Teacher assessment literacy: Are we there yet?

Dr. Dennis Alonzo
Prof. Chris Davison
Outline

• Competing conceptualisations of teacher assessment literacy (TAL)
• Theoretical and empirical support for teacher assessment for learning literacy (TAfLL)
• A framework for TAfLL
• Implications for building a strong assessment culture in schools
When you think of assessment literacy, do you think of this?

<table>
<thead>
<tr>
<th>Type of question</th>
<th>NAPLAN</th>
<th>PIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Recall</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Inter</td>
<td>10</td>
<td>5</td>
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<tr>
<td>Integrate/Evaluate</td>
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</table>

On informational items...NAPLAN asks more basic recall questions.

On fiction items...PIRLS asks more evaluation questions.

**NAPLAN**
- Australia only
- 7 stories, < 200 words
- Fiction text at grade level
- Non-fiction above grade level in Year 5
- Nearly all Year 3, 5, 7 and 9 students sit
- 91% met benchmark
- Online in 2018

**PIRLS**
- 59 countries
- 2 stories, ~ 800 words
- Fiction text below grade level
- Non-fiction above grade level in Year 5
- Sample of 6,000 Year 4 Australian students
- 74% met benchmark
- Online piloted in 2011
“Assessment literacy is the possession of knowledge about the basic principles of sound assessment practice, including its terminology, the development and use of assessment methodologies and techniques, and familiarity with standards of quality in assessment.”

Or this?
Or even this?
Background

Why is assessment literacy the “new” holy grail?

At the intersection of two major ideological and educational fallacies:

• *If you measure it, it will improve.*

• *If you improve it, it will be measured.*
However, much research evidence suggests assessment is a key to improvement in learning …

- Black & Wiliam (1998) have convincingly demonstrated the learning gains that can be achieved through well focused teacher-based formative assessment enhance students’ learning more than any other strategy across age levels and in different contexts.

- Hattie (2009) in a more recent study of major influences on educational achievement (using 800+ meta-analyses) found that formative practice, in particular self-assessment and feedback, had the highest effect sizes (i.e., impact on student outcomes) out of more than 100 different instructional and contextual factors.
The Evidence

Key findings (Black and Wiliam, 1999):

- ‘that initiatives designed to enhance effectiveness of the way assessment is used in the classroom to promote learning can raise pupil achievement’ (p3.)
- ‘frequent assessment feedback helps low-achieving students and students with learning disabilities’.

Hattie’s research (2008)

- 800+ meta-analysis
- 50,000 studies, and
- 200+ million students
## Barometers of Influence

<table>
<thead>
<tr>
<th>Rank</th>
<th>Factor/Influence</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self-reported grades</td>
<td>1.44</td>
</tr>
<tr>
<td>2</td>
<td>Piagetian program</td>
<td>1.28</td>
</tr>
<tr>
<td>3</td>
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</tr>
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<td>Reciprocal teaching</td>
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</tr>
<tr>
<td>10</td>
<td>Feedback</td>
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**Ran**

\[ \text{Factor/Influence} \]

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Others (Hattie, 2008)

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<tbody>
<tr>
<td>11</td>
<td>Teacher-student relationships</td>
<td>.72</td>
</tr>
<tr>
<td>14</td>
<td>Prior achievement</td>
<td>.67</td>
</tr>
<tr>
<td>18</td>
<td>Self-verbalization and self-questioning</td>
<td>.64</td>
</tr>
<tr>
<td>19</td>
<td>Professional development</td>
<td>.62</td>
</tr>
<tr>
<td>21</td>
<td>Not labeling students</td>
<td>.61</td>
</tr>
<tr>
<td>22</td>
<td>Teaching strategies</td>
<td>.60</td>
</tr>
<tr>
<td>25</td>
<td>Direct instruction</td>
<td>.59</td>
</tr>
</tbody>
</table>

*d = 0.0 – 0.15* What students could achieve without schooling

*d = 0.15 – 0.4* Typical effects of teachers on students that can be accomplished in a year of teaching

*d > 0.4* Zone of desired effects
This raises the question of what kind of “assessment” we most want teachers to be literate in?

- Researchers do not agree on how assessment literacy should be defined (Walters, 2010) nor what it might comprise (Fulcher, 2012, p. 115). Although many have attempted to define this construct (Fulcher, 2012; Malone, 2011; Popham, 2009), no existing definitions suit the Australian school context, with teacher-based assessment accounting for most evaluation that takes place.
In terms of its assessment demands and practices, Australia is very different from other assessment contexts, see http://www.cese.nsw.gov.au/images/stories/PDF/Re-assessing_Assessment_v6.pdf

“Australia tends to sit in the middle when comparisons are made between it and other countries (with) an assessment system which is balanced between classroom level assessment and standardised assessment, with a reasonably strong focus on classroom assessment (and assessment for learning) …”
Assessment for learning:

• emphasises the interactions between learning and manageable assessment strategies that promote learning
• clearly expresses for the student and teacher the goals of the learning activity
• reflects a view of learning in which assessment helps students learn better, not just achieve a better mark
• provides ways for students to use feedback from assessment
• helps students take responsibility for their own learning
• is inclusive of all learners

http://arc.boardofstudies.nsw.edu.au/go/7-8/assessment-for-learning-in-years-7-10/
However, as Stiggins (1991) argues, the problem is that the meaning of assessment literacy varies due to “the needs of the decision maker and the practical realities of the decision context” (p.537).
Competing Definitions

- teachers and principals’ capacity to use student achievement data to increase learning, and to inform policy makers on the uses and misuses of achievement data (Fullan, 2002).

- using assessment data to improve teaching and effectiveness of the educational programs to help students’ learn (Webb, 2002).

- knowing the difference between sound and unsound assessment (Stiggins, 2005)

- “understanding of the fundamental assessment concepts and procedures deemed likely to influence educational decisions” (p. 265) (Fullan, 2011).

- critical views of testing and its social consequences (McNamara & Roever, 2006) and the social roles of assessment (Inbar-Lourie, 2008), including the roles of teachers in providing assessment information to stakeholders (Tylor, 2009).

- growing emphasis on the assessment literacy of other stakeholders (Davison, 2013).
Teacher Assessment for Learning Literacy

“Teacher assessment for learning literacy comprises the knowledge and skills to make highly contextualised, fair, consistent and trustworthy assessment decisions to inform learning and teaching to effectively support both student and teachers’ professional learning. The aim of teachers is to build students and other stakeholders’ capabilities and confidence to take an active role in assessment, learning and teaching activities to enable and provide the needed support for more effective learning” (adapted from Alonzo, 2015, p. 58)
This means we need to practise what we preach, following the same principles and developing the same practices among our teachers that we want them to implement with students (Davison, 2013), i.e.,

- striving to be theoretically and philosophically consistent,
- **beginning** by finding out where teachers are in terms of assessment literacy,
- sharing learning intentions, setting clear and coherent success criteria and achievable timelines, modelling desired outcomes and leading by example to sustainable improvements in assessment, learning and teaching,
- putting the learners and teachers at the centre of the change process,
- involving students, parents and the wider school community in understanding and supporting reforms,
- maintaining confidence in the assessment system.
Current Level of Teachers’ AL

• Teacher Afl literacy remains relatively low (Davison & Michell, 2014; Lam, 2015; Malone, 2013; Popham, 2009; Tsagari & Vogt, 2017)

• Teachers do not feel sufficiently well-prepared to assess students’ learning (Mertler, 2004; Plake, 1993) as they have limited knowledge and understanding of AflL principles and practices.

