Formative Assessment: Myths and Realities

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This presentation will challenge participants to assess their own assumptions about formative assessment, its definition and key characteristics, its relationship to summative assessment and its impact, with a view to informing and shaping new understandings of its use and potential for enhancing student learning.
Overview

1. Formative assessment: Shifting definitions and changing characteristics
2. Formative vs summative assessment
3. Realizing the (potential) impact of formative assessment
4. Implications for enhancing student learning
What is your definition of formative assessment?

– Jot down your set of key characteristics and then turn that into one (long) sentence
– Share with your colleagues
– What are the similarities? differences? gaps? problems?
Formative assessment … late 1990s

“The term *formative assessment* is to be interpreted as encompassing all those activities undertaken by teachers, and/or by their students, which *provide information to be used as feedback to modify the teaching and learning activities in which they are engaged*”

Black & Wiliam (1998)
Formative vs summative assessment

Adapted from Wiliam (2001):

- **Time/frequency:**
  Summative assessments are retrospective (even if used to predict future performance); formative assessments are prospective.

- **Format/type of assessment:**
  The formative-summative distinction applies not to the assessment itself, but to the use to which the information arising from the assessment is put, i.e. the same assessment can serve both functions.
• **Purpose:**
Summative assessments are assessments of what the student has learnt, knows, understands or can do; formative assessments are assessments of what students need to learn (and teachers teach)

• **Nature of feedback:**
Summative assessment requires teachers to understand the standard; formative assessment requires learners to understand the standard, and for teachers to understand the standard, *analyse* the gap between present and desired performance, and be able to break this down into small, comprehensible steps that can be communicated to the learner (but see Sadler, 2011)
• **Teacher and student roles:**
Summative assessment requires teachers become members of a community of practice, while formative assessment requires learners themselves become members of same community of practice.

• **Consequences:**
Summative assessments are validated by consistency of meanings (any negative consequences tend to be justified by need to establish consistency across different contexts and assessors); formative assessments by their consequences (i.e. **successful action in support of learning**).
However, although there is widely accepted evidence of its positive impact of learning (Black & Wiliam, 1998), there have always problems with the interpretation of formative assessment; at best it may be “fairly mechanical and behaviouristic … in the graded test tradition”; at worst summative, “taking snapshots of where the children have ‘got to’, rather than where they might be going next” (Torrance, 1993, p. 340).

In many cases this is because of the dichotomy “formative vs summative” itself, which leads to over-simplification and misunderstanding, eg.

https://www.youtube.com/watch?v=bT GnJnuVNt8
The reality on the ground … A lot of confusion

“I guess, let me see, examination and uniform tests will be more like formative assessment. But the revision tests … they will be tested on vocabulary and grammar items that they have learnt. Um… I feel part of that can be considered summative because the marks are counted towards their daily mark, but the teachers can learn something from their performance or maybe just some of the materials and I am trying to help them improve. I think that’s also formative assessment. Then we also have dictations. That’s also formative assessment. When they do presentation, group presentation, if that is not counted towards their daily mark, ok? Or they just give marks to their classmates when they do presentation. That’s more like formative assessment”
And some rare examples of increasing clarity …

“We are inserting (into the curriculum) different types of assessment, formative assessment, to help us in understanding the students’ learning a little bit more. And of course, we need summative assessment to have an overview of what the actual learning has tackled”
1. Time/Frequency:

“Formative is kind of **continuous assessment** and at the end we will have the summative … the students have only one chance”

“We **test different topics and at the end 20% of these performance will be counted** and 80% of the marks will come from the exam, so I consider the tests will be formative”

“… now students are doing a lot of things in the classroom and then finally they have to present their findings, and we assess the students **more continuously**, instead of just a final grade”

“I don’t really have anything like structured formative assessment, so to speak, except … **the continuous kind of assessment** over the term. But again it’s very traditional. You receive homework, you mark them, you return them”
2. Format/type of assessment

“For formative, their **daily work** will be counted…This year, including **their dictation, their tests** and then we have included **their presentation marks**, students have to come out and give a presentation. And then we also include the mark of book report. We like to encourage them to read books. In this year, we introduce the mark for **book report**…and then they will have a final exam and we’ll combine the marks”

“…not very formative, except we integrate one part that can be considered as formative assessment as we have the assignment marks which comes from their **daily homework/tasks**”
“Over the past few years there is a shift from summative to formative. We’ve tried to incorporate the formative assessment like the project, like portfolio into our yearly exam”

