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# Diversity of assessment literacy among in-service primary teachers

By Isabel Hopwood-Stephens, Institute for Education

Bath Spa University

[i.hopwood-stephens@bathspa.ac.uk](mailto:i.hopwood-stephens@bathspa.ac.uk)

# Presentation overview

- The problem: changes to assessment policy
- A possible solution: the TAPS pyramid
- Research questions: who is using it, and how?
- Analysis and Discussion: where are the differences?
- Implications of findings: teachers, school leaders and teacher trainers

# The problem

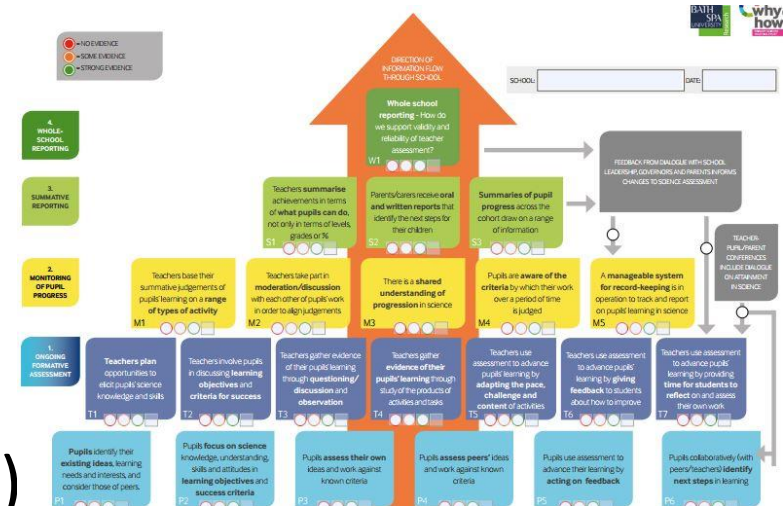
- Teacher judgment replaced by “best fit” statements and levelling in 1990s – attempt to standardise assessment
- SATs for measuring – and comparing – outcomes, including science
- Performance in SATs led to focus on testable outcomes for measuring children’s progress
- Primary curriculum – teaching and content - skewed by emphasis on written testing (Tymms, Bolden and Merrell, 2008)
- Review by experts found children progressing through schools with gaps in knowledge; teachers relying on best-fit levels descriptors instead of describing children’s depth of knowledge (DfE, 2011)

# The solution: improving learning and assessment

- Post-levels assessment of progress, where depth of learning is evaluated by the teacher from a range of data
- Less is more: a simplified curriculum that covers less topics in more detail
- Teacher judgments required...
- From a possibly deskilled workforce?..
- No central guidance on how to achieve this...
- Schools invited to find their own solutions (DfE, 2014)

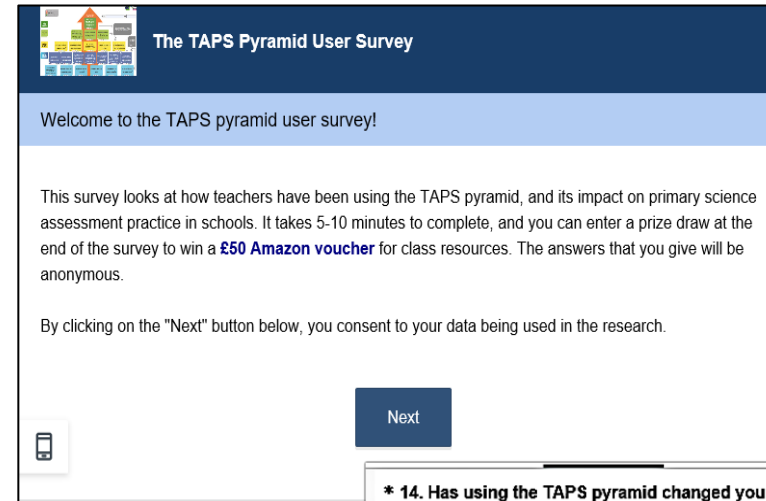
# The solution: for primary science

- TAPS pyramid (Davies et al., 2014)
- Evaluation tool for assessment skills
- Model of a “post-levels” framework
- Released in 2015 online
- Promoted to Science Subject Leaders (SSLs) and primary science subject networks
- Downloaded over 5,700 times in 45 countries (Hopwood-Stephens, 2018)



