Teacher Assessment in Primary Science (TAPS)
STEM Research conference
York, May 2016

Sarah Earle @PriSciEarle s.earle@bathspa.ac.uk
Symposium

• Overview of TAPS
• Use of TAPS pyramid self-evaluation tool

• Case study: Asima Qureshi
• Case study: Pauline Rodger
Teacher Assessment in Primary Science (TAPS)

Funded by Primary Science Teaching Trust. Based at Bath Spa Institute for Education. Working with TAPS project schools, PSQM, PSTT college fellows.

Aiming to develop support for a valid, reliable and manageable system of science assessment which will have a positive impact on children’s learning.
TAPS so far

- Reports summarising of approaches
- Pyramid self-evaluation tool with examples
- Focused assessment plans
- Examples of children’s learning

https://pstt.org.uk/resources/curriculum-materials/assessment
What does this look like in practice?

A Design-Based Research approach

Ongoing formative assessment can be summarised

Summative reporting e.g. based on range of info

Monitoring e.g. manageable records, moderation

Responsive teaching e.g. clear focus, Qs, feedback

Active pupil involvement e.g. self/peer assessment

Range of info/contexts supports validity (all areas e.g. WS)

Shared understanding and moderation supports reliability (consistency)

Focus, clear purpose and examples support manageability

The ongoing formative assessment can be summarised for different reporting purposes.

The base of pyramid encapsulates the principles of assessment for learning.

Introducing the TAPS pyramid for school self-evaluation
Pupils identify their existing ideas

Pupils assess peers' ideas and work

Pupils assess their own ideas

Pupil learning is supported by their active involvement (AfL)
How do teachers rate the TAPS pyramid?

<table>
<thead>
<tr>
<th>Feedback from 13 events from June 2015 to March 2016</th>
<th>New to TAPS pyramid</th>
<th>Had seen TAPS pyramid before</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of forms (N=267)</td>
<td>189</td>
<td>78</td>
</tr>
<tr>
<td>% of total number of forms</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Average rating of usefulness of TAPS pyramid tool</td>
<td>4.2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

(1 ‘not at all useful’ to 5 ‘extremely useful’)

Usefulness rating remains positive after time using it back in school.
How are teachers using the TAPS pyramid tool?

- Not yet but plan to use (not clear how): 30%
- Identified area/part to work on: 21%
- Shown to others/argue for science: 12%
- Used to self evaluate/audit: 23%
- Used to self evaluate and change made: 8%
- No: 6%
‘No’ or ‘Not yet but plan to’

“I wasn’t sure where to begin, what to tackle first”

“I'd like to use it now and feel that I understand it more this time around”

“not used yet- like it a lot but haven't had the time to fully explore or share it with colleagues”

“I have seen it before but not used it but now it is interactive I fully intend to use it and pass on the website to colleagues and encourage them to use it”
Used to audit or identify specific area

“give the children more responsibility for their assessment”

“identify progression across the school”

“help me plan an inset”

“have used it to suggest to staff that lots of different ways of recording and assessing science is okay”

“identifying things we do well vs those we need to do more of/some of (!) eg we don't do much peer and self assessment compared with teacher feedback”
Changing practice

“we discussed the pyramid during a science staff meeting following up the previous best practice meeting. It helped us to identify major gaps in our approach to science. We've since started Science Before and After entry/exit cards across the whole school which will provide great evidence for future moderations”

“I used it during the summer term to identify areas for development. I identified the need to report to parents and to continue to look at progression - we will report differently this year.”
Pyramid self-evaluation tool discussion

What questions does this raise about assessment in schools?

What questions does this raise about STEM research?

What questions does this raise about professional development?

https://pstt.org.uk/resources/curriculum-materials/assessment