“In our school there is the combination of formative and also summative approaches. For the formative for the senior forms we ask the students to do a portfolio. And all the students’ work will be kept in a folder, so we call that the portfolio and also we’ve got a summative assessment which is the yearly examination”

“When I arrived, it was simply... It was 100% summative. We have since put in the project and our presentation”
3. Purpose

“Of course it depends on individual teachers, … but now we have reduced it (tests) to one because of too many things going on. And then one exam, mid term and final exam. Um… seems that it is more summative to me. But for me, I try to just take part of the exam and throw it back to the students especially when they are weak in a certain part. And then I will give them back as an exercise. So, in that sense, I guess it’s formative”

“I think it’s formative because they will do some further improvement in their coming writing”
4. Nature of feedback

“For things you call formative students get comments whereas in summative, they don’t. They just get a grade … or very very short and informal comments, like “Good”, “Well done”, “Work harder in composition”. Nothing else”

“We try to introduce the formative assessment, what we did is actually quite simple, a very basic formative form of assessment, to give students some comments I mean during the process of the project”

“I don’t know my understanding is correct or not but what I have observed so far as that basically what we called the formative assessment practice at our school is still quite summative. What makes the difference is just the feedback we gave students for each piece of writing task”
5. Teacher and student roles

“I think maybe **we teachers** need to set up the very clear criteria in assessing students’ work especially the formative ones”

6. Consequences

“Daily marks count 40%. Yes, 40%, while the examination counts 60”
“It is essential to work to a careful definition of formative assessment:

An assessment activity can help learning if it provides information to be used as feedback, by teachers, and by their [students] in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged. Such assessment becomes formative assessment’ when the evidence is actually used to adapt the teaching work to meet learning needs. (Black et al. 2002)

A frequent misunderstanding is that any assessment by teachers, and in particular the use of a weekly test to produce a record of marks, constitutes formative assessment. It does not. Unless some learning action follows from the outcomes, such practice is merely frequent summative assessment: the key feature, interaction through feedback, is missing”.

“It's a popular idea - educational assessments are either 'summative' assessments of learning or 'formative' assessments for learning. But just how fundamental is this distinction? And is it truly useful? An alternative is to recognise that the **essential purpose of assessment in education is to establish and understand where students are in an aspect of their learning at the time of assessment.** This usually means inferring what they know, understand and can do from **observations of their performances and work.** The question of what students know, understand and can do can be asked before, during or after teaching -- or without reference to a course of instruction at all. The question also can be addressed at differing levels of diagnostic detail. For example, assessments can be used to establish overall levels of student achievement in a subject such as Physics; mastery of particular topics such as energy and mechanics; or the ability to apply Newton’s First Law to explain the relationship between force and motion in practical situations. These assessments provide information about increasingly narrow and specific areas of learning, but they differ in degree, not kind. They share the same underlying purpose: to establish and understand where students are in their learning. Information about where students are in their learning can be used to plan future action. This is true whether assessment information is collected as part of a teacher’s day-to-day work and used to guide next steps in teaching and learning, or through international programs such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS), and used by education systems to guide future policies and programs …”
## Applying Strategies For Formative Assessment

<table>
<thead>
<tr>
<th>What do you learn?</th>
<th>Short-cycle Assessment</th>
<th>Medium-cycle Assessment</th>
<th>Long-cycle Assessment</th>
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<tbody>
<tr>
<td>Where is each student in his or her learning right now?</td>
<td>Where is each student in his or her learning right now?</td>
<td>How much progress is each student making?</td>
<td>Is each student growing as planned? Where will they be at the end of the year?</td>
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| Where are you in the curriculum? | Daily lesson | Within and between teaching units | Across units, terms |

| When in the teaching process? | Minute-to-minute: 5 seconds to 2 hours | 1 to 4 weeks | 9 weeks, end of semester |

Source: Learning Assessment: A report on teaching assessment in initial teacher education in NSW, Board of Studies NSW 2016, p.22.
What about assessment *of*, *for* and *as* learning?

