerned. Another concern is that students might not be independently doing the work set as projects at home. We are mindful of Vygotsky’s idea of the zone of proximal development, which students enter when assisted by a more knowledgeable peer who is scaffolding the learning. This is a challenge to educators to think differently about assessment—to not look only at what children and young people can do independently, but what they can do with assistance. Implementing more stringent assessment conditions or just doing invigilated tasks is not the only way to assure authorship or independent learning. However, strategies that we would advocate to ensure authenticity of authorship include the following:

- > Design tasks that are contextualised to the learning going on in the classroom; tasks that ask students to reflect on something they have done or seen.
- > Develop tasks that require the use of higher-order thinking.
- > Change assessment tasks regularly; don’t give the same thing year after year!
- > Ask students to design the task with you, or for you (and show them how to do it).

- > Ask students to take on your perspective: ask them to think about what will be in an upcoming assessment and how you (the teacher) will be likely to assess them in what they are doing.
- > Limit the amount of assessments students are doing in favour of fewer, high-quality pieces that give you good evidence of student learning. There is nothing like time pressure to encourage plagiarism!
- > Ask students to engage in reflection on the task by asking them questions about how they went about it. This also enhances their metacognition of successful strategies (Munns & Woodward 2006).

Another element of authentic assessment that is important for teachers and students is designing learning experiences and assessment tasks that are enjoyable, challenging and engaging. It can be very fulfilling for a teacher when a student completes a task saying, 'That was so hard, but I really enjoyed it; it pushed me to my limits and I learnt so much!' Students feel a sense of accomplishment when they work hard and achieve goals that they value; a task is well-scaffolded if students feel that they've completed it independently and they're proud of what they've done.



The student experience of authenticity is addressed in Chapter 2, 'Developing a Healthy Attitude to Assessment among Students'.



Pause and reflect

Thinking of some of your experiences of assessment, what could have been changed to make your experience a more authentic one?

What if you'd had a say in designing the task? What if you'd been able to choose the topic? What if the task encouraged you to try something new without fear of failing?

MANAGING MARKING AND FEEDBACK

One practice that can improve teachers' attitudes to assessment is managing marking and feedback in a way that responds to the principles advanced in this book. Giving marks on summative assessments and homework is deeply ingrained in our psyche; marking is a significant part of teachers' workload and the time that it takes can be overwhelming, especially when you are trying to do it to further student learning. Let's look at some ways to manage this aspect of assessment better.

Dylan Wiliam (2011) and other members of the Assessment Reform Group argue that once marks are awarded, learning ceases and other forms of feedback that are given, such as comments, greatly reduce in value. By awarding marks, the teacher has focused students on what has just happened and in so doing has caused them to take their eyes off the learning. Students,



Chapter 7, 'Creating Helpful Feedback Cycles', gives many examples of how a teacher might share the marking processes with students before they submit any summative assessment.

parents/carers and the community want to know and understand students' progress, but Wiliam argues, and we agree, that marks are not the only way to achieve this communication; in fact, they are a poor way to achieve it.

A rule of thumb that Wiliam (2011) advances is that students should take at least as long to deal with the feedback given as you took to create it. Giving a child a 'B+' or '13/20' with a comment like 'Good work' may not make the student *do* anything except have an emotional reaction to the outcome. Just as we focus on the students' learning experience, we should also be focusing on their assessment experience and what they are doing in that process—not what we have done in marking. The process of assessing and making judgments about students' work should be an affirming one. There should be no surprises except for delightful ones because you should be in tune with your students and their progress, through the formative assessment experiences your students engage with in the classroom each day.

One extremely useful way of ensuring students respond to feedback is provided by Jayne Bartlett (2015). She puts comments about a student's work on Post-it notes, using one colour for affirmations and another for comments requiring actionable responses, such as explaining and reworking a maths problem the student did not do correctly. Students have to respond on the Post-it note and then return it to the teacher, who then sticks the completed note into that student's file. These then make great resources as evidence for end-of-semester reports and for parent–teacher–student meetings, as they are a catalogue of each student's progress over the learning period.

CHAPTER SUMMARY

Helping yourself and your colleagues to maintain a healthy attitude towards assessment certainly requires an investment of effort and time, but it is a worthwhile one! Providing students with meaningful, positive assessment experiences as they address challenging, realistic and enjoyable tasks; engaging in ongoing professional learning, especially with your colleagues; and putting marking in its rightful place, will all assist you in doing so.

Questions and activities for reflection

- 1 Consider what motivates you to learn. What can you do to build motivation for learning into the tasks that you ask students to engage in?
- 2 What are your own attitudes to assessment? If you have disliked assessment in the past, what should you be doing differently now to improve your attitude?

- 3 If you are working through these questions and activities in a group, brainstorm approaches to being involved in professional learning networks that are likely to be sustainable for you. How would that change if you went to teach in a different location, such as a rural or remote school? How could you leverage notions of situated learning to remain engaged with a community of practice?
- 4 Consider a scenario where a parent/carer has come in unhappy with a mark you have given their child for a particular task. What would you do to engage with the parent/carer to come to a worthwhile resolution? What would you talk about or show to them to help them understand your decision making and to ensure that the mark itself doesn't overshadow what's important?

FURTHER READING

Howell, J. (2012). *Teaching with ICT: Digital pedagogies for creativity and collaboration*. South Melbourne, Vic: Oxford University Press.

Read Howell's chapter on learning theories and in particular the information on connectivism to gain an accessible understanding of that theory.

Wiliam, D. (2010). *The classroom experiment* [Documentary film]. London: BBC Film.

This is a two-part video of Dylan Wiliam conducting professional learning among teachers of a Year 8 class in a real school in England's home counties. The emphasis is on teachers employing formative assessment to develop their overall skills and how changing teacher practices impacts on the learning outcomes of all students.

Wiliam, D. (2017). *Embedded formative assessment* (2nd ed.). Bloomington, IN: Solution Tree Press.

Wiliam's book is fascinating, but his explanation of why grades and marks are not helpful to student learning is especially worth reading.

WEBSITES

Queensland Curriculum & Assessment Authority, *Extended Experimental Investigations*:

www.qcaa.qld.edu.au/senior/subjects/sciences/extended-experimental-investigations-eeis