

Research-based support for reading comprehension: An overview, and applications in early secondary school

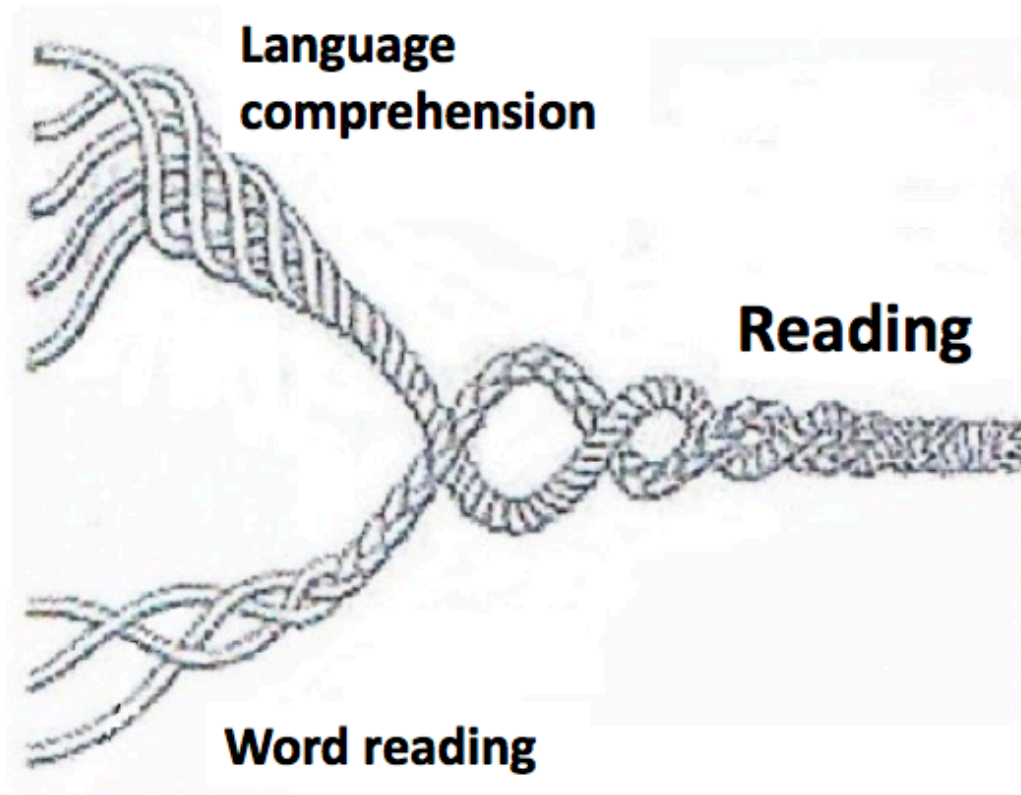
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Components of Reading: The Rope Model

- Activating word meanings
- Understanding sentences
- Making inferences
- Comprehension monitoring
- Understanding text structure

- Letter-sound knowledge
- Accurate word decoding
- Automaticity in decoding



Main conclusions from previous studies:

- There is a dissociation between predictors of word reading and predictors of comprehension
- Important factors in reading comprehension development were identified:
 - Vocabulary – especially “deep” vocabulary
 - Inference making
 - Comprehension monitoring
 - Understanding story/text structure

Vocabulary knowledge and reading comprehension.

- Clearly a certain level of vocabulary is required for a reader to understand a text.
- BUT the relation between vocabulary and reading comprehension is much more subtle and interesting than just:
LARGE VOCABULARY --> GOOD READING COMPREHENSION.
- Deeper knowledge of word readings, and rapid activation of meaning networks is important for comprehension.

Text comprehension: beyond words and sentences (integration and inference)

- We go beyond the literal meaning of text and “fill the gaps” with inferences
- Only a fraction of our interpretation of language is licensed by what is explicitly stated.
- For example:
 - *Mary heard the ice-cream van coming.*
 - *She remembered her pocket money.*
 - *She rushed into the house*

Story structure understanding

- Poor comprehenders perform more poorly on a task that requires them to reorganize a set of jumbled sentences into a coherent story ("story anagram task") (Oakhill, Cain & Bryant, 2003).
- Poor comprehenders are less good at picking out the main point of a picture story from a set of alternatives (Yuill and Oakhill, 1991).
- In a story production task, poor comprehenders produce less well-structured stories - their stories are have poorer global coherence, and often lack a main point (Cain & Oakhill, 1996).
 - Task e.g. Child given a topic, e.g. "Pirates", "The holiday" on which to base a story.

