

What evidence can contribute to pupil, teacher, school and collaborative success

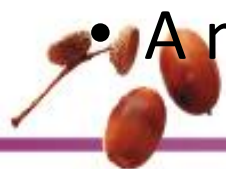
Philippa Cordingley

Chief Executive, The Centre for the Use
of Research and Evidence in Education



This session

- Two examples (one individual one whole phase/x school) of really effective use of evidence as part of CPDL
- Making sense of what we know already (quick buzz)
- Mapping this on to the evidence about what really works when, where...
- An example of supported and embedded use of research at whole school level
- Questions
- A metaphor/story (if time)





Alf Coles Evidence – making algebra meaningful

- **Suggested focus areas:**
- - **The importance of showing what you are doing is having an impact**
- - **How do you go about setting up projects (whole school and at an individual level) so that you are able to track impact**
- - **Why is this important?**
- - **Be great if you could share any tips and techniques for how this could come to life in a classroom or whole school context.**
- - **Can you share examples of best practice based on your experience?**
- - **If you have had any experience of how schools come together to collaborate with each other and this has happened successfully be great if you could share this.**



Alf Coles' evidence – making algebra meaningful

- **Focus** on becoming a mathematician e.g. think for themselves, notice and write about what they are doing, ask why things work, look for patterns and are organised
- **Results**
 - using symbols to express own ideas in 15 weeks
 - can we do this for N? in problem solving
 - understood algebraic statements in different contexts and could identify what was useful
 - Equivalent of GCSE in year 7



<http://www.ntrp.org.uk/node/205>



Closing the gap in KS2 – Palfrey school


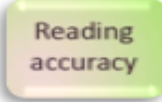
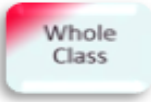

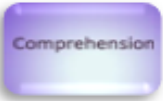
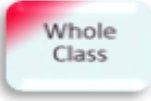

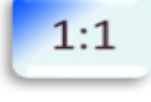

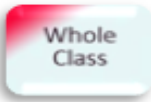

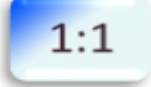
- A good, high fsm primary in the Black Country
- Had tried many interventions for most vulnerable pupils
- Cheryl Collis implemented and championed Response to Intervention “(RTI) Breakthroughs in Literacy” in year 6 working with 60 other schools
- Impressive results – for pupils where nothing else worked
- Some made 9 months progress in 5 weeks! Next ES .5
- She has now designed RTI tools and protocols into years 4-6
- RTI is now being trialled in Ys 5,7 & 9 nationally via Close the Gap Test and Learn programme of school based, “RCT like” research

Response to Intervention

- RTI involves:
- Close case analysis of in depth literacy needs of target pupils
- Selecting *research based* interventions to match those needs
- Identifying the level of intensity of intervention for effectiveness and efficiency
- Fast feedback loops to adjust intensity
- A focus on home/school image of success and meaningful parental involvement



Table of comprehension interventions for which there is positive evidence of impact

Intervention	Could be applied	Description	Impact
<p>Improving reading comprehension through Peer-Assisted Learning Strategies (PALS)</p>  	 	<p>Whole class peer tutoring is a system by which all pupils in a class are paired and work simultaneously. The focus of the paired activity in this intervention was comprehension strategy training.</p>	<p>Age relevance High Comprehension High Reading accuracy Medium</p> <p>The study showed that all the pupils in PALS classrooms made significantly greater progress than their counterparts in No-PALS classrooms across three reading measures. Moreover, the size of these gains was statistically significant. The effect sizes (a way of quantifying the size of the difference between two groups) for the three measures were:</p> <ul style="list-style-type: none"> • .22 for words correctly read • .55 for correct answers to comprehension questions, and <p>.56 for correct choice of words in a maze assessment (where some words in text are replaced with a choice of three words, only one of which fits semantically (i.e. makes sense).</p>
<p>Learning strategies curriculum for promoting reading comprehension</p> 	  	<p>The learning strategies curriculum focuses on developing pupils' understanding of text through using strategies such as: word identification, visual imagery, self-questioning, identifying vocabulary and paraphrasing.</p>	<p>Age relevance High Comprehension High</p> <p>The 11-12 year old pupils significantly outperformed the comparison group pupils on reading comprehension and reported using problem-solving strategies more than the comparison group pupils.</p>
<p>Inference training</p> 	  	<p>The focus of the intervention is to help children to make meaning as they read. This involves learning vocabulary, using their background knowledge, making inferences and building up meaning. It helps weak readers to get the full message from the text, making reading more enjoyable</p>	<p>Age relevance High Comprehension High</p> <p>During the intervention, which lasted eight weeks, 40% of pupils made at least one year's progress in comprehension, whereas in the control group 11% made at least one year's progress. There was a significant impact for children who speak EAL.</p>

