Harnessing research to practice
What international evidence suggests will make a practical difference in Wales

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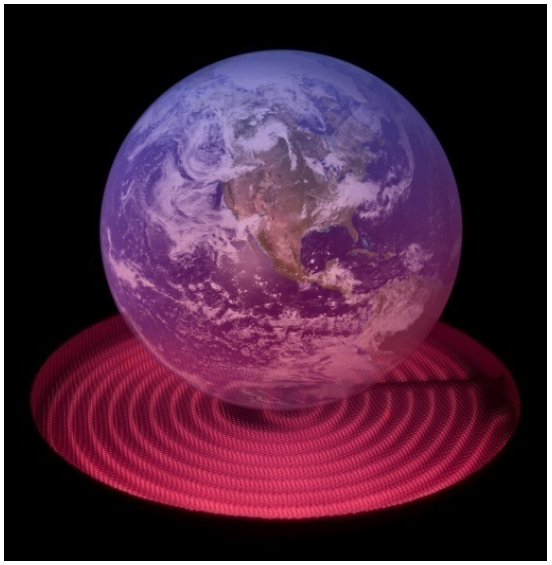
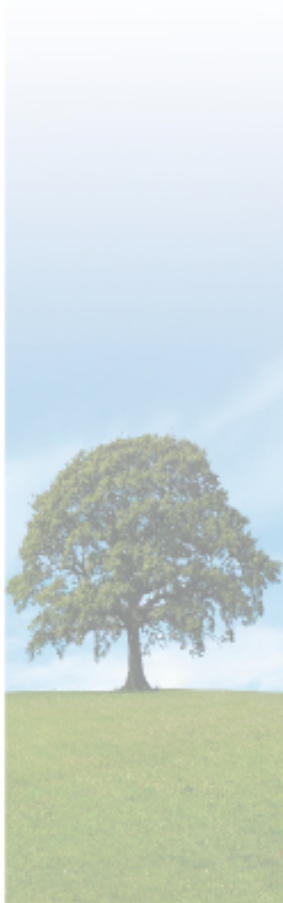
Research and practice -two worlds?



Academic researchers communicate, organise and represent research around academic excellence, validity and generalisability

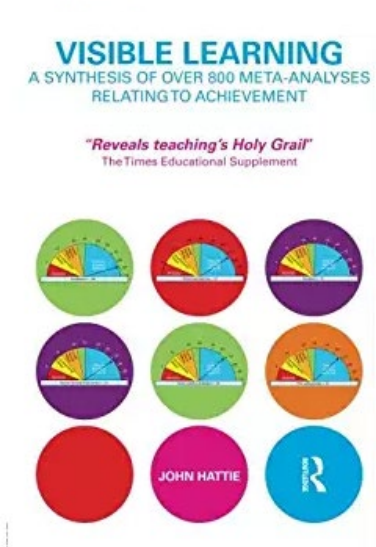
Teachers privilege development over investigation and writing

Both matter. What helps us integrate them?



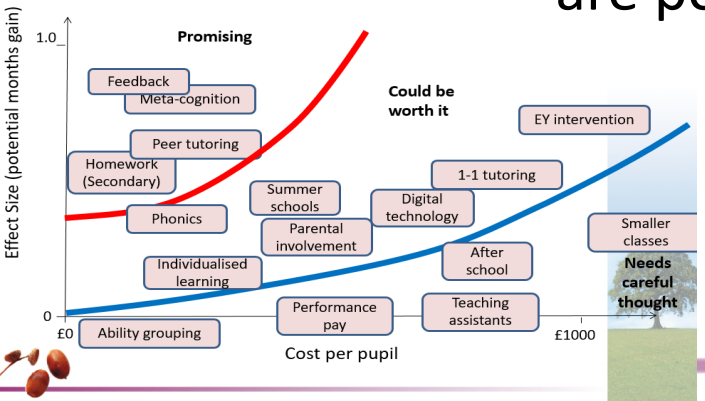
What evidence have we and what is it good for?

- Individual studies help but are always limited in scale and validity - education is context specific
- *Quantitative* studies tell us *whether* things work
- *Qualitative* studies help us explore *why* and *how*
- So mixed methods matter
- Pupils always progress so comparisons are needed to identify results
- Randomised controls are needed to isolate many, dynamic variables to generalise results reliably



What evidence have we and how good is it?

- ICT enabled "systematic reviews of international research" from mid 2000s
- Help with navigation of contradictory studies
- Mis-understood – debunk myths here https://bit.ly/2NAlTqy
- Good e.g.s - New Zealand Best Evidence Synthesis (BES) E.g. Robinson, Timperley
- Now systematic reviews of systematic reviews are possible E. Hattie, Sutton Trust Tool kit, Developing Great Teaching



The international evidence - A commission for BERA

What does research contribute to teachers' professional learning? https://bit.ly/2SwgSz3

- Structured engagement in and with research links to positive outcomes for teachers and pupils and improving knowledge and skills, behaviour for learning, and attitudes to learning
- How do we know? Systematic reviews of research re
  - Teacher engagement in and with research PURR 2010
  - Teacher CPD EPPI 2010, Timperley BES 2007, Robinson BES 2009
  - A systematic review of reviews- Developing Great Teaching 2015

curee

"Engaging in research is for Christmas.
Engaging with research is for life."
@PhilippaCcuree