Comprehension monitoring

The ability to detect problems in text is related to comprehension skill (Oakhill, Hartt & Samol (2005)

Gorillas

Gorillas are clever animals that live together in groups in Africa.

Gorillas sleep on the ground on a bed of leaves and they like to eat different types of fruit.

They are shy and gentle and they hardly ever fight with each other.

Gorillas have flat noses and a very poor sense of smell but their eyesight is very good.

They move about the ground on their hands and feet.

Gorillas sleep up in trees and they often build a shelter out of leaves above them to keep the rain out.

Scaffolding learning

A gradual release
of responsibility

within a lesson, across a unit/text, throughout

Modelling

Scaffolding

Independent

Exemplifying the
thinking – making
the implicit,
explicit

Working together to
learn, demonstrating,
supporting, guiding

Practising to
achieve mastery,
automaticity of
strategies

“A Faster Read”: Background

- At secondary school level (11+ in the UK), the emphasis in English lessons is on literary analysis, not on reading comprehension per se.
- Thus, the assumption is that all children can understand the text well enough to analyse it at a “meta” level.
- Poorer readers at secondary level are often regarded by teachers as unable to cope with whole narratives and given short, simplified texts, which they are expected to analyse bit by bit, in a slow laborious read through.

“A Faster Read”: Background

- Before the intervention, teachers saw these lessons as arduous and dull.
- Yet teachers were aware of students’ desire to read the narrative without interruptions. One teacher said:

In my experience they hate reading for five minutes and then doing a diary entry for 40 minutes, they hate it; they just want to know the next bit of the story.

Two ways of reading in secondary school:

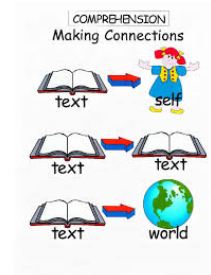
Current practice

- Slow read
- Short chunks
- Interrupted by small, writing analysis tasks - micro-analysis
- Whole class or Individual
- Assumption of comprehension
- Literary analysis



The Faster Read model

- Fast, immersive read
- Longer chunks read
- Guided group-work, peer talk & questioning
- Explicit teaching of inference & other strategies
- Comprehension of whole novel; making connections
- More oral discussion
- Comprehension, then....Literary analysis



“A Faster Read” trial: Aims twofold

1. To explore (with teachers) the reasons for re-thinking their own approach to reading...

- What must we do, as readers, to comprehend a novel?
- And, thus, what reading strategies must we enable students to develop their comprehension?

2. To explore how we can equip teachers to make these lessons relevant and useful, especially for poorer readers.

“A Faster Read” trial: Outline

20 English teachers:

changed current practice to read two whole challenging novels at a faster pace than usual in 12 weeks.

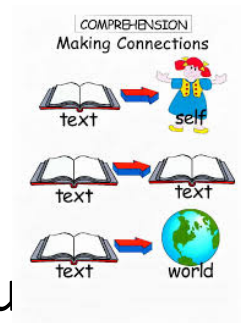
343 students in total: average and poorer readers (12- 13-year-olds).

We compared the progress of the two groups of children, and observed and interviewed their teachers.

- One group of teachers received additional training in teaching comprehension (1.5 days total: theory and research + pedagogy = FR +T&R).
- The second group did not receive such training, but importantly, this group often engaged in meta-cognitive activities.
- Outcome variables: children’s reading ability pre/post (short story assessment & standardised test), and observations of & interviews with teachers.

Reminder: What is involved in understanding a text?

- **Build a mental model of the text as a whole (overall purpose)**
- Understand word **meanings**
- **Infer** at local level – connect up sentences using cues in text (pronouns, conjunctions, other links).
- **Infer** at global/text level – bring relevant knowledge to text to add meaning & fill in gaps and make connections across the text.
- Draw on understanding of **text structure**/genre, predict & navigate.
- **Monitor comprehension** to identify problems (and know what to do about them).