The more recent terms ‘assessment *of* learning’ and ‘assessment *for* learning’ suffer from a similar lack of clarity. For example, evaluations *of* learning progress are essential *for* effective teaching and learning. Perhaps the time has come to ask whether our attempt to categorise educational assessments as either ‘formative’ or ‘summative’ is serving us well. A more unified theory of assessment might begin by observing that the fundamental purpose of assessment in education is to establish and understand the points that students (either as individuals or groups) have reached in their learning at the time of assessment, and that there are then different ways to use this information.”

<table>
<thead>
<tr>
<th>In-class contingent formative assessment-while-teaching</th>
<th>More planned integrated formative assessment</th>
<th>More formal mock or trial assessments modeled on summative assessments but used for formative purposes</th>
<th>Prescribed summative assessments, but results also used formatively to guide future teaching / learning</th>
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<tr>
<td>An integral but very informal part of every teacher’s daily practice</td>
<td>An integral part of the learning and teaching cycle, i.e. part of effective teaching and planning for the future</td>
<td>A time for taking stock, assessing how individuals are performing compared with whole group.</td>
<td>A distinctive stage at the end of a unit of learning and teaching.</td>
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<td>Often spontaneous and contingent when the need arises</td>
<td>An informal planned process during the course of the year tailored to the needs of the individual students and class</td>
<td>Usually pre-designed, sensitive to needs of students but also to the demands of external requirements</td>
<td>Pre-determined, relatively formal and set at beginning of unit of learning and teaching</td>
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<td>Learner-referenced</td>
<td>Criterion-referenced, but in relation to learner’s starting point</td>
<td>Criterion-referenced, but in relation to system-level norms</td>
<td>Norm-referenced and criterion-referenced</td>
</tr>
<tr>
<td>Focus on the learning process</td>
<td>Focus on the learning process and student progress</td>
<td>Focus on student progress and gap between what should be and is.</td>
<td>Focus mainly on the product of learning, and what student needs to do next</td>
</tr>
<tr>
<td>Indirect or implied feedback, co-constructed by students and teacher</td>
<td>Direct qualitative feedback, may involve multiple and varied sources eg. self, peers, teacher etc.</td>
<td>Direct qualitative feedback, may indicate profiles or grades, but still extensive student involvement</td>
<td>Report in profiles, levels, and marks by teacher, but preceded and/or followed by formative self and peer evaluation and extensive teacher feedback</td>
</tr>
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Implementation Process

Teacher plans integrated teaching and assessment program to meet the syllabus standards and levels of achievement

Teacher periodically reports on student progress against the standards

Teacher plans the next step to ensure the student works towards or beyond the syllabus standards

Teacher gives feedback to each student about progress

Student and parents receive progress reports and understand next step in student’s learning

Student acquires knowledge, skills, understanding and demonstrates completion of that step

Student renews goals or sets new goals

Student receives ongoing information about what they need to learn next

Student empowered to exert control over their own learning

Student acquires new knowledge, skills and understanding

Teacher continually monitors and assesses student work against the syllabus standards

Teacher informs students of what they need to learn and what good work looks like

Teacher delivers integrated teaching and assessment program

Source: Learning Assessment: A report on teaching assessment in initial teacher education in NSW, Board of Studies NSW 2016, p.19.
Summary:

Two distractions to moving forward...

The *naming* game ...
The *blaming* game ...
Worldwide there has been a concern to increase teachers’ assessment literacy, as well as that of other stakeholders (Taylor, 2009), in part due to concerns that teachers may lack sufficient training in what educational assessment entails (Malone, 2011; Stiggins, 1991, 2008, 2009b; Taylor, 2009) and/or may lack the confidence or skills required to perform their assessment duties in a competent manner (Stiggins, 2008, September, p. 8).

Hence, a lot of investment in assessment “education” and resource development, parodied by Jim Popham, see http://vamboozled.com/ucla-professor-emeritus-jim-popham-his-testing-and-teacher-evaluation-infomercial/
“Student survey data suggests that NSW teachers are more inclined to use formative assessment (including feedback to students) than the average of OECD teachers …Teachers are encouraged to use a variety of assessment techniques that are valid, reliable and appropriate to the age and stage of learning. The development of these teaching skills has been a major focus of teacher professional learning opportunities in NSW schools over the past decade. Teacher survey data from OECD’s Teaching and Learning International Survey (TALIS) indicates that 80 per cent of NSW teachers who participated in professional development relating to student evaluation and assessment practices reported that it had a moderate to large impact on their teaching”

But perceived ‘problems’ with teachers:

- OECD review of Australian assessment practices undertaken in 2011 found that when teachers graded against national A-E standards, the consistency of their judgements within a school was weak (Goss et al 2015).