# RQs and Methods

- Who is using this tool?
- What impact is it having on their assessment practice?
- Is everyone using it the same way?
- Online survey
- 96 complete response sets
- Descriptive statistics for an excerpt of the data



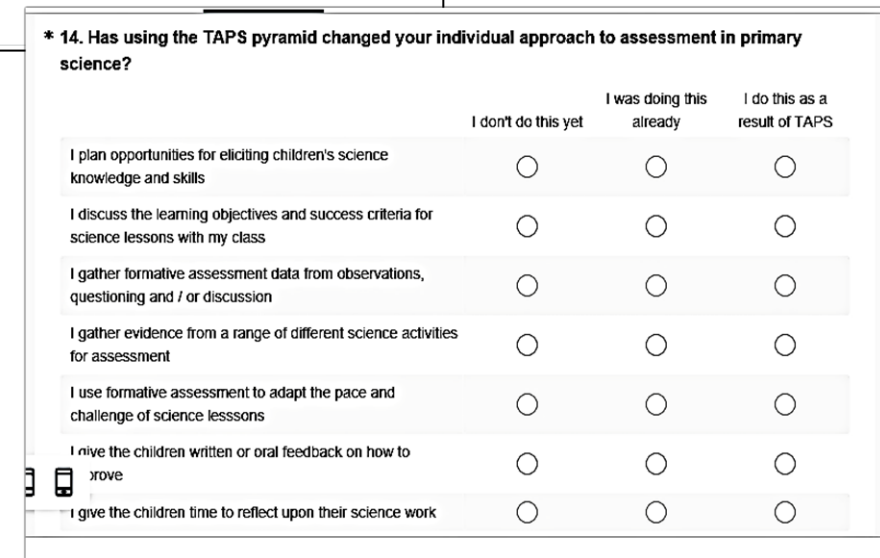
The TAPS Pyramid User Survey

Welcome to the TAPS pyramid user survey!

This survey looks at how teachers have been using the TAPS pyramid, and its impact on primary science assessment practice in schools. It takes 5-10 minutes to complete, and you can enter a prize draw at the end of the survey to win a **£50 Amazon voucher** for class resources. The answers that you give will be anonymous.

By clicking on the "Next" button below, you consent to your data being used in the research.

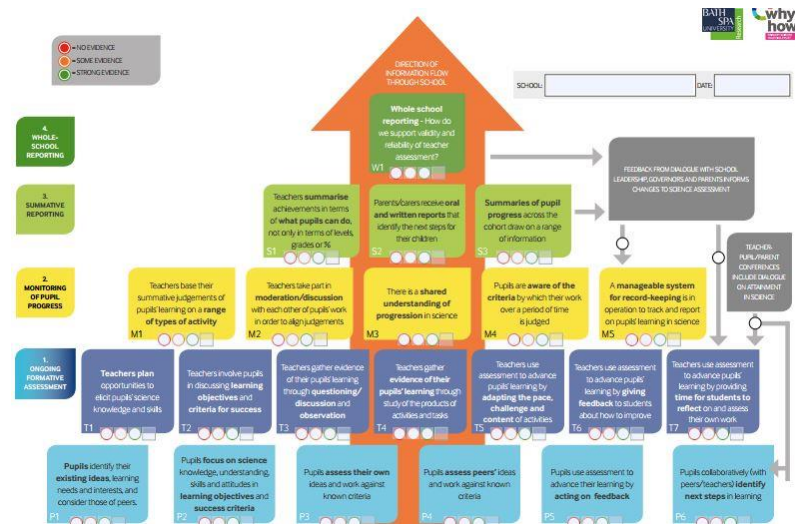
Next



\* 14. Has using the TAPS pyramid changed your individual approach to assessment in primary science?

	I don't do this yet	I was doing this already	I do this as a result of TAPS
I plan opportunities for eliciting children's science knowledge and skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I discuss the learning objectives and success criteria for science lessons with my class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gather formative assessment data from observations, questioning and / or discussion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gather evidence from a range of different science activities for assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use formative assessment to adapt the pace and challenge of science lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give the children written or oral feedback on how to improve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give the children time to reflect upon their science work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Survey design



Formative assessment activities in “blue layers” rationalised into nine statements



Participants selected a statement for each assessment activity:

- I was doing this already
- I do this as a result of TAPS
- I don't do this yet

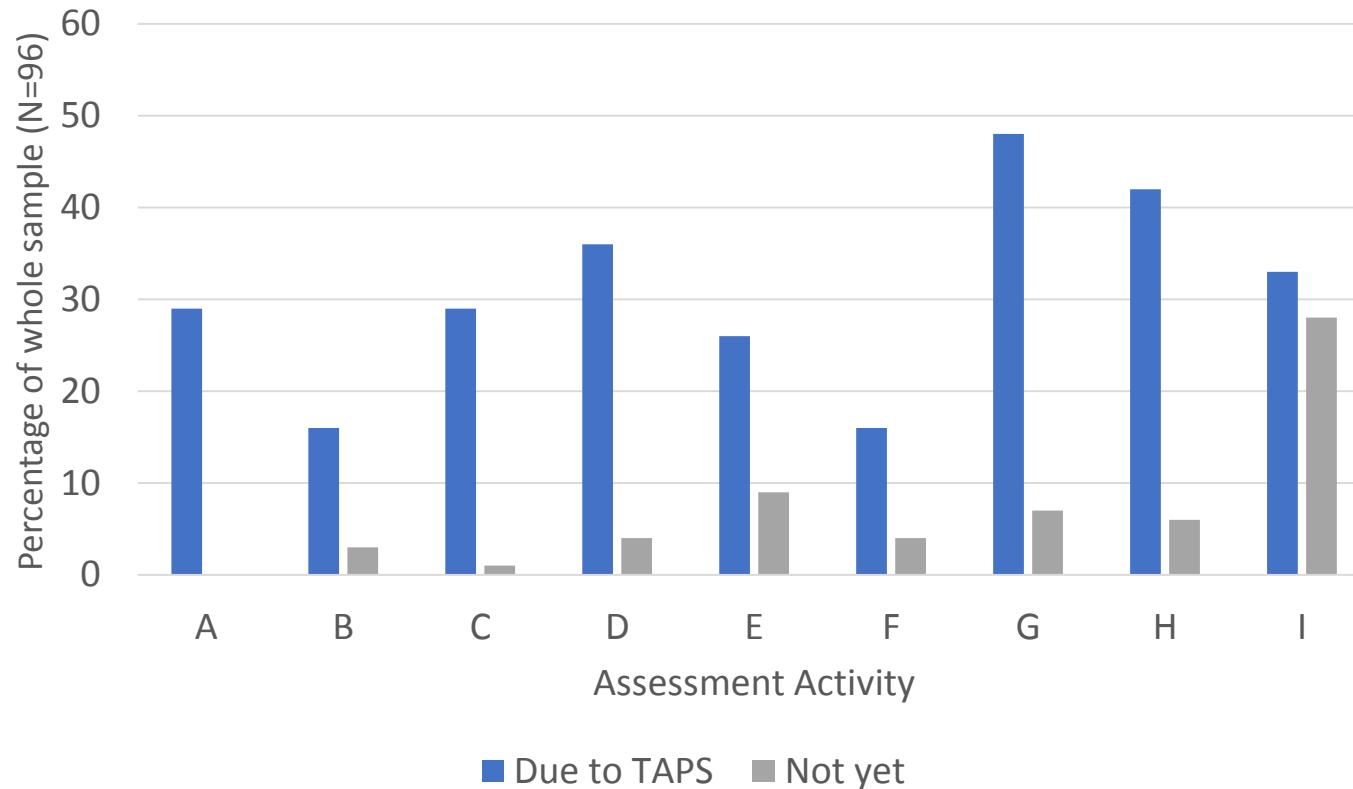


**\* 14. Has using the TAPS pyramid changed your individual approach to assessment in primary science?