Teachers in the +T&R group encouraged to reflect on their own comprehension processes

- 1) What inferences must you make to comprehend this passage? i.e. which parts might confuse weak readers?
- 2) What kinds of knowledge are you drawing on to help you?
- 3) What is difficult to understand (comprehension monitoring)?

There were a lot of wreaths delivered to the church and Father was proud of the fact that one of them had been sent by the Fury, but when Mother heard, she said that Grandmother would turn in her grave if she knew it was there.

Teachers in the +R&T group encouraged to reflect on their own comprehension processes (Inferences: local, global, use of knowledge & previous text, monitoring).

There were a lot of wreaths delivered to the church and Father was proud of the fact that one of them had been sent by the Fury, but when Mother heard, she said that Grandmother would turn in her grave if she knew it was there.



Strategies for developing vocabulary using morphology & inference

Can you say this word?

antidisestablishmentarianism

What does it mean?

Can you break the word into chunks of meaning – morphemes?

And link those to words you've seen or heard before?

Use these clues to try to work out the overall meaning



Aim: to be able to work out unfamiliar words independently.

Take a word from sorting hat, from the story we've just read...

Have you ever heard anyone use it? How?



Word:	Steps	Guesses/Answers
	Step 1 - do you already know/think you know the word? Can you guess it?	
	Step 2 - find the word in the book; look at the rest of the sentence.	
	Step 3 - are there any words you know inside the word? e.g. 'knowledgeable' has the word 'know' in it so must be about understanding things.	
	Step 4 - Look it up in the dictionary!	

Practise using the word: create a new sentence with the word in it and test it out on your partner or me, in conversation!

What can we infer from this image?



What did you have to **know about** to be able to infer these things?

Place cut-up phrases of **Things we Know** in middle box on your charts. Now write **4 Things we can infer** from p. 1 in next box.

Read next chapter in groups & complete this chart, extracting facts, making inferences & adding some questions.

Questions we could ask (about narrator? setting? plot?...)

Things we can infer

Things we know: facts

Is this a town or a village?

Who are 'we'?

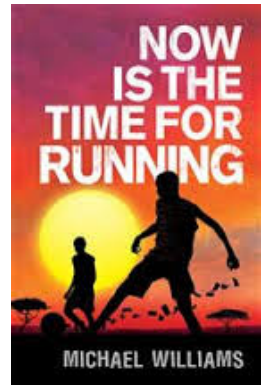
Modelling questions and responses

We walk to Bikita to see Captain Washington. He is the best policeman in the district. I will tell him what happened in Gutu, what happened to Amai and Grandpa Longdrop and the others. He will know what to do. Bikita is three hours' walk on the normal path from Gutu, but we do not walk on that path. It is the road that the soldiers used. If they should come back they will see us. We walk the long way.

Why? What does this show about his character? Relationship?

Why is Deo scared of the soldiers? What happened earlier in the book?

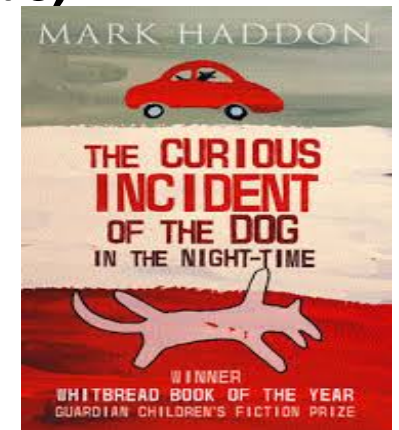
How far would you get if you walked for 3 hours out of Brighton? What does this show about the boys' journey?