• Pre-service teachers are unprepared to use appropriate AflL strategies to support student learning (Siegel & Wissehr, 2011; Volante & Fazio, 2007) due to their lack of confidence in applying their AflL knowledge and building their skills (Ogan-Bekiroglu & Suzuk, 2014).
## High self-efficacy of teachers (Alonzo & Davison, 2015)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducts assessment with consideration of student background and culture</td>
<td>4.36</td>
</tr>
<tr>
<td>Participates in professional development related to assessment</td>
<td>4.36</td>
</tr>
<tr>
<td>Demonstrates belief in the ability of every student to improve</td>
<td>4.14</td>
</tr>
<tr>
<td>Identifies appropriate teaching methods</td>
<td>3.94</td>
</tr>
<tr>
<td>Maintains confidentiality in dealing with assessment results (norm referencing, inappropriate disclosure of assessment results and ranking students)</td>
<td>3.93</td>
</tr>
<tr>
<td>Develops an environment of trust</td>
<td>3.93</td>
</tr>
<tr>
<td>Undertakes further education/ training</td>
<td>3.93</td>
</tr>
<tr>
<td>Tailors lessons to available resources</td>
<td>3.88</td>
</tr>
<tr>
<td>Uses assessment to build students’ interest to learn</td>
<td>3.86</td>
</tr>
<tr>
<td>Reinforces positive learning attitude of students</td>
<td>3.79</td>
</tr>
</tbody>
</table>
### Low self-efficacy of teachers (Alonzo & Davison, 2015)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathers a range of evidence of student learning</td>
<td>2.36</td>
</tr>
<tr>
<td>Designs assessment tasks</td>
<td>2.45</td>
</tr>
<tr>
<td>Engages students in peer-assessment</td>
<td>2.45</td>
</tr>
<tr>
<td>Engages in self-assessment/ reflection</td>
<td>2.68</td>
</tr>
<tr>
<td>Involves students in the development of learning outcomes</td>
<td>2.87</td>
</tr>
<tr>
<td>Gives feedback related to criteria</td>
<td>2.87</td>
</tr>
<tr>
<td>Assists students in using feedback to feed forward</td>
<td>2.98</td>
</tr>
<tr>
<td>Collaborates with family to establish home activities to support student</td>
<td>2.98</td>
</tr>
<tr>
<td>learning</td>
<td></td>
</tr>
<tr>
<td>Informs community of school’s assessment practices</td>
<td>3.12</td>
</tr>
<tr>
<td>Develops appropriate English language assessment strategies</td>
<td>3.33</td>
</tr>
<tr>
<td>Moderates feedback and results of self and peer assessment</td>
<td>3.33</td>
</tr>
<tr>
<td>Engages in peer-review of teaching performance</td>
<td>3.36</td>
</tr>
<tr>
<td>Identifies key assessment and teaching issues for review</td>
<td>3.36</td>
</tr>
<tr>
<td>Involves students in the development of success criteria/ rubrics</td>
<td>3.4</td>
</tr>
<tr>
<td>Explains the success criteria/ rubrics</td>
<td>3.4</td>
</tr>
<tr>
<td>Engages students in self-assessment</td>
<td>3.4</td>
</tr>
</tbody>
</table>
Teacher AfL Literacy Framework

Teachers as Assessors
- Design assessment tasks
- Use rubrics to assess students' learning
- Consider factors that affect students' performance
- Avoid interference in task completion
- Engage in social moderation

Teachers as Pedagogy Experts
- Translate learning standards to learning outcomes
- Identify appropriate teaching methods
- Consider students' prior knowledge in lesson planning
- Consider students' current level of abilities
- Consider students' interest
- Plan lessons according to students' learning needs
- Tailor lessons to available resources
- Develop teaching and learning resources

Teachers as Stakeholder Partners
- Collaborate with family to establish support activities
- Inform community of the assessment practices
- Report to community about students' performance
- Identify key assessment and teaching issues for review

Teachers as Student Partners
- Give feedback on students' strengths and weaknesses
- Assist students in using feedback
- Involve students in the development of learning outcomes
- Make students understand the learning outcomes
- Involve students in the development of criteria and standards
- Explain the criteria and standards
- Develop students' capabilities in self and peer assessment
- Engage students in self-assessment
- Engage students in peer-assessment
- Moderate feedback and results of self and peer assessment

Teachers as Motivators
- Use flexible teaching activities
- Conduct assessment with consideration of student background
- Develop an environment of trust
- Ensure openness in the class
- Build students' interest in learning
- Demonstrate belief in the ability of every student to improve
- Affirm students' good performance
- Clarify students misconceptions
- Reinforce positive learning attitude of students

Teachers as Teacher Learners
- Participate in professional development related to assessment
- Engage in self-assessment/reflection
- Engage in peer-review of teaching performance
- Identify subject content knowledge needs
- Search new and relevant subject content information
- Undertake further education/training

Teacher Assessment Literacy
Dimensions of Teacher Assessment Literacy

Teacher as an ASSESSOR – this domain refers to the teacher’s knowledge and skills to develop and use a wide range of assessment strategies and tasks and to use a comprehensive system of assessing student learning. The teacher needs to continually evaluate the appropriateness, usefulness, adequacy, trustworthiness and fairness of his/her assessment practices, and monitor the extent to which students are able to use the assessment information to improve their learning.
Dimensions of Teacher Assessment Literacy

Teacher as a PEDAGOGY EXPERT - this domain refers to the teacher's role in reflecting on and using assessment information to inform teaching. The teacher determines students’ prior knowledge, interests and levels of ability and uses this in planning lessons and in implementing the curriculum.
Dimensions of Teacher Assessment Literacy

Teacher as a STUDENT PARTNER – this domain refers to the teacher’s ability to develop and use assessment strategies and tasks to actively engage students in teaching and learning activities. The aim of the teacher is to work closely with students to provide them with a wide range of opportunities to develop their self-regulation and ability to use assessment information to improve their learning.
Teacher as a MOTIVATOR – this domain refers to the teacher’s ability to use assessment strategies and assessment information to enhance students’ motivation. The aim of the teacher is to provide differentiated instruction and assessment to address individual students’ learning needs and maximize their engagement.
Dimensions of Teacher Assessment Literacy