**

	I don't do this yet	I was doing this already	I do this as a result of TAPS
I plan opportunities for eliciting children's science knowledge and skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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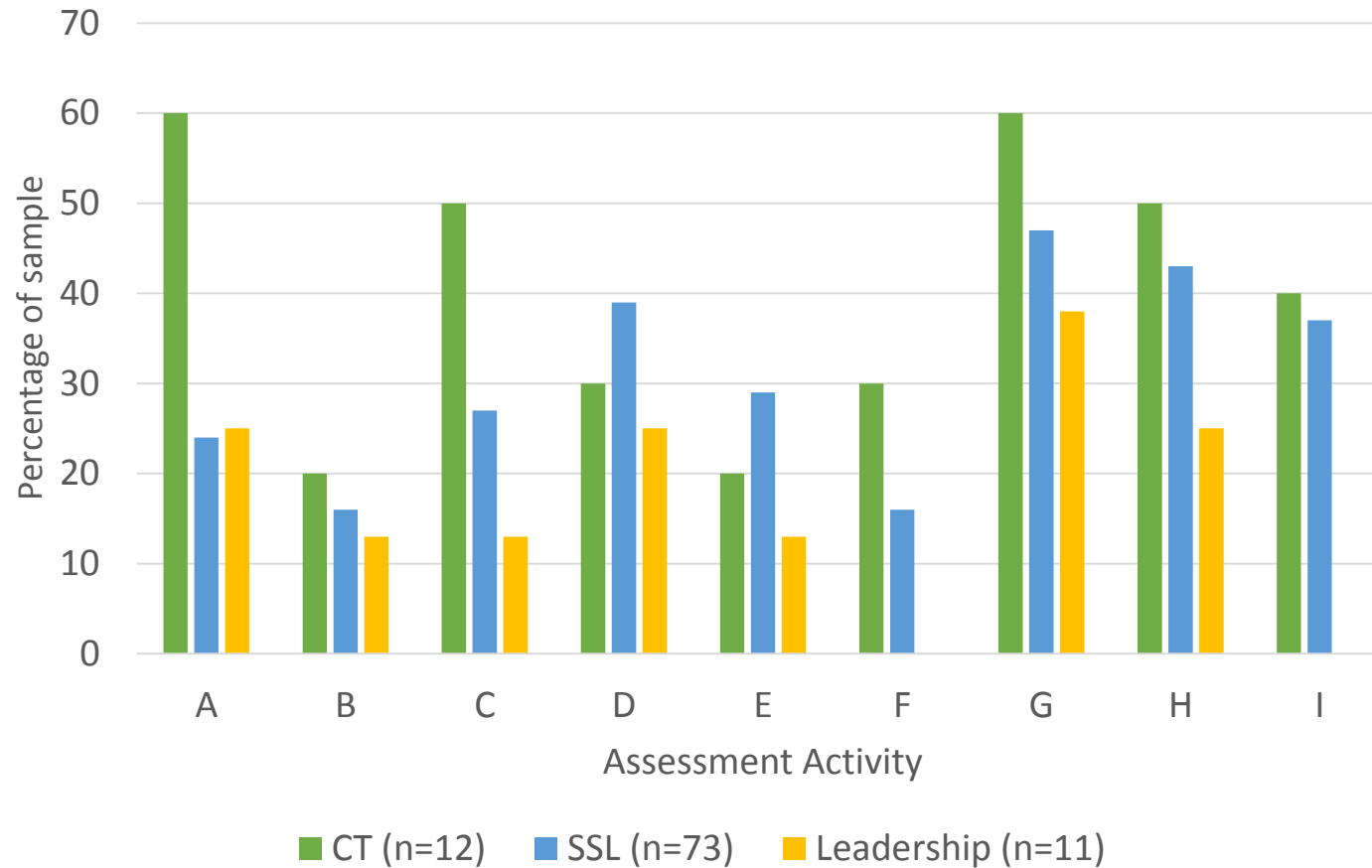