Envelopes with phrases from Page 1, *The Curious Incident of the Dog...*

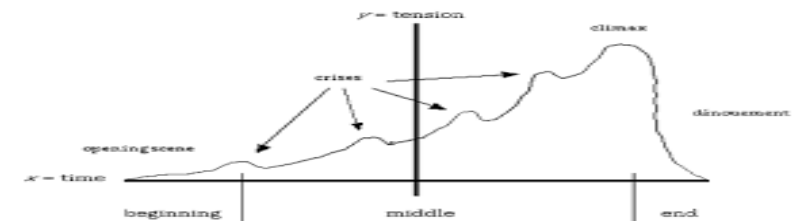
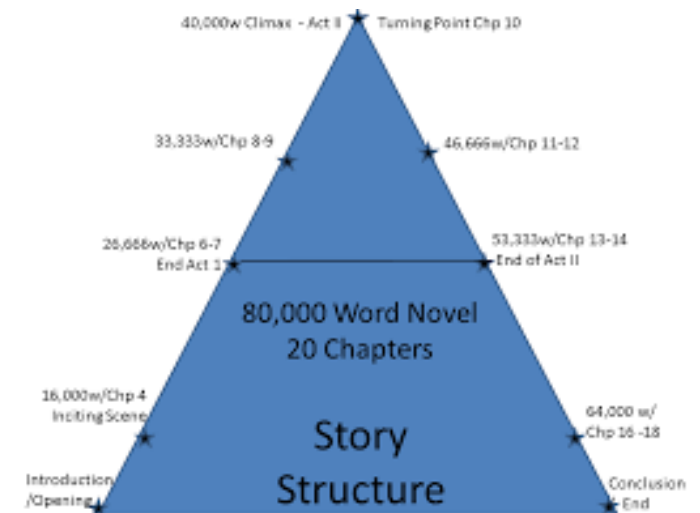
Students discuss:

- What genre do you think this book is? Why?
- What do you think this book might be about, based on these clues?
- What are your reasons for thinking this?



Teaching whole story structure with graphic organisers

- Time-lines & plot-sequencing: using sentences & photos.
- Maps, tracking characters' journeys.
- Tension graphs – highs and lows
- Event and emotion wheels
- Family trees