Teacher as a TEACHER LEARNER—this domain refers to the teacher’s capacity to reflect on assessment data to identify the effectiveness and appropriateness of his/her classroom practices. From such reflection, the teacher identifies their own strengths and weaknesses both in the AfL skills and in the curriculum-content knowledge and undertakes further professional learning to address any gaps in knowledge and/or skill.
Dimensions of Teacher Assessment Literacy

Teacher as a STAKEHOLDER PARTNER – this domain refers to the teacher’s ability to produce reports tailored to the information needs of various stakeholder groups, and to establish a continuing dialogue with these groups to communicate assessment results in ways that can be easily understood and to discuss and address any issues arising. The reports and the feedback gathered are used to identify ways to improve learning and teaching.
Teacher Assessment for Learning (AFL) Literacy Tool

**Purpose of the AFL Literacy Tool**

This assessment instrument is part of a process designed to help teachers improve their use of assessment for learning (AFL) in improving student learning and achievement. As with AFL for students, this tool can be used for teachers’ self and peer assessment and for school leader’s direct assessment.

- In self-assessment, teachers can identify what they believe their current level of AFL literacy is and then identify the next steps of skills they need to develop to move to the next level of standards.
- In peer-assessment, colleagues can provide their perception of fellow teachers’ current AFL literacy levels based on their observation of classroom practices and other information provided by the teacher being assessed. They can also identify opportunities for assisting colleagues seeking further development and for learning from those teachers already well-advanced in AFL literacy development and classroom practice.
- In direct assessment, school principals/heads can use the instrument to assess the current level of individual teachers’ AFL literacy. From the results, they can identify the support required by each teacher including appropriate professional development.

Importantly, all of these assessment results are brought together within the school for “moderation” just as in assessment moderation or standardisation for student work. In this way, in a safe and supportive conversation, each teacher has the opportunity to present their teaching portfolio and other evidence to illustrate their self-assessment striving for an agreement of the various assessors on the most accurate picture from which to plan the next step of professional development.

**Directions**

For self-assessment: Whilst reflecting on your own classroom practices, please read each item carefully then mark the level which best describes your current performance. There is no right or wrong answer. Your responses will be used to guide and support you in enhancing your assessment literacy.

For peer and leader assessment: Whilst reflecting on your colleague’s current AFL literacy levels, please take into account any other information or evidence of performance made available to you by your colleague for whom you are doing this assessment. Again, please remember there is no right or wrong answer. As with self-assessment, your responses are needed to guide and support your colleague in their AFL literacy and classroom practices improvement.

### Development of Assessment Tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Indicators</th>
<th>Levels of Performance</th>
<th>Development of Assessment Tasks</th>
<th>Evaluation of the Suitability of the Differentiated Assessment Tasks Developed</th>
<th>Support to Colleagues in Designing Differentiated Assessment Tasks</th>
</tr>
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<tbody>
<tr>
<td><strong>A</strong></td>
<td>Develops appropriate assessment strategies but limited to measuring student learning</td>
<td>Develops assessment strategies to measure learning outcomes and to support learning and student achievement</td>
<td>Develops a range of assessment strategies which put assessment at central to classroom practices with active engagement of students</td>
<td>Evaluates the suitability of the differentiated assessment tasks developed</td>
<td>Provides targeted professional assistance to colleagues in developing suitable assessment tasks</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Designs generic assessment tasks</td>
<td>Designs inclusive assessment tasks</td>
<td>Designs differentiated and multi-dimensional assessment tasks that allow students to demonstrate their learning in a variety of ways</td>
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</tr>
<tr>
<td><strong>C</strong></td>
<td>Uses a range of assessment methods</td>
<td>Uses formal assessment methods</td>
<td>Uses formal and informal formative and summative assessment methods</td>
<td>Uses a wide range of assessment methods suited to student’s capabilities, learning needs and interests (informal and formal, diagnostic, formative and summative)</td>
<td>Evaluates the appropriateness of assessment methods according to the goals of assessing students’ learning progress and achievement</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>Gathers evidence of students’ learning</td>
<td>Gathers evidence of students’ learning</td>
<td>Gathers evidence of students’ learning across four dimensions and analyses data to show a coherent picture of overall students’ learning progress and achievement</td>
<td>Assesses the usefulness of evidence of students’ learning progress and achievement</td>
<td>Determines how colleagues approach ways of gathering a range of evidence of students’ learning progress and achievement</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Uses rubrics to assess students’ learning</td>
<td>Uses rubrics to assess student learning</td>
<td>Uses rubrics to assess student learning opportunities</td>
<td>Uses rubrics to identify student learning opportunities</td>
<td>Reviews the effectiveness of rubrics against valued expertise in assessing students’ performance and identifying learning opportunities</td>
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Teachers’ Use of Assessment Literacy

Based on observation and interviews, some teachers use assessment like a checklist (Routine Expertise)

“The lesson went well. All the activities were completed although some students were too slow. I had to keep reminding them of the time. I always aim to have as many assessment activities as possible – questioning, peer feedback, use of exemplars, explaining the learning outcomes, and sometimes if my lesson plan is too long, I only print the learning outcomes and give to them.”

“I know I am good at it because I am meeting all those indicators in the tool…I send reports to the parents as well but I wonder if they understand it, but at least I am doing something.”
Teachers’ Use of Assessment Literacy

Other teachers adapt their practices according to student needs (Adaptive Expertise)

“I planned to use self-assessment but when I was giving instruction, I saw in their face that they (students) were not ready, so instead, I went on to discuss the rubrics for the whole period.”

“After discussing the learning outcomes, I do not know if my class understood them. It made me wonder because they keep on saying, yes teacher, we understood it but when we do self-assessment they keep on coming back to me and ask about each criterion. So it’s taking time but I need to adjust my teaching. When I give an activity and I see that some of them cannot produce the output, I mean, expected output, I go back to the learning outcomes and discuss them, sometimes the whole week I find myself like a broken record talking learning outcomes, but I can’t help but to bring their attention to LOs.”
Two Types of Expertise

**Routine Expertise**
- Better fluency

**Focus: Efficiency of teaching**

**Adaptive Expertise**
- Higher effectiveness

**Focus: Improvement of learning**
Framework for Building an Assessment Culture in Schools

- Teachers’ AL
- Students’ AL
- Parents’ AL
- School Head’s AL

LEARNING

Support

Engagement

Expectations

Collaboration
What question do school leaders need to ask?

**What assessment knowledge and skills do we as leaders need to support our teachers?**

- The focus of high performing principals is ensuring student learning (Dinham, 2005)
- The role of principals in helping teachers in their assessment practices defines their effectiveness (Stiggins & Duke, 2008)
- Effective principals use a wide range of assessment data to help teachers develop interventions (Day et al., 2009), focus on the user of the data (i.e., students, teachers), not just its use.
What question do parents need to ask?