# Use of the TAPS Pyramid to inform assessment practice (whole sample)



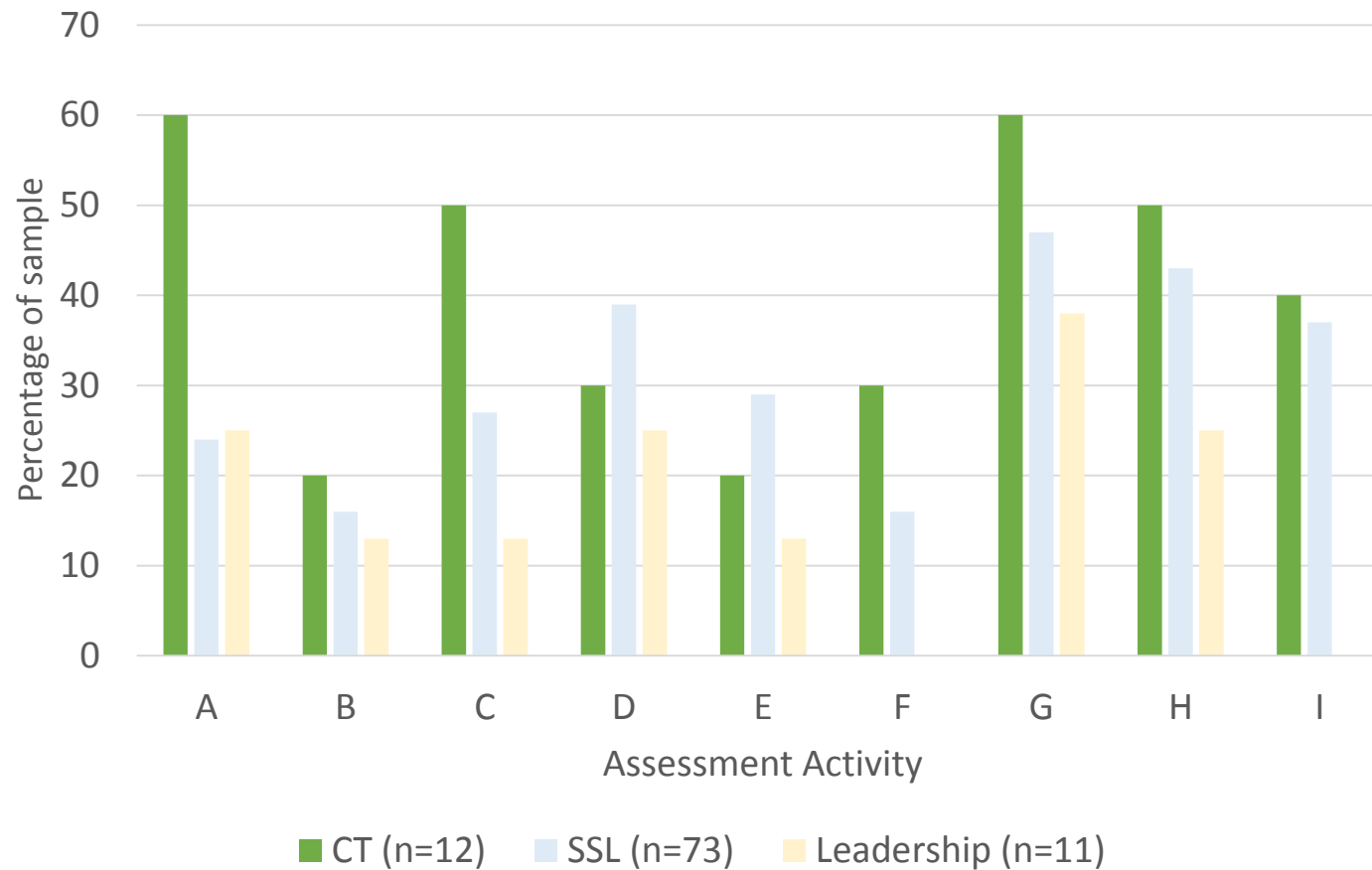
A: plan opportunities for eliciting knowledge  
B: discuss LO and SC with children  
C: gather FA from obs, questioning and discussion  
**D: use evidence from range of sources for assessment**  
E: adapt pace and challenge of teaching using formative ass.  
F: give written / oral feedback  
**G: give the children time to reflect upon work**  
**H: judge pupil progress from range of FA data**  
I: manageable system for storing and using FA data