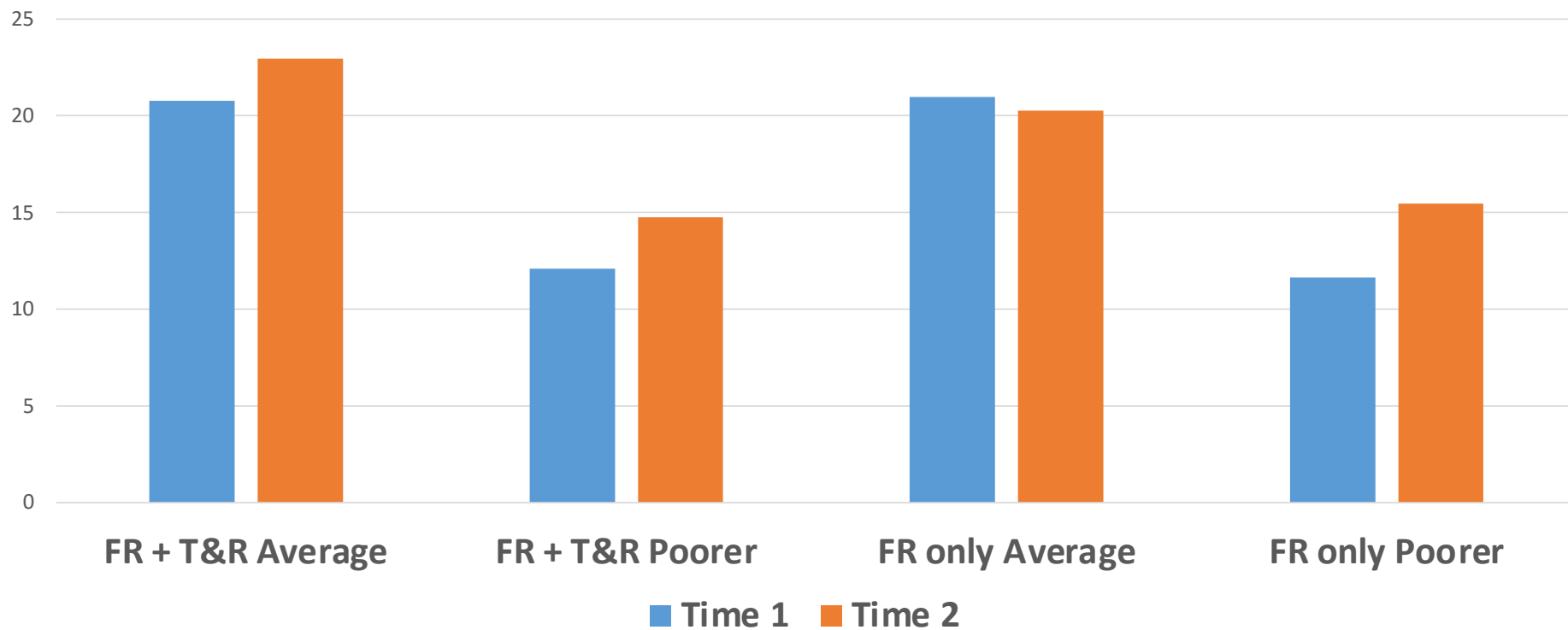


Group Reciprocal Teaching/Reading?

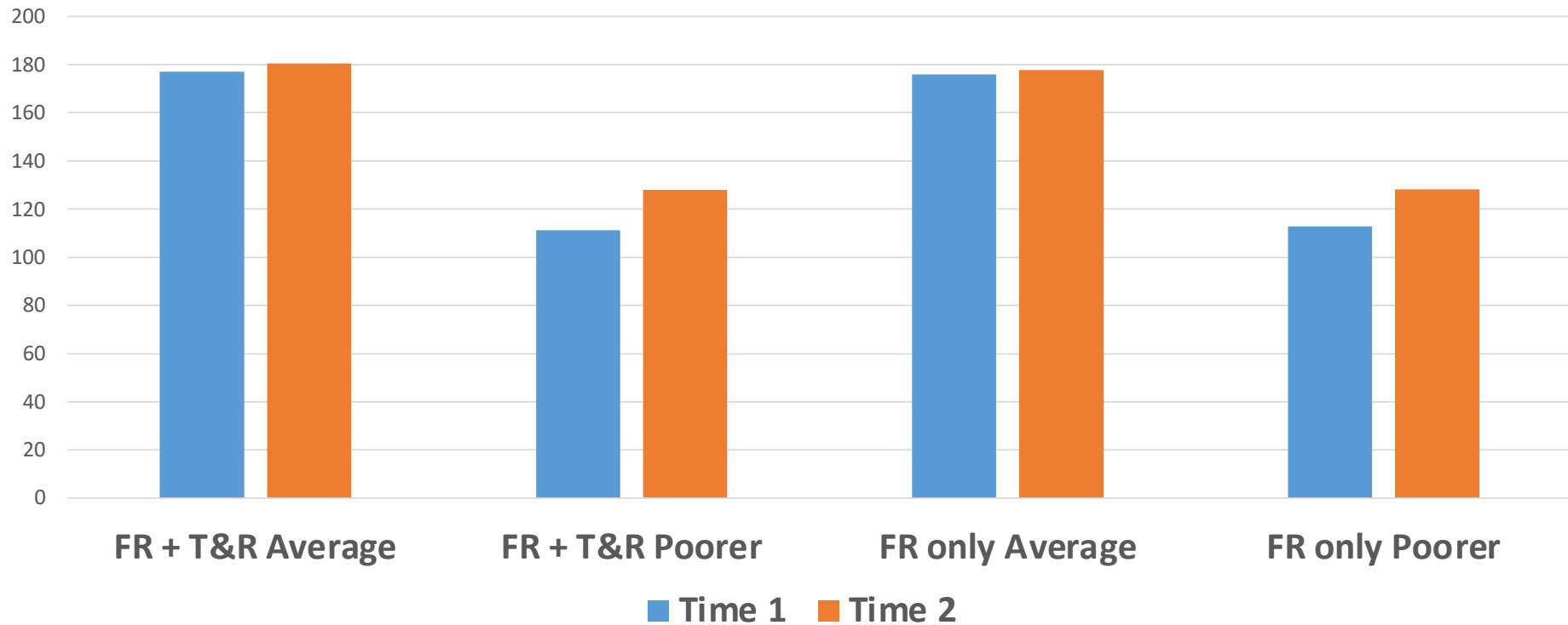
Why is this particularly useful for developing reading comprehension?