Are our expectations aligned to the principles of effective assessment practices of the school?

- Misalignment of parents’ expectations with teachers’ and/or school’s assessment practices will compromise student learning (Davison, 2013)
What questions do students need to ask?

*Do I understand the learning outcomes and criteria?*

*Do I have sufficient assessment knowledge and skills to engage in this assessment activity?*

- Student use of assessment influences their achievement; it helps them account for their learning (Brown & Hirschfeld, 2008), improve their learning (Hattie, 2008), increase their motivation and engagement (Planas Lladó et al., 2014)
But …

• Students respond differently to assessment activities (Brown et al., 2009; Healy et al., 2014)

• Particular groups of students selectively engage in assessment to meet their learning and personal agendas (Colvin et al., 2016).

• Students' perceptions of the effectiveness of their teacher assessment practices and understanding of the assessment process influence their future actions toward learning.

• Teachers need to adapt to student needs, (Wiliam, 2011), in particular, responding to the initial preferences of students with different ability levels.
Implications

- Always link the improvement of assessment literacy to the improvement of learning (learning progressions) and focus on developing a community of assessment practice, eg., TEAL, an online assessment advice and ‘toolkit’, http://teal.global2.vic.edu.au/, for use by all Victorian school teachers to help assess the stage of development for EAL students in speaking and listening, reading and writing, to improve learning and teaching, based on assessment for learning (AfL) principles and Vygotskian theory.
Welcome to Tools to Enhance Assessment Literacy

The TEAL web project, launched in June, is an online resource for teachers of primary and secondary level children who are learning English as a second (ESL) or additional (EAL) language in Australia. It brings together a range of tools and advice for the assessment and reporting of the English language proficiency and progress of students.

For more information on the TEAL web project, its contents and its intended use, please follow the links below to read more. If you have any further questions or comments, don’t hesitate to visit our
Supported by an extensive professional learning program in assessment for learning literacy

• 6 x 3-hour or 3 x 6 hour modules, 10 x 3 teachers from each school, focusing on
  - developing an understanding of the philosophy of assessment for learning, especially the use of feedback and self/peer assessment with students from language backgrounds other than English
  - developing a clear understanding of the materials and assessment advice on the website and how to use them in assessment to build student, parent and teacher knowledge and engagement.
  - having opportunities to interact with each other online and use the online discussion forum for benchmarking and collaboration

• All sessions incorporate time for professional dialogue and for sharing of strategies to enable school-based implementation, plus action-oriented activities in the form of between session tasks, e.g. trialing and evaluating common oral and written assessment tasks, reading, reflections, etc.
• Participants provide extensive feedback on TEAL and the professional learning program which is used to continually improve both.

• Pre and post-assessments indicate significant improvement in assessment literacy, with typical comments including:
  - As a school leader, TEAL is useful for leading other staff and delivering general EAL advice and PD. The site has some great resources for this
  - Strategies and awareness of assistance to EAL students will benefit the entire cohort of students by catering for all needs
  - The program has inspired me and helped me recognise the need to develop a whole school vision and implement less formal yet consistent and varied forms of assessment for our EAL learners
  - A wake up call about assessment for learning and not just data collection. I can do much better!
For more information:

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c.davison@unsw.edu.au
Using the Hess CRM to enhance cognitive rigor in the classroom through the effective use of cognitive verbs

Chelsea Bernal
Outline

• Why focus on enhancing cognitive rigor?
• Determining student cognition
• Developing tasks to enhance cognitive rigor in the classroom
• Using cognitive verbs
What does ‘cognitive rigor’ mean to you?

Paige, Sizemore & Neace (2013) define cognitive rigor as the amount of time that students spend engaged in those higher order thinking activities that require the transfer of knowledge.

Karin Hess defines cognitive rigor in a matrix (CRM) that combines Bloom’s Taxonomy and Webb’s depth of knowledge (DoK) (Hess, Jones, Carlock & Walkup, 2009).
Why enhance cognitive rigor?

‘One aspect of cognitive rigor is the extent to which classroom instruction demands students to use critical thinking skills.’ (Paige, Sizemore & Neace, 2013, p.105)

In Paige, Sizemore and Neace’s (2013) study ‘Exploring the relationship between student engagement and cognitive rigor’, their guiding hypothesis was that as cognitive rigor increases, student engagement with classroom instruction also increases.

Chi and Wylie (2014) found that as students become more engaged with the learning materials, their learning increases.
Determining student cognition

Three models to observe and classify cognition:

- Revised Bloom’s taxonomy (Anderson et al, 2001)
- Norman Webb’s Depth of Knowledge (DoK) (1997)
Revised Bloom’s taxonomy

Original taxonomy by educational psychologist Benjamin Bloom (1956)
Revised in 1990’s by a team of cognitive psychologists, led by one of Bloom’s students (Anderson et al, 2001)
Revised Bloom’s taxonomy

• Designed to classify learning objectives (not learning activities)
• The categories are presented as lying on a hierarchical continuum where a process like ‘understand’ is considered less cognitively demanding than ‘evaluate’
• There is also a new knowledge dimension which lies on a continuum from the concrete to the abstract:

- factual
- conceptual
- procedural
- metacognitive
Revised Bloom’s taxonomy

These two dimensions (cognitive process and knowledge) form the taxonomy table.
Revised Bloom’s taxonomy

• Hess (2014) noted that the restructuring of Bloom’s taxonomy recognised the importance of the interaction between the content taught and the thought processes used in learning.
• But sometimes verbs/processes can seem similar in differing levels; and thinking process, don’t always translate to deeper understanding of content.
• E.g. In her CRM, Compare-contrast (DOK 2) can be a much ‘lighter’ form of analysis than analysis of theme development in one (DOK 3) or more texts (DOK 4).
Webb’s Depth of Knowledge (DoK)

DoK consists of ‘levels of complexity of information students should be expected to know, how well they should be able to transfer this knowledge to different contexts, how well they should be able to form generalisations, and how much prerequisite knowledge they must have in order to grasp ideas.’ (Webb, 1997)
Depth of Knowledge (DoK) – Karin Hess
Hess’ Cognitive Rigor Matrix (CRM)

Karin Hess took the revised Bloom’s taxonomy and Webb’s DoK to create a matrix of cognitive rigor.