# Impact of TAPS pyramid: by job role



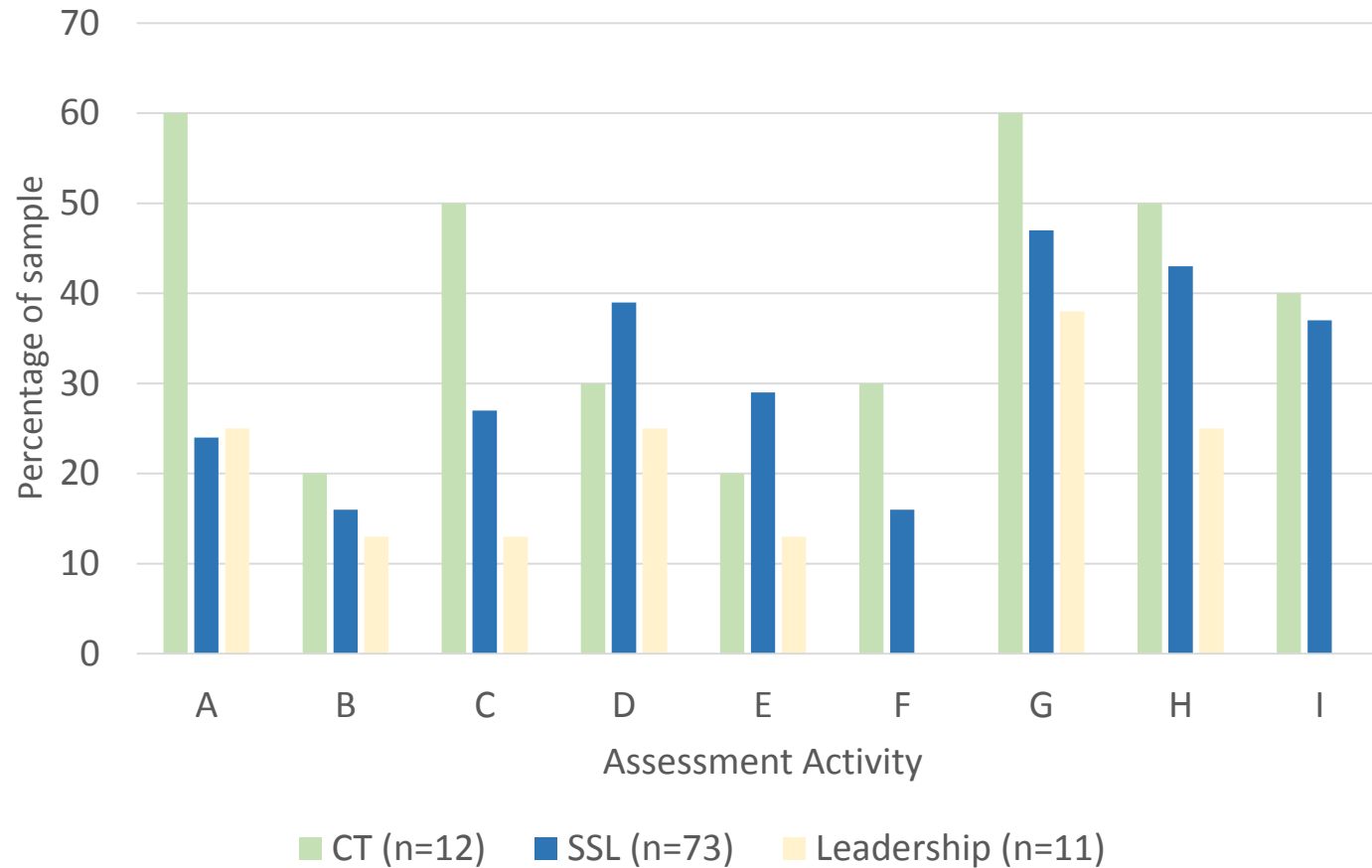
A: plan opps for eliciting knowledge  
B: discuss LO and SC  
C: gather FA from obs, qs and discussion  
D: evidence from range for assessment  
E: adapt pace and challenge with FA  
F: give written / oral feedback  
G: time to reflect upon work  
H: judge PP from range of FA data  
I: manageable system for storing and using FA data