- A 2013 Staff in Australia’s Schools (SiAS) survey reported that 25.7 per cent of primary teachers identified the need for more professional learning in ‘making effective use of student assessment information’. The findings were similar for secondary teachers.

- The apparently “low” levels of assessment literacy in initial teacher education a concern...
Considerable evidence that Australia has some way to go to ensure that teachers understand how to interpret and understand assessment data and effectively embed assessment within a framework of teaching and learning …

• Critical to note that assessment is not only important for teachers, but also students as both can reap the benefits of assessment to improve learning. Thus, assessment should not be teachers’ “secret business” as Sadler (1998) so eloquently puts it:

“We need to let students into the secret, allowing them to become insiders of the assessment process. We need to make provision for them to become members of the guild of people who can make consistently sound judgments and know why those judgments are justifiable” (p. 7)
“It may be assumed that the teacher's responsibility for making best use of assessment to improve student learning is fully discharged by providing extensive verbal communications relating to assessment task specifications (and possibly fixed assessment criteria); information about the quality of an appraised work; and advice about how future responses to similar assessment tasks could be improved …feedforward and feedback respectively. However, empirical evidence shows that while these communications may be appreciated by students, they often lead to little if any improvement in subsequent submissions… The problem lies less with the quality of feedback than with the fundamental assumption that telling, even detailed telling, is an effective approach to complex learning. Because feedback is commonly expressed in verbal form, learning from being told is flawed as a general strategy because the conditions for the statements to make intimate connection with the student work (with a view to future work) are frequently not satisfied …
…A proposed alternative to the usual sequence of [task – response – appraisal – feedback] is to make intensive use of purposeful peer assessment as a pedagogical strategy, not just for assessment but for substantive aspects of the course as well. Students need to grasp three groups of concepts in particular – response genre, quality, and criteria – if interactions between teachers and learners are to be formatively effective, and capability in complex appraisal is to be developed. These assessment concepts must be understood not as abstractions but as core concepts that are internalised, operationalised and applied to concrete productions. Unless this occurs, the key assessment concepts are likely to remain submerged and invisible.”


Egs. The formative classroom, https://www.youtube.com/watch?v=rL54bfmZPzY; What students want (Assessment for Learning)
Applications: The TEAL project

• An assessment ‘toolkit’ for use by all teachers to help them assess the stage of development for EAL students in speaking, listening, reading and writing, and the implications for learning and teaching, see http://teal.global2.vic.edu.au/

• Based on assessment for learning principles but from a Vygotskian perspective (eg. Lantolf & Thorne, 2006), rejecting the dualism inherent in the formative and summative distinction, seeing assessment and teaching as part of same process to support development
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
An online ESL Assessment Resource Centre, consisting of four key components:

1. **Teacher professional learning modules** - containing activities and background material about assessment principles and processes, with video and text-based resources, including explanations of assessment in language other than English, see [http://teal.global2.vic.edu.au/esl-students/](http://teal.global2.vic.edu.au/esl-students/)

2. **An assessment tools bank** – containing a range of assessment tools and tasks cross-referenced according to language mode, macro-function (i.e., informative, narrative, persuasive), VELS EAL stages and Year levels.
The common assessments tools include

• A prototype teacher-based assessment system
  • for the collection and analysis of oral and written language samples and exemplars aligned with the ESL Continuum to provide information on students’ English language and literacy development.
  • including strategies for evaluating students’ L1 language and literacy development.
• A calibrated item bank of reading and vocabulary items linked to texts
  • to be used in a computer adaptive testing (CAT) system aligned with ESL continuum to provide information on students’ English and L1 language and literacy development at the four NAPLAN assessment points Years 3, 5, 7 and 9.
  • undertaken with Educational Assessment Australia, UNSW Global.
3. Assessment for teaching and learning exemplars –


4. An online teacher discussion forum –

A key challenge ... 

A key challenge is to maintain the balance between the “measurement” and formative feedback feed forward functions of the tools so that neither assessment purpose dominates nor undermines the other, but both are enhanced by the presence of the other, hence creating a system that provides high quality information to all stakeholders in a form that is tailored for their needs.
Implications

• Look back at your definition of formative assessment?
• What would you keep? What would you change?
• What are the implications of these developments for you? Your students? Your school?