The CRM allows each educational objective to be classified according to the cognitive process required to complete the task as well as the depth and complexity of the content knowledge that students have to master to achieve that objective.
Hess’ Cognitive Rigor Matrix (CRM)

Hess has created subject specific versions of the CRM, and these are available on her website at https://www.karin-hess.com/free-resources

There are 4 core subject tools: Reading, Math & Science, Written & Oral Communication and Social Studies/Humanities,

and 4 special subject tools: Fine Arts, Health & Physical Education, World Language and Career & Technical Education.
Hess’ Cognitive Rigor Matrix (CRM)

The Standards Company LLC analysed over 200,000 samples of student work (homework, tests, quizzes, worksheets) from 200 schools in Oklahoma and Nevada and plotted them on the CRM. (Hess et al, 2009)

- A third of English work sat at 2:2 (DoK2, Bloom’s 2 –Skills & Concepts/Understand)
- A quarter at 1:1 (Recall & Reproduce/Remember)
- Only 2% reached DoK3, and only at ‘Understand’
Mathematics assignments heavily sampled the 1:1 and the 1:3 cells at 34% and 28% respectively, which could point to an over-reliance on teaching straightforward applications of routine steps.
Using the CRM

- Use the CRM to plot the cognitive rigor of your class’s assignments and assessments to ensure you are giving students the opportunity to be cognitively engaged.
- Use the CRM to guide you in the development of new assignments or assessments by locating cells that will push your students.
- The CRM is a tool to help educators to enhance learning opportunities by providing students with a curriculum that spans a wide range of the CRM (Hess et al, 2009).
Developing tasks

• The first step in analysing past tasks or creating new ones is to make sure you know your verbs!
• Cognitive verbs specify the cognitive depth to which students engage with knowledge (QCAA, 2018)
Task Details:
You are to compare and contrast the water resources in Australia and ONE other country that your teacher nominates.

1. Identify at least 4 different water resources in Australia in detail.
   a. Examples are; water table, ground water, lakes, rivers, dams, desalination plant(s), precipitation, etc.
   b. Pick 2 regions in Australia.
      i. How is water used in the region? Consider the impact upon farms and towns in light of the drought throughout large areas in Australia.
      ii. Explain what the water management strategy is in place for each region, considering farms, townships and the relationship with major cities such as Sydney, Adelaide, Melbourne and Perth.

2. Identify at least 4 different water resources in a nominated country in detail.
   a. Examples are; water table, ground water, lakes, rivers, dams, desalination plant(s), precipitation, etc.
   b. Pick 2 regions the nominated country.
      i. How is water used in the region?
      ii. Explain what the water management strategy is in place for each region.

3. Analyse the water resources in Australia and the nominated country and the water management strategies that Australia and the nominated country utilise.
Task Details:
You are to compare and contrast the water resources in Australia and ONE other country that your teacher nominates.

1/2. Identify at least 4 different water resources in Australia & a nominated country in detail.
   b. Pick 2 regions in Australia; pick 2 regions the nominated country.
      i. How is water used in the region? Consider the impact upon farms and towns in light of the drought.
      ii. Explain what the water management strategy is in place for each region.

3. Analyse the water resources in Australia and the nominated country and the water management strategies that Australia and the nominated country utilise.

Glossary of cognitive verbs (QCAA, 2018)
compare: display recognition of similarities and differences and recognise the significance of these similarities and differences
contrast: display recognition of differences by deliberate juxtaposition of contrary elements; show how things are different or opposite; give an account of the differences between two or more items or situations, referring to both or all of them throughout
Task Details:
You are to compare and contrast the water resources in Australia and ONE other country that your teacher nominates.

1/2. Identify at least 4 different water resources in Australia & a nominated country in detail.
   b. Pick 2 regions in Australia; pick 2 regions the nominated country.
   i. How is water used in the region? Consider the impact upon farms and towns in light of the drought.
   ii. Explain what the water management strategy is in place for each region.

3. Analyse the water resources in Australia and the nominated country and the water management strategies that Australia and the nominated country utilise.

Glossary of cognitive verbs (QCAA, 2018)
identify: distinguish; locate, recognise and name; establish or indicate who or what someone or something is; provide an answer from a number of possibilities; recognise and state a distinguishing factor or feature
Task Details:
You are to **compare and contrast** the water resources in Australia and ONE other country that your teacher nominates.

1/2. **Identify** at least 4 different water resources in Australia & a nominated country in detail.
   b. Pick 2 regions in Australia; pick 2 regions the nominated country.
   i. How is water used in the region? **Consider** the impact upon farms and towns in light of the drought.
   ii. **Explain** what the water management strategy is in place for each region.

3. **Analyse** the water resources in Australia and the nominated country and the water management strategies that Australia and the nominated country utilise.

Glossary of cognitive verbs (QCAA, 2018)
**consider:** think deliberately or carefully about something, typically before making a decision; take something into account when making a judgment; view attentively or scrutinise; reflect on
**explain:** make an idea or situation plain or clear by describing it in more detail or revealing relevant facts; give an account; provide additional information
Task Details:
You are to compare and contrast the water resources in Australia and ONE other country that your teacher nominates.

1/2. Identify at least 4 different water resources in Australia & a nominated country in detail.
   b. Pick 2 regions in Australia; pick 2 regions the nominated country.
   i. How is water used in the region? Consider the impact upon farms and towns in light of the drought.
   ii. Explain what the water management strategy is in place for each region.

3. Analyse the water resources in Australia and the nominated country and the water management strategies that Australia and the nominated country utilise.

Glossary of cognitive verbs (QCAA, 2018)
analyse: dissect to ascertain and examine constituent parts and/or their relationships; break down or examine in order to identify the essential elements, features, components or structure; determine the logic and reasonableness of information; examine or consider something in order to explain and interpret it, for the purpose of finding meaning or relationships and identifying patterns, similarities and differences
Cognitive verbs

• What does ‘identify’ mean to you?
  
  • **Identify**: distinguish; locate, recognise and name; establish or indicate who or what someone or something is; **provide an answer from a number of possibilities**; recognise and state a distinguishing factor or feature. (QCAA, 2018)

  • When you want to assign a higher order thinking cognitive verb to a learning outcome, make sure to check that the task is not one of ‘identification’.
Cognitive verbs

• Who is doing the thinking?
  • When you give homework or write a task or an assessment, think about what has to be done in order to answer the question.
  • For example: it can be difficult to get a DoK 3 or DoK 4 multiple choice question. This is because the writer of the question has done a lot of the reasoning or extended thinking to come up with the options – so half the work is already done for the student.
  • Don’t look at what the question is asking, look at what thought processes the student has to go through in order to get the answer. Are they really being asked to analyse or summarise? Or are they identifying a correct answer or locating key information?
## Common multiple choice items

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall &amp; Reproduction</td>
<td>Skills &amp; Concepts</td>
<td>Strategic Thinking/ Reasoning</td>
<td>Extended Thinking</td>
</tr>
<tr>
<td>Remember</td>
<td>Common use of multiple choice items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand/Comprehend</td>
<td>Common use of multiple choice items</td>
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<td></td>
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<tr>
<td>Apply</td>
<td>Common use of multiple choice items</td>
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<tr>
<td>Analyze</td>
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<td>Evaluate</td>
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<tr>
<td>Create</td>
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</table>
ICAS/Reach assesses a broad range