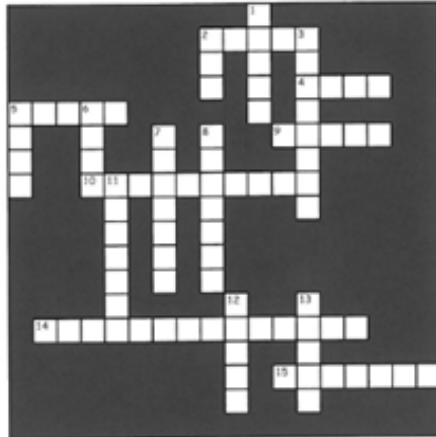
The Seashore

Phonics Vocab Comprehension Para/text structure

(A)

Match up the words below to the definitions in the crossword, then fill in the crossword.

stack • beach
cave • deposition • arch
groynes • transportation
shingle • cliff • erosion
coast • waves • tides • bay
headland • sand • seawall



Clues Across

2. An area of sand b.....?
4. Rock rather like a gateway in the water.
5. Where the land meets the sea.
9. High costal rock face.
10. The depositing of beach material.
14. The movement of sand, shingle, etc to a different part of the coast.
15. Wall built to protect the land from the action of the sea.

Clues Down

1. Moving ridges of water - we see rolling onto the beach.
2. A concave area of beach between two headlands.
3. Area of land jutting into the sea.
5. A hollow in the rock face.
6. Grains of rock found at the seashore.
7. Man-made structures designed to prevent movement of sand.
8. Small stones.
11. The action of the sea wearing away rocks.
12. A column of rock standing in the sea.
13. The rise and fall of the sea resulting in two

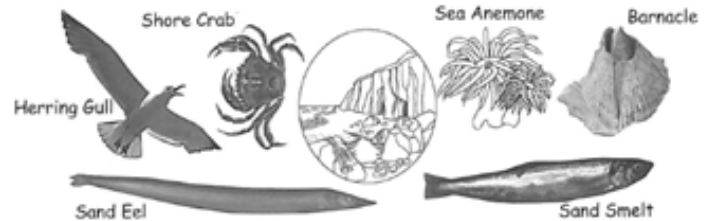
Students

Are any of the words in section A new to you? If so add them to your word wall. When you are using the internet or books to research the animals in section B see if you can identify any new words.

Parents/Carers

Support your child in reading the words in section A. Encourage them to sound out any new words and use a dictionary to find out what they mean. You could then take it in turns to read out a definition and match it to the correct word.

(B) What makes the seashore a good HABITAT for these animals? Find out what the animals eat, and how they live and breed.



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(C) Now try this...

Choose an animal that you have observed in its habitat. Make notes and write a report about why the animal is suited to its habitat...

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- Schools in Close the Gap Test and Learn programme now choosing to establish a network to scale RTI breakthroughs in literacy up to other years and support development of research based interventions menu for maths.



Sense making

- Quick buzz

What is similar and distinctive
between these examples?

What made them so successful?





RESEARCH AND TEACHER EDUCATION: THE BERA-RSA INQUIRY

THE CONTRIBUTION OF RESEARCH TO TEACHERS' PROFESSIONAL LEARNING AND DEVELOPMENT

*Philippa Cordingley**

December 2013

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Systematic reviews highlight:

- Structured dialogue re evidence from trying things out with pupils- PLCs don't work without it
- Linking pupil and teacher learning via aspirations for specific groups of pupils
- Specialists
 - providing sustained, structured support
 - modelling high leverage approaches
 - supporting evidence collection/ interpretation
- Sustained peer support for enquiry oriented professional learning



Systematic reviews highlight:

- Ambitious, focussed goals – peer support enables prescription
- Learning to learn from looking
- Leaders modelling support by e.g.
 - Providing time for teachers to plan & reflect, and
 - encouraging experimentation, evidence collection *and analysis* for learning
- Developing theory and practice side by side
- [BERA Paper](#)



Kenton school

- Deputy head and CPDL leader designs and leads a Professional Learning Programme (PLP) for *all Staff*
- PLP via 2.30- 4.30 sessions each Wednesday, 3 day sessions, multiple enquiry/R&D groups and degree and M level study
- PLP provides a mix of CPDL approaches e.g. Open space, interactive whole school sessions, departmental groups and special interest research and development groups