# Impact by job role: teachers



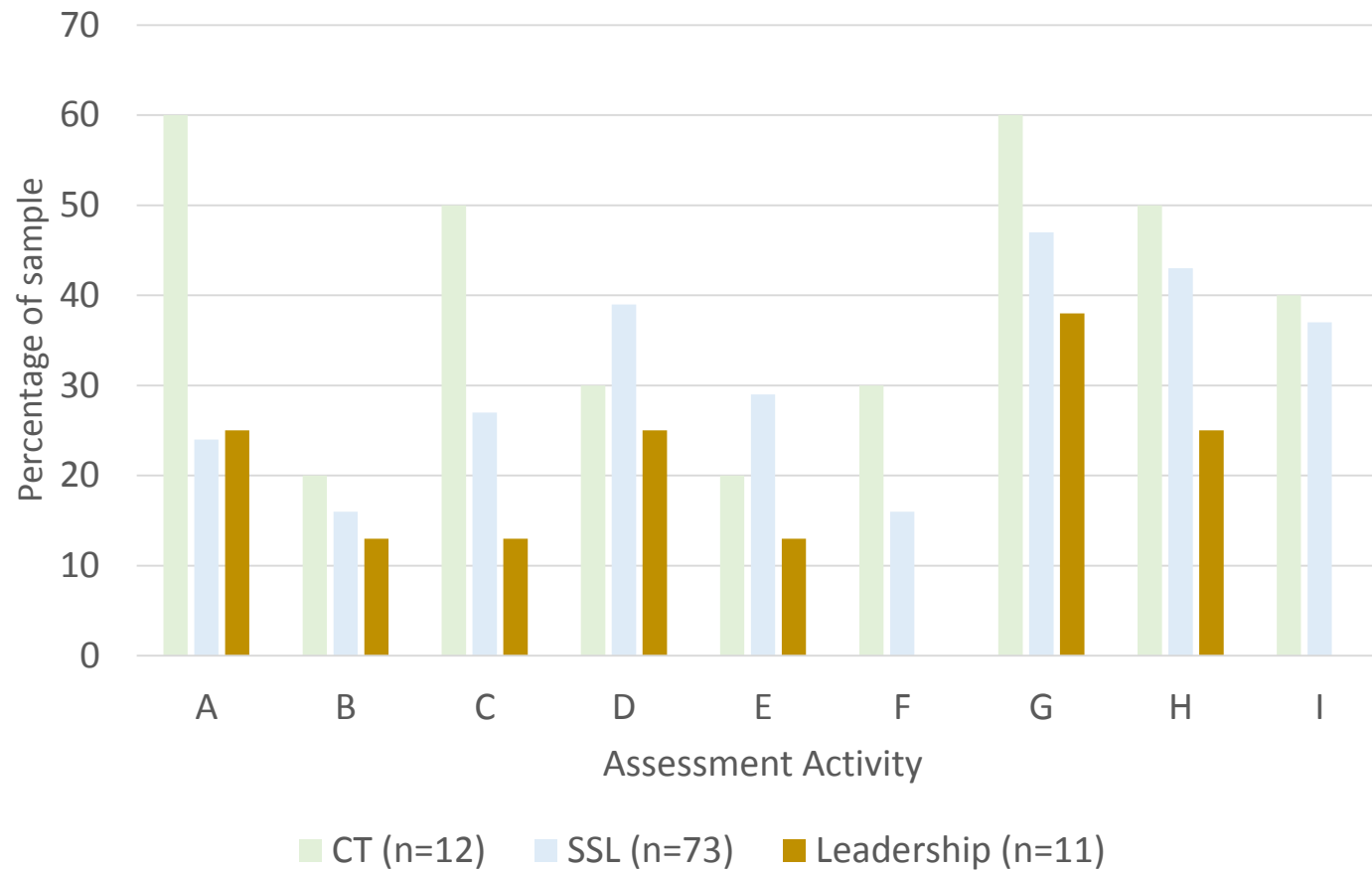
Greatest reported impact for this group, especially on eliciting ideas; gathering formative assessment data from a range of sources; and giving children time to reflect upon their work.  
Formative Assessment 101?