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall &amp; Reproduction</td>
<td>Skills &amp; Concepts</td>
<td>Strategic Thinking/ Reasoning</td>
<td>Extended Thinking</td>
</tr>
<tr>
<td><strong>Remember</strong></td>
<td>ICAS</td>
<td>ICAS</td>
<td>ICAS</td>
</tr>
<tr>
<td>Some items in ICAS</td>
<td>Some related skills tested in ICAS</td>
<td>Some related skills tested in ICAS</td>
<td>Some related skills tested in ICAS</td>
</tr>
<tr>
<td>Understand/Comprehend</td>
<td>Apply</td>
<td>Analyze</td>
<td>Evaluate</td>
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<td>Some related skills tested in ICAS</td>
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<tr>
<td>Evaluate</td>
<td>ICAS</td>
<td>ICAS</td>
<td>Some related skills tested in ICAS</td>
</tr>
<tr>
<td>Create</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Enhancing cognitive rigor

• Where do I start?
  • Remember: as cognitive rigor increases, student engagement with classroom instruction also increases – which results in improved learning outcomes.
  • Check the cognitive rigor of your activities and assessments to make sure you’re covering a range of the CRM for the learning outcomes for your subject.
  • Consult the CRM to help you develop new tasks to fill in gaps and increase cognitive rigor.
  • Check your cognitive verbs – are your students really engaged in higher order thinking?
Enhancing cognitive rigor

Resources

• Check out Karin Hess’ website and download the CRM.
  https://www.karin-hess.com/free-resources

• If you’re looking for more detail on different cognitive verbs, the Queensland Curriculum & Assessment Authority has released a *Glossary of cognitive verbs* (2018).

• Professional Learning offered by UNSW Global
  https://www.unswglobal.unsw.edu.au/educational-assessments/services/professional-learning/
References


Thank you
Differentiated Rubrics for Assessment

Courtney Nelson
What is differentiation?

- Differentiation can best be summarised as recognising that all students have differences in their learning abilities, whether it be in their learning progression, language proficiency, or literacy and numeracy skills.

- Even a students' socio economic background and life experiences can have an impact on their ability for successful learning.

- The role of the educator is to adapt their teaching style to accommodate for these differences, while minimising the chance for failure.
Differentiation is difficult!

• The goal of the differentiated classroom and assessment should be to successfully meet the learning needs of all without increasing the achievement gap between able and less-able students.

• But how? – An incredibly useful tool for differentiated assessment is the rubric, for both teachers and students.
Rubrics

- A rubric is typically laid out as a matrix with clear expectations and marking values matched to each learning target that is being assessed.

- In order for a rubric to be most effective the objective for the task must be clear from the start.

- Students should have a solid understanding and be able to articulate what the objective of the assessment is and how they will be assessed, prior to the assessment.

- This will aid in performance and guarantee that clear expectations and tasks have been communicated and assigned accordingly.
Successful rubrics should contain:

- The key criteria that is being assessed.
  - (goals and objectives)

- Clear descriptors (for student and teacher) on various levels of student achievement.
Successful rubrics should contain: (cont.)

• Use age-appropriate language that is used in the classroom and for learning
  • The language of the rubric can be differentiated to suit the ability of the student, but should be similar to what has been taught/used in the classroom.
    • (This is incredibly important when using the rubric for feedback.)

• The rubric should reflect the varied levels of abilities.
  • Using the Hess Matrix (DOK, Blooms) can help to create a differentiated rubric that is suitable for all abilities, as well as assessing higher order thinking skills.
Successful rubrics should contain: (cont.)

• The skills assessed should be reasonably easy to measure

• Appropriate and meaningful reasons for assessment criteria (i.e. skills have been taught in the class and are curriculum aligned)

• The ability to act as a self-assessment tool (The rubric should not be a foreign tool for the students)

• Provide opportunities for students to be challenged and show progression.
Benefits of rubrics

• Providing constructive feedback on:
  • student strengths
  • learning and progression
  • Teaching practices

• Providing timely results that aid in:
  • student skill improvement
  • learning enhancement
  • Focused revision of student work

• An added bonus, rubrics can also be used to provide powerful feedback for parents and school officials!
<table>
<thead>
<tr>
<th>Questions</th>
<th>Exceeds (4)</th>
<th>Partially Meets (2)</th>
<th>Minimally Meets (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the text say? Briefly summarize the passage.</td>
<td>Gives an expert summary that includes the most important details from the text as well as key facts, details, and vocabulary.</td>
<td>A partial summary that may include misinterpretation/wrong information.</td>
<td>No summary is given. However, one or two facts from the text may be copied as a response.</td>
</tr>
<tr>
<td>How does it say it? How does the author develop the text to convey his/her purpose? (genre, format, organization, features, etc.)</td>
<td>The &quot;gist&quot; is well organized and clear. Includes important/significant examples from the text. It includes elements of the author's craft and structure (voice, imagery, mood, pictures). Uses appropriate vocabulary to identify the text features with a thoughtful explanation of how the author wrote the text.</td>
<td>The &quot;gist&quot; may not be organized in correct sequence. Includes examples from the text. It includes elements of the author's craft and structure (voice, imagery, mood, pictures). May not provide appropriate vocabulary to identify the author's craft. Provides a reasonable explanation of how the author wrote the text.</td>
<td>There is no organization and demonstrates confusion. Includes general/vague statements about the text. Does not provide appropriate vocabulary to identify the craft element. Includes an inadequate explanation of how the author uses the craft of writing to convey his/her message.</td>
</tr>
<tr>
<td>What does the text mean? What theme, concept, or gist is the author trying to get you to understand?</td>
<td>Able to accurately interpret and explain the message in the text. Provides important supporting evidence to justify/support thinking.</td>
<td>A reasonable explanation of the message from the text. Provides relevant supporting evidence to support/justify thinking.</td>
<td>Incomplete explanation of the text and its message. Provides little or no evidence to support/justify thinking.</td>
</tr>
<tr>
<td>What connections can you make? How does the message from the passage effect your life? How does it effect others? Why should you share the passage with others?</td>
<td>Makes a significant connection to the world, other texts, or themselves to the main idea or message of the text. Provides insightful examples to support thinking.</td>
<td>Makes a relevant connection to the world, other texts, or themselves to the main idea or message of the text. Provides adequate examples to support thinking.</td>
<td>Makes a general/vague connection to the world, other texts, or themselves to the main idea or message of the text. Provides general examples to support thinking.</td>
</tr>
</tbody>
</table>

Sample Rubric

How is an 'expert summary' defined? Needs to be more specific, i.e., 4-5 key facts, etc.

