Making the most of low stakes assessments

Jane Jones
Cambridge Mathematics Symposium - 21 March 2018
Starting point

- By ‘low stakes’, I mean assessments that are not part of accountability measures:
  - principally, formative assessment activities that are part of day-to-day teaching - e.g. questioning
  - but also tests/assessments that may feed into pupil progress meetings or other tracking.
Thinking about low stakes assessments

... why assess?

... what is assessed?

... in what ways do/could teachers assess pupils’ learning in mathematics?

... what happens as a result?
Low stakes assessments - why and what

Why?
- My premise: to find out how well pupils are learning.

What?
- Most emphasis on knowledge and proficiency; some on problem solving; least on reasoning
2017 KS2 test questions

Adam buys 6 bags of white balloons. Chen buys 3 bags of red balloons.

Adam says,

‘I have four times as many balloons as Chen.’

Explain why Adam is correct.

In this circle, $\frac{1}{4}$ and $\frac{1}{6}$ are shaded.

What fraction of the whole circle is not shaded?

Adam says,

0.25 is smaller than $\frac{2}{5}$

Explain why he is correct.
Low stakes assessments - ways

- Ways? Through:
  - what pupils write/do, including classwork, homework, tests/exams, practical activity and problem solving
  - what pupils say in their:
    - answers to teacher’s questions
    - explanations/reasoning
    - questions, e.g. when seeking help/clarification, or when taking their thinking/interest further/deeper
    - in discussions with other pupils.
Low stakes assessments - what happens next?

- What the pupil does/writes/says should be influential in what the teacher says next and/or how she/he adapts the teaching.

- When assessing written work, teachers/leaders sometimes use the information for intervention and follow-up teaching. Too rarely, they consider how the teaching approach might have supported or impeded the learning, and therefore seek to improve the approach and/or the curriculum planning.
Assessment as an integral part of teaching

<table>
<thead>
<tr>
<th>Before lessons</th>
<th>During lessons</th>
<th>After lessons</th>
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<td>- Planning - check essential prior learning</td>
<td>- Check learning by questioning, observing, listening - ask follow-up questions to probe.</td>
<td>- Reflection and marking - inform next lesson(s) and, possibly, intervention.</td>
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<td>- Decide on new learning - teaching strategy and careful choice of resources that allow understanding to be developed/deepened and misconceptions to arise.</td>
<td>- Provide ongoing informal feedback, usually verbally.</td>
<td>- Marking of tests/exams informs future teaching.</td>
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<td>- Be aware of key learning points and likely misconceptions/errors</td>
<td>- Use correct and incorrect responses and approaches to questions to make teaching points.</td>
<td>- QLA can support work to improve teaching and curriculum.</td>
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<td>- Adapt teaching in light of responses.</td>
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Final thoughts

- ... so much depends on the quality and richness of assessment and how teachers use it. These in turn depend on teachers’ subject and pedagogic knowledge.
- ... how well does assessment reflect the whole curriculum? Taken together, does it probe the breadth and depth of learning that all pupils should be experiencing: fluency (that flexible blend of understanding and proficiency), problem solving and mathematical reasoning?
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