# Impact by job role: Science Subject Leads



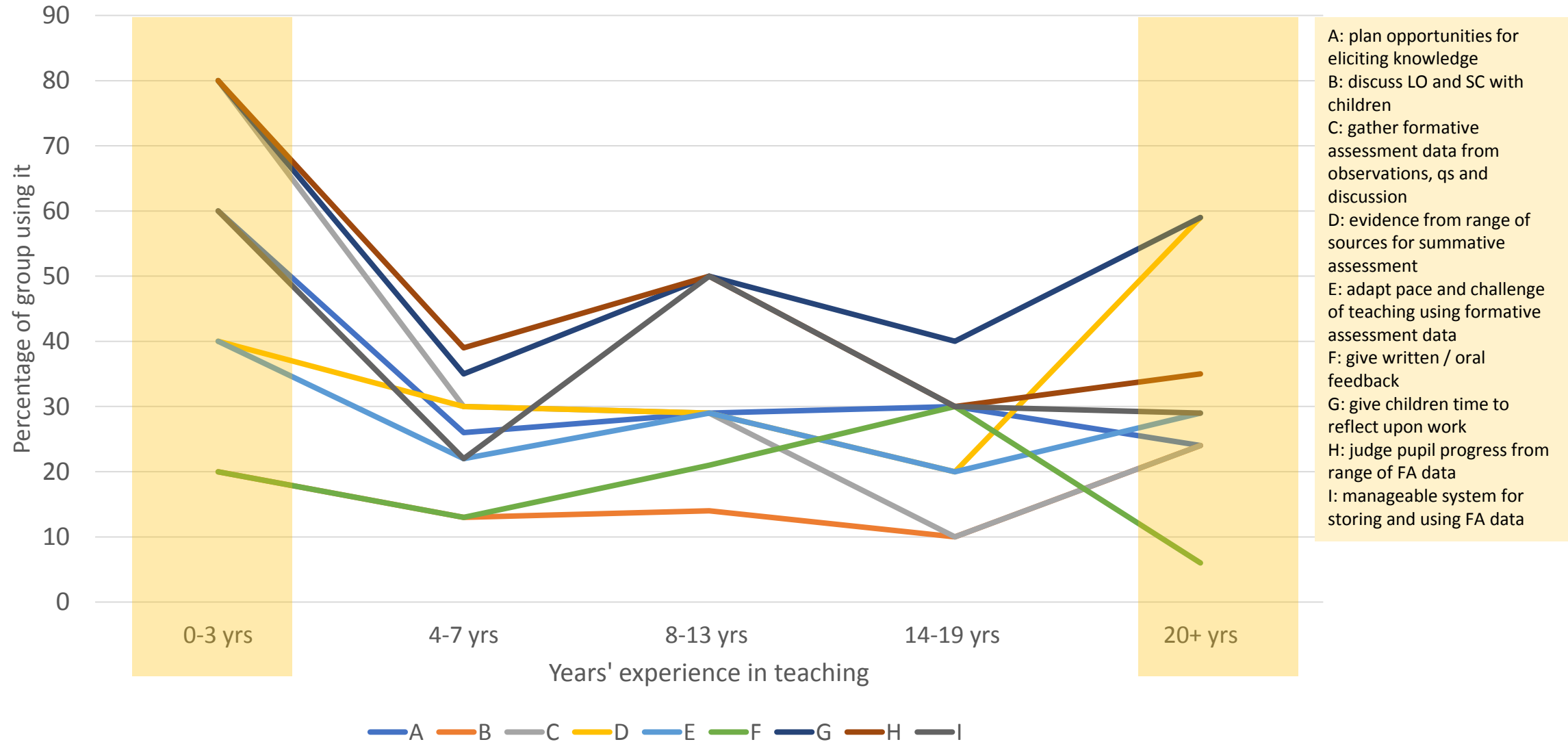
Already using elicitation and gathering data from a range of sources; now also using that data towards summative judgments of progress; using formative data to adjust pace and challenge of their teaching. Putting FA data to better use.

# Impact by job role: leadership



Relatively small impact, due to less class teaching? Most impact upon giving children time to reflect upon learning.

# Impact on practice: years in teaching



# Impact: years in teaching

- Greatest impact upon the assessment practice of newly and recently qualified teachers (teaching for three years or less)
- Up to 80% of newly and recently qualified teachers in this survey now use the assessment activities listed in the survey, *as a result of engaging with the TAPS pyramid*
- This includes sharing the Learning Objectives and Success Criteria with class – Formative Assessment 101 again?
- Large impact among those in teaching for 20 years or more: 60% of this sample now use evidence from a range of sources and give children time to reflect upon work
- Smaller peak for mid-career teaching professionals

# Implications of findings: teacher training

Carter Review (2015): “Of all areas of ITT content, we believe the most significant improvements are needed for training in assessment... there are significant gaps in both the capacity of schools and ITT providers in the theoretical and technical aspects of assessment.” (p.9)

- Smith (2011) noted limited knowledge among ITE providers of effective formative assessment practice, and the trickle-down impact upon student teachers’ practice
- Impact of TAPS pyramid upon assessment practice of newly recently qualified teachers... the canary in the coalmine for assessment training in primary science? and



# Implications of findings: SSLs and leadership

- Diversity in assessment literacy exists among teacher workforce
- Teaching professionals may need support with different aspects of assessment practice, dependent on years in teaching as well as seniority of role
- Science Subject Leads and school leaders need to formatively assess the abilities within their staff before designing interventions

# The cyclical nature of teacher development

“Where we were three years ago and where we were even one year ago is actually quite different to where we are at the moment, because we’ve had changes in staff, we’ve had changes in role... We went through a couple of years where it was really ‘we’ve done that, we’ve done that’, but now we’re back to the start again, because of circumstance”.

(Quote from SSL, case study school)



# Study limitations and next steps

- Science Subject Leads formed the largest group; the voice of class teachers was under-represented by comparison
- Quantitative survey data does not provide nuanced explanations behind responses – interview data needed for that
- Viewpoints from many different schools across the country - an indicative snapshot of use, rather than a detailed picture
- Final stage of research using case study data from two schools to examine perceptions and use of the TAPS pyramid

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