What's 'little or no evidence'? What's the difference between a 1 and a 2 in this column?
<table>
<thead>
<tr>
<th>Skill that is being assessed</th>
<th></th>
<th></th>
<th>Scoring system (i.e. 1-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses capitals and full stops correctly.</td>
<td>5-6 sentences start with a capital and end with a full stop.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
assessment evolution conference 2019
References

• https://www.state.gov/documents/organization/261969.pdf

• http://inclusiveclassrooms.org/inquiries/differentiation-supports-and-assessments
A teacher-based assessment validation framework: Teacher assessment literacy and teachers as sources of evidence

‘Seun Ijiwade
Big ideas

• Why a teacher-centred validation approach?
• Teacher judgment in classroom assessment
• Advances in assessment validation
• Principles for validating classroom assessments
• Teacher-centred assessment validation
• Teachers as sources of evidence
• Teacher assessment validation literacy
• Questions, comments and feedback
Why a teacher-centred validation approach?

• The situated nature of classroom assessment (CA)
• Perception about the level of importance for inferences in CA
• The complexity of assessment methods
• The nature and number of CA users
• The role of theory in CA.

(Implicit and/or explicito theories and concepts “are instruments that we use to guide our actions” (Stone & Zumbo (2016), pp. 559-560)

• The use of informal assessment methods
  (Bonner, 2013, p. 91)
Teacher judgment in classroom assessment

Reality can be so complex that equally valid observations from differing perspectives can appear to be contradictory.
Teacher judgment in classroom assessment

Criteria or instinct?

Extract 1 from a HSC moderation group:
R: There is no obvious evidence of an introduction in terms of paragraphing. However, Vince would appear to have some appreciation of the generalities of the issue that he’s considering...We’ll be generous and give him a high. So, we’ll total that and probably be horrified at the high score he’s got. Four highs which gives him that’s a total of 16. Gives him a B plus. My instinct now comes in and I think really he’s not worth a B plus. This is now my subjective ... I would probably be more inclined to give him a B. But I’m going to be honest and I’m going to give Vince a borderline B plus. Which I think is generous and I think perhaps a B would have been a much more appropriate mark.

(Davison, 2004, pp. 314-319)
Extract 2 from a HSC moderation group:

R: I think you and I are actually, what we’re doing is being quite legalistic about this, aren’t we?

R: I have a dreadful conflict within myself as to what I call my intuitive judgment, which is what you are going on, I think.

J: It is, it is.

R: And thinking about the future and where is this child going, can this child cope (with university)? But that’s not what we’re being asked to do. We’re being asked to tick the box.

(Davison, 2004, pp. 314-319)
Being legalistic or being human?

Extract 3 from a HSC moderation group:

M: I think we all agreed that we are human, and if we saw someone was having hardship, particular cases of where a student beats the odds, then again, where there was borderline decision to be made, we’d err on the side of the higher mark . . .

M: It’s really those border areas and I think, if truth be told, subconsciously, we are all affected by the students in front of us when we know them.

R: By definition, I mean, we’re human beings, aren’t we?

(Davison, 2004, pp. 314-319)

So, we need a systematic way to validate teacher-based assessment
Advances in assessment validation

What is validity in educational assessment?

• **1923 - 1954**: Validity is the degree to which a test measures what it is intended to measure (APA, 1954).

• **1966, 1974**: Validity viewed as a trinitarian approach, ensures the content, criterion and construct validity of a test. (AERA, APA, and NCME, 1966, 1974).

• **1980s**: Validity viewed as a “unified approach”, seen as “construct validity” as well as the “social consequences” of decisions made from tests (Messick, 1989) and as can be presented as a “validity argument” (Cronbach, 1988).

• **1990s**: Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests (Kane, 1992 & AERA, APA, & NCME, 1999, p. 9) and constructed through argument (Kane, 2006, 2013 and Bachman, 2005).
Advances in assessment validation

What is validity in educational assessment?

- 2000s: Validity becomes the extent to which plausible evidence are provided based on the inferences made on test score interpretations. This process are presented in form of an argument, argument-based approach (Kane, 1992, 2001, 2006, 2013, Mislevy, 1999, Bachman, 1990).

- The process of validation involves accumulating relevant evidence to provide a sound scientific basis for the proposed score interpretations. It is the interpretations of test scores for proposed uses that are evaluated, not the test itself (AERA, APA & NCME, 2014, pg. 11).

- Inferences are made from the “grounds” to the “claims”

Argument framework of Mislevy’s Adaptation of Toulmin
Advances in assessment validation

What evidence and how gathered (sourced)? It’s based on inferences

Six inferences by Enright, Chapelle & Jamieson (2007)
Advances in assessment validation

What does validity mean in a classroom assessment context?

- Classroom assessment is different; main purpose is to improve teaching and learning. Assessment is an iterative process to both inform the teacher and students about what they have achieved, but also to form future learning and teaching.
- Classroom assessment is used to identify “where the learner is going”, “where the learner is right now” and “how to get there” (Black and Wiliam, 2018).
- Validation involves accumulating evidence for the score interpretation based on the inferences relevant to the assessment context, purposes and instructional process (Brookhart & Helena, 2003; Bonner, 2013).
- Classroom assessment validation is now about the practicality, usefulness and trustworthiness of decisions to teaching and learning.
Principles for validating CA

• Inferences made in classroom assessment (CA) are those which support classroom decisions and instructional activities.

• Ambitious decisions/claims will require ambitious evidence. As low stakes assessment, CA requires relatively plausible inferences/assumptions.

• Most plausible inferences will be domain definition, evaluation, explanation and utilization.

• Inferences are developed by teachers based on their conceptual framework (Black et.al 2010); teachers need to be able to articulate the claim to be made and the inference for such claim to ensure trustworthiness of their judgements.
Principles for validating CA …

• New claims will require new evidence; the unintended consequences of score interpretation should be reported

• Test score interpretations are premised on the context of the assessment

• Sources of evidence (quantitative and qualitative) should be explored by all assessment stakeholders before attempting to use assessment data (Bachman and Palmer, 2010)
Teacher-centred assessment validation

The framework

- **Test use**
  - **Utilization**: Assessment report helps teachers to classify students appropriately and plan instruction. Students use feedback to set learning goals.
- **Construct**
  - **Explanation**: Test takers' cognitive processes during the test similar to the skills in the subject area.
- **Observed score**
  - **Evaluation**: Assessment report provides information on the tasks completed by the students to show specific strengths and weaknesses.
- **Observation**
  - **Domain description**: Assessment tool actually measures the necessary aspects of the skill development in subject area.
- **Target domain**
Teachers as sources of evidence

- The teacher’s role in validating CA is pivotal.
- The recent educational standards argue “validation is the joint responsibility of the test developer and the test user” (AERA, APA, NCME 2014, p. 13).
- “Teacher self-inquiry may be more effective than researcher-driven inquiry for improving the validity of teacher practice” (Bonner, 2013, p. 103).
- The teacher’s role is to provide evidence for the claims in the interpretive framework.
Teacher assessment validation literacy

• A lack of theory on the appropriate methods for validating CA is evident despite organised approached used for validating high stakes assessment by assessment specialists (Bonner, 2013)

• Teacher-based validation methods described today can inform our thinking about CA and what is within our power as teachers

• A teacher-based framework is a socioculturally-informed and more pragmatic approach to CA validation, requiring little or no statistical sophistication

• More professional learning or personal reading of literature can be helpful in developing validation skills
assessment

evolution

conference

2019
Giving feedback to students: Helpful or harmful?

Mary-Anne Kefaloukos
Self-evaluate: "At giving feedback to students:

...I am confident that I always help my students meet their learning goals."