Kenton school

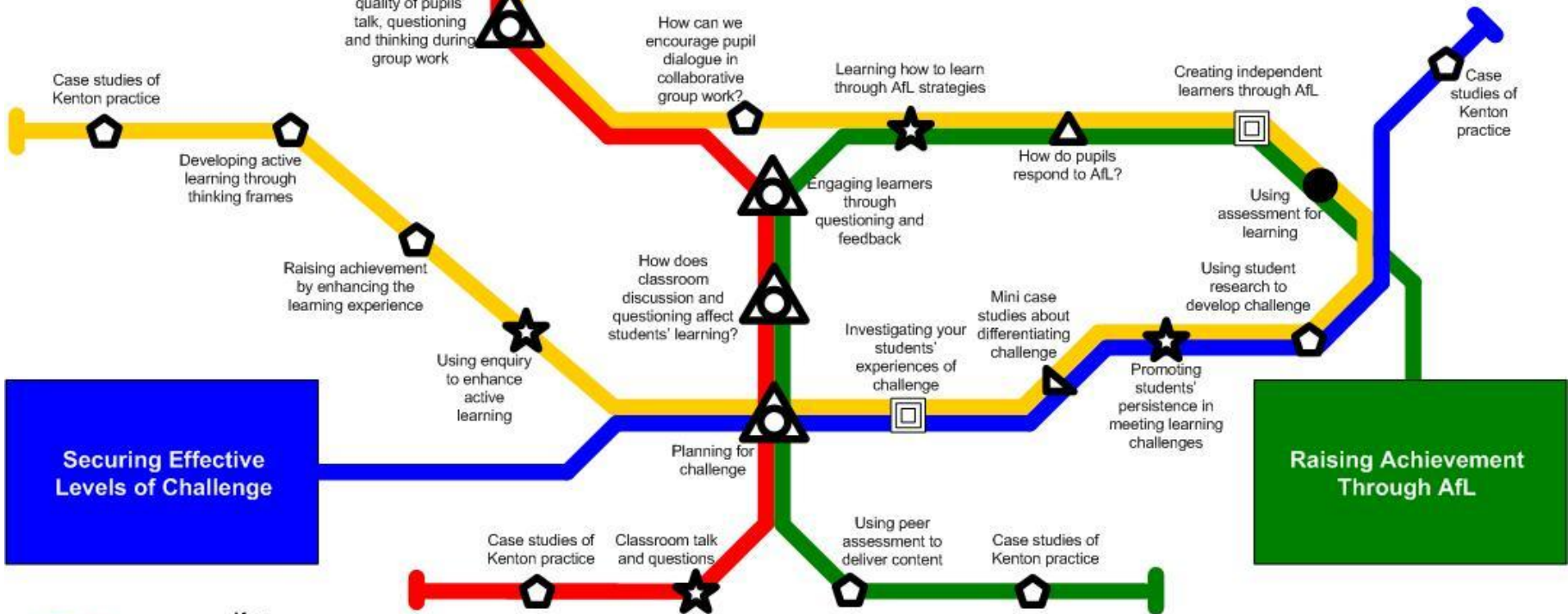
- PLP underpinned by co-coaching approach for *all* staff - partners work across departments and roles
 - supported by trained co-coaching champions
 - practical tools and resources to secure quality now including 100 video cameras
 - route maps to underpin co-coaching and video activity through research summaries, enquiry tools,
- Staff choose support/ activities, from a varied programme, in context of their specific goals/targets
- Extensive staff consultation re PLP



Developing Effective Questioning

Developing Active Learning

Introduction to the Kenton route map



Securing Effective Levels of Challenge

Raising Achievement Through AFL

Key



Tasters - micro enquiry tools to try with your students - choose which of the three levels you want to work with



Practitioner friendly summary



Teacher case study



Mini case studies



Summary of research plus related case studies



Videos



Short and engaging PowerPoint summary (Bites)

A question?

- Ambitious, shared purposes (RTI, Algebra, priorities in route maps, the holy grail..) and tools (menus, common boards, round tables) held these complex , sustained programmes together
- What might a more coherent sustained approach to using evidence through CPDL look like for Achieve Together?



Evidence behind this?

PURR

<http://www.curee.co.uk/resources/publications/purr-summaries>

EPPI 4 and EPPI 2

<http://eppi.ioe.ac.uk>

Timperley

<http://www.oecd.org/edu/school/48727127.pdf>

Robinson :

<http://www.curee.co.uk/resources/publications/robinson-summary>

RTI and AERA paper

<http://www.curee-paccts.com/files/shared/Response%20to%20Intervention%202014.pdf>

<http://www.curee-paccts.com/news/2013/08/aera-2013>

TF report

<http://www.curee.co.uk/publication/characteristics-high-performing-schools-teach-first-research-report>

Romey Tacon NTRP summary

<http://www.ntrp.org.uk/node/62>

Formative assessment for all - Pearson/NESTA report

<http://www.nesta.org.uk/publications/good-intentions-real-impact-rethinking-role-evidence-education-businesses>





philippa.cordingley@curee.co.uk

www.curee.co.uk

Centre for the Use of Research and Evidence in
Education

8th Floor

Eaton House

Eaton Road

Coventry

CV1 2FJ

024 7652 4036

[@PhilippaCcuree](https://twitter.com/PhilippaCcuree)

[@curee official](https://www.facebook.com/curee.official)