Results: Short story task (max=45)



Results: Standardised reading test (age-related scores in months)



Conclusions

- There is strong evidence from this study that reading 2 books in a term enables poorer readers in particular to make substantial progress.
- Also helps average readers **if** the teacher can coach them appropriately (+T&R).
- In the FR + T&R classes, where teachers focused on explicitly teaching reading strategies, including using guided reading and group work, the students appeared more engaged, confident about reading and independent in their approach: they independently used the strategies in groups, asked lots of good questions of the text, predicted, summarised, clarified, etc.
- The FR + T&R teachers also continued to use the practices they had learned (also with older age groups).
- We need further research to measure reading gains over a longer time period – we expect, but did not test, that children who are taught all the reading strategies and given plenty of time to practise these in groups will make greater gains in reading over time.

After training: what do teachers know about reading?

Inference and self-monitoring comprehension (Oakhill and Cain, 2012)

Anne: I do an introductory lesson about **how** we read & how we can judge [our comprehension]...I also teach text-to-self, text-to-world, text-to-text...and I share the theory with my classes in quite an academic way, which is worthwhile (laughs) – they can see it's not just me making it up!

Story-structure – (Oakhill and Cain, 2012; Cragg & Nation, 2006)

Grace: It's given me a deeper understanding of different types of comprehension, a deeper understanding of how to teach structure

Group/guided reading & explicit use of reading strategies (Palinscar & Brown, 1984; Soter et al, 2008; Wolf et al, 2005; EACEA, 2011)

Tess: I've started doing much more group & guided reading – and I use [oral] assessment ...questioning, so 'Are they summarising? Are they predicting?' I wasn't confident about putting students in groups - it has changed my practice and my understanding of reading as a skill

Chloe: In groups, they've become well versed in the reading strategies & able to tell me what strategy they've used ... we still use the key-rings, but they've moved so far beyond them!

Comments from Grace, participant teacher, before and after....

We [English teachers] skip comprehension and go straight to analysis [...] we teach KS3 students how to analyse [texts] for three years but we rarely spend time on that close comprehension - that's not even a phrase I've ever heard anyone say (*laughs*) - which is crazy! I've been doing this for nearly 11 years.

The faster read is so important for comprehension that I just say to my new teachers, 'Try it once, and you'll be convinced, just by your experience of doing it, even without knowing all the theory!'

Why did teachers sustain changed practices?

- Quantitative data: increased students' reading ages + Qualitative: *evidence*
- *Own experience* of teaching, observing & critical reflection:

Chloe: I saw such brilliant results during the project, largely in the engagement of the students. It was so immediate it would seem bonkers not to carry on doing it. I don't want to go back to how it was before where we do so much writing that they can't remember what the book was about!

- Experiential nature of the training: teachers make connections between own reading practices & reader identities and those of students:

Grace: I gained insight into the experience of what **not** understanding was like [...] recognising gaps in my own comprehension of texts [gave] me empathy with students.

Laura: [The theory] makes sense: I don't like people stopping **my** reading all the time and I don't know why anyone would think that children would like that either.'

Theory transforms teachers' thinking, questions beliefs & impacts on practice

Penny: It's changed my beliefs that, with low-ability pupils, it's better to give them a DVD or simplified text & then focus on *analysis*. I've read the whole of *Jane Eyre* with this class purely for comprehension and [...] they were booing and cheering as the plot unfolded! English is now their 'favourite subject' & they never enjoyed it before. [It] comes from them feeling they can actually understand [the book], rather than just being given the 'dummies' guide

Participation in research supports knowledge-development & power to challenge existing practices and orthodoxy – the language of the battlefield!

Grace: 'I have more in my armoury, more understanding and more strategies'

Anna: 'I can defend my approach more'

Laura: 'Schools are quite reluctant to observe children just reading...nonsensical!...If an outsider came in and saw me reading for half an hour, I would definitely feel confident justifying it, by talking about the project...the really **massive** impact on students' engagement.

Thank you for listening.

Comments or questions?

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