... I could improve at writing more effective comments.

...I don't give any feedback because my students don't do anything about it anyway."
Assessment design - Is effective feedback possible?
Why do we give feedback to students?

To reduce discrepancies between current understandings/performance and a desired goal.

(Hattie & Timperley, 2007)
Three important questions when giving feedback:

• Where is the learner going?
• Where is the learner right now?
• How is the learner going to get there?
Which question does this feedback answer?

Geometry HWK 1

Very good, revise the reasoning required when finding an angle in an isosceles triangle.
"...revise the reasoning required when finding an angle in an isosceles triangle." is an example of feedback that answers:

Where is the learner going?

Where is the learner right now?

How is the learner going to get there?
Hattie & Timperley’s model of effective feedback

4 levels of feedback:

• Feedback on the task
• Feedback on the processes used to complete a task
• Feedback on self-regulating
• Feedback on the student
Feedback on the task

• The student is right/wrong.
• How neatly the student has completed a task
• Better used for correcting misconceptions

“You need to include appropriate scientific language.”
Feedback on the processes used to complete a task

- Corrects the processing of information, or the learning processes requiring understanding or completing the task

“Edit your piece of writing for punctuation.”
Feedback on self-regulating

• Greater skill in self-evaluation
• Greater confidence to engage further on a task

“You know how to structure an essay. You need to take steps to see if you have structured your essay correctly.”
Feedback on the student

• Unrelated to the task
• Directed to the ‘self’

“You are a great student.”
<table>
<thead>
<tr>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback on Task</td>
</tr>
<tr>
<td>Feedback on (learning or thinking) Processes</td>
</tr>
<tr>
<td>Feedback for Self-regulation</td>
</tr>
<tr>
<td>Feedback on (student's) Self</td>
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</tbody>
</table>
The effectiveness of the 4 levels of feedback:

- Feedback on the student (personal praise)
- Feedback on the task (right/wrong)
- Feedback on process &
- Feedback for self-regulation
“To improve method, carefully read marking criteria.”
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<td>Yes</td>
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<td>No</td>
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Give effective feedback

Paper handout: Week 7 Weekly Writing Task

Read the poem and provide one piece of effective feedback.

Outside scandal and forbidding,
An aggressive appearance and stress,
very much showing off,
Traditional clothing,
suits him well,
Inside gentle and thinking,
In the moment, thinking present,
despite imaginary lands,
Solving problems,
inside his head,
A round him people gather,
All from different places,
a great tribal meeting,
Other clans,
outside or inside,
A creative poem but I'm not sure what it is really about.
Your turn: Provide your feedback on the poem here.
Take-away points

• For more info: https://www.aitsl.edu.au/teach/improve-practice/feedback

• Design your assessments to be fair
• Follow up on the feedback you give
• Indicate if the student has achieved their goal
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Delegate roundtable
Some questions to consider

• Research suggests that a learning progression is more of a map rather than something like a scope and sequence and does more than just list the order of what to teach next. Would you agree?

• If a learning progression describes increasingly more complex content & skills (rather than more difficult), what are effective ways to measure student achievement and/or development?

• Is there value in students using a learning progression as a self-assessment tool? Is it something you would/could implement in your school?
Your thoughts?
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Assessment Evolution 2019
Panel discussion
The panelists

• Professor Chris Davison

• Brad Campbell EdD

• Paul Gavin
Original Definition of AfL

• 'Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.' (ARG, 2002)
What teachers need to know?

Where the learners are?
- Current level of ability/prior learning
- Motivation
- Learning needs/learning style

Where they need to go?
- Intended learning outcomes
- Knowledge/skills
- Performance required
- Graduate attributes

How best to get there?
- Approach/strategies/method of teaching
- Assessment strategies
- Resources/support needed

Point of differentiation
Framework for Differentiation

- Low Performing
  - Very difficult
  - I am lost
  - Unclear instruction
  - Unmotivated
  - Disliked it
  - Too hard
  - Nerve heard
  - I don’t understand
  - Completely new

- High Performing
  - Challenging
  - I learned more
  - Gives me more opportunity to learn
  - It pushes me beyond what I can do

- Easy Task
  - I feel supported
  - Just right
  - I enjoyed it
  - I feel that I can succeed

- Difficult Task
  - Too easy
  - Very basic
  - Nothing is new
  - Repetition
  - Boring
  - I know it already
  - Only for beginners
  - I want a more difficult stuff
  - I can do that
Framework for Differentiation
Framework for Differentiation

- Difficult Task
- Easy Task
- Low Performing
- High Performing
- Frustration Zone
- Boredom Zone
- Self-directed
- Guided Practice
- Modelled Practice
Framework for Differentiation
Assessment Best Practice

• Principals are supporting teachers to develop a high-level of assessment literacy
• Teachers are using assessment and assessment data to effectively support student learning
• The school is communicating the purpose of assessment to parents and is establishing a strong home-school collaboration
• Students are actively engaging in assessment, learning and teaching activities.
Framework for Building an Assessment Culture in Schools

LEARNING

- Teachers’ AL
- Students’ AL
- Parents’ AL
- School Head’s AL

Support
Engagement
Collaboration
Expectations
What does assessment best practice look like now and in the future?
Further questions

1) What do we actually mean by assessment?
2) Why do we assess?
3) Is assessment best practice the same for everyone?
Professor Yong Zhao

- There are only a limited number of outcomes worth pursuing
- Students can achieve outcomes through teaching
- Students are capable of achieving similar progress in a specific timeframe
- Students are interested in pursuing the outcomes.
Assessment is a grab-all term

Different audience ... different purpose
In Victoria ...

1. Ongoing
2. Inform the learner and teacher
3. Provide feedback and encourage reflection
4. Promote further learning
5. Share knowledge to enhance learning
In NSW ...

1. Assessment of learning
   point in time, places students on a continuum

2. Assessment for learning
   shows where students are, informs next steps

3. Assessment as learning
   part of learning process, student actively involved
We count what counts

Knowledge and memorisation

The 4 Cs: critical thinking, creativity, collaboration and communication

UK levels

NAPLAN
Best practice

Continuous and unobtrusive
Integrating and embedded
Feedback
Focused on growth not comparison
Values student voice
Promotes action to inspire further learning
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