Putting this to work

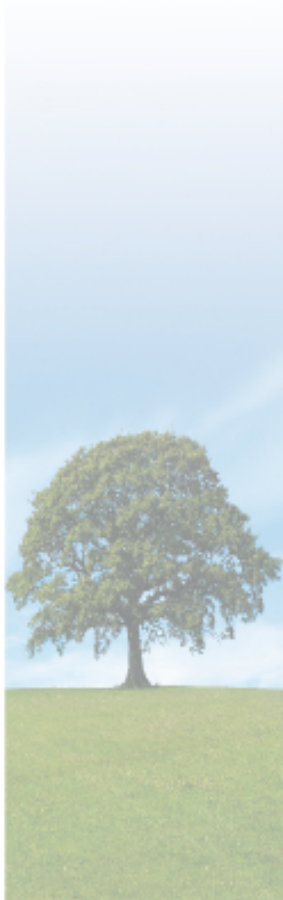
- We will now look at what the international research says about how to support this
- To help you think about what his evidence might mean for you:
- Identify 2 teachers/ colleagues whose practice could benefit form greater use of research:
  - One who is a convertable sceptic- someone who challenges new approaches and ideas but comes round if there is a good case
  - A skilled disappearer – someone who knows how to talk the talk project but who keep themselves to themselves and may or may not be walking the walk
- Use these two to explore what I and others are saying

Effective engagement with research via powerful, evidence-rich CPDL

The evidence from the RSA BERA commission shows that engaging with research/ CPDL *always needs to involve:*

Sustained, iterative combinations of evidence-rich activities which:

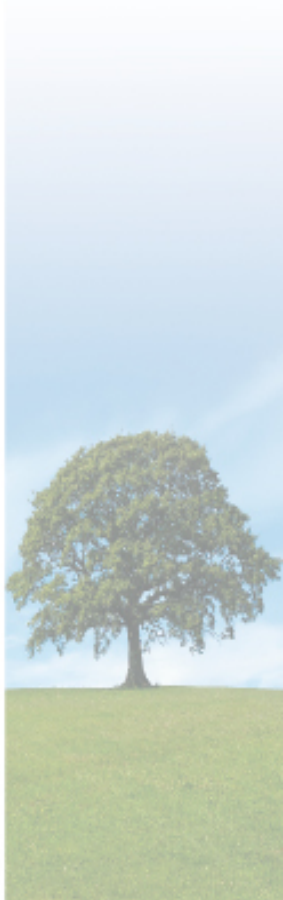
- Are organised around aspirations for sub groups of pupils
- Identify and build on individual starting points – are differentiated- AfL for teachers
- Are contextualised for subjects and groups of pupils



Effective engagement with research via powerful, evidence-rich CPDL

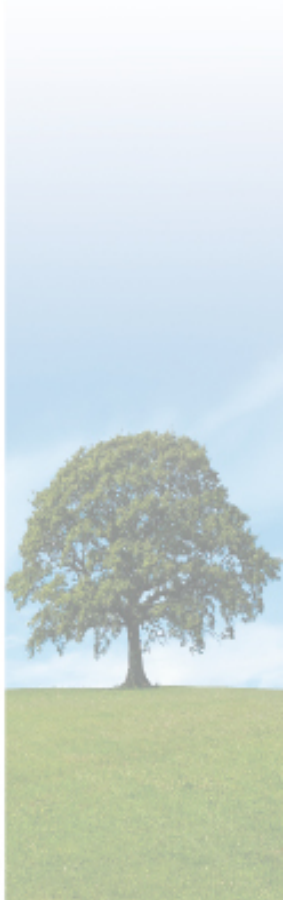
- Effective, evidence based CPDL also involves:
- Access to specialist expertise (some of it external) in e.g.
  - Illustrating excellence underpinned by research
  - Challenging orthodoxies - reflective, evidence-rich exploration of assumptions and beliefs in the context of wider evidence
  - Designing effective evaluation into development

  with sensitivity!
- Developing practice and theory (e.g. re why/ where things do and don't work) side by side



Effective engagement with research via powerful, evidence-rich CPDL

- The evidence from the RSA BERA commission also highlights the importance of peer supported dialogue.
- But suggests that professional learning conversations and communities don't work – *unless* they involve:
  - Disruption to the status quo via trying new approaches to help teachers see, analyse and reflect on practice through a fresh pair of eyes
  - A focus on exploring evidence about how learners are responding to the changes teachers make through experimenting with learning



Robinson's "Smart" tools

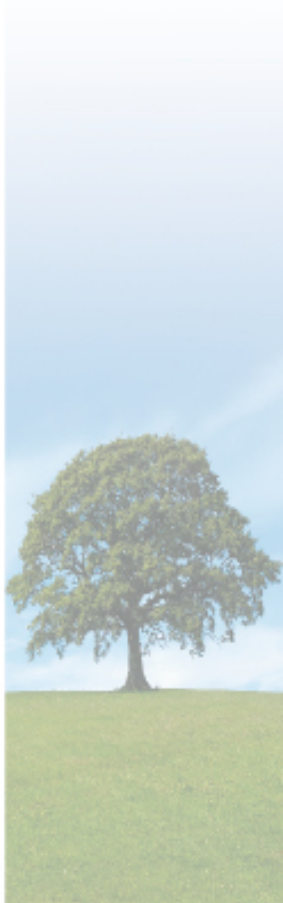
Benefit of tools *is capacity to embody evidence and ideas* in ways that shape/scaffold actions for *coherence*

Tools with evidence of success are:

- Underpinned by evidence/research based knowledge
- Designed around sound theories re both goals and process
- Define what good practice looks like
- Take account of/manage the cognitive, practical and affective load
- Scaffold navigation of complexity to focus effort on depth
  http://www.curee.co.uk/resources/publications/robinson-summary

What evidence have we and what is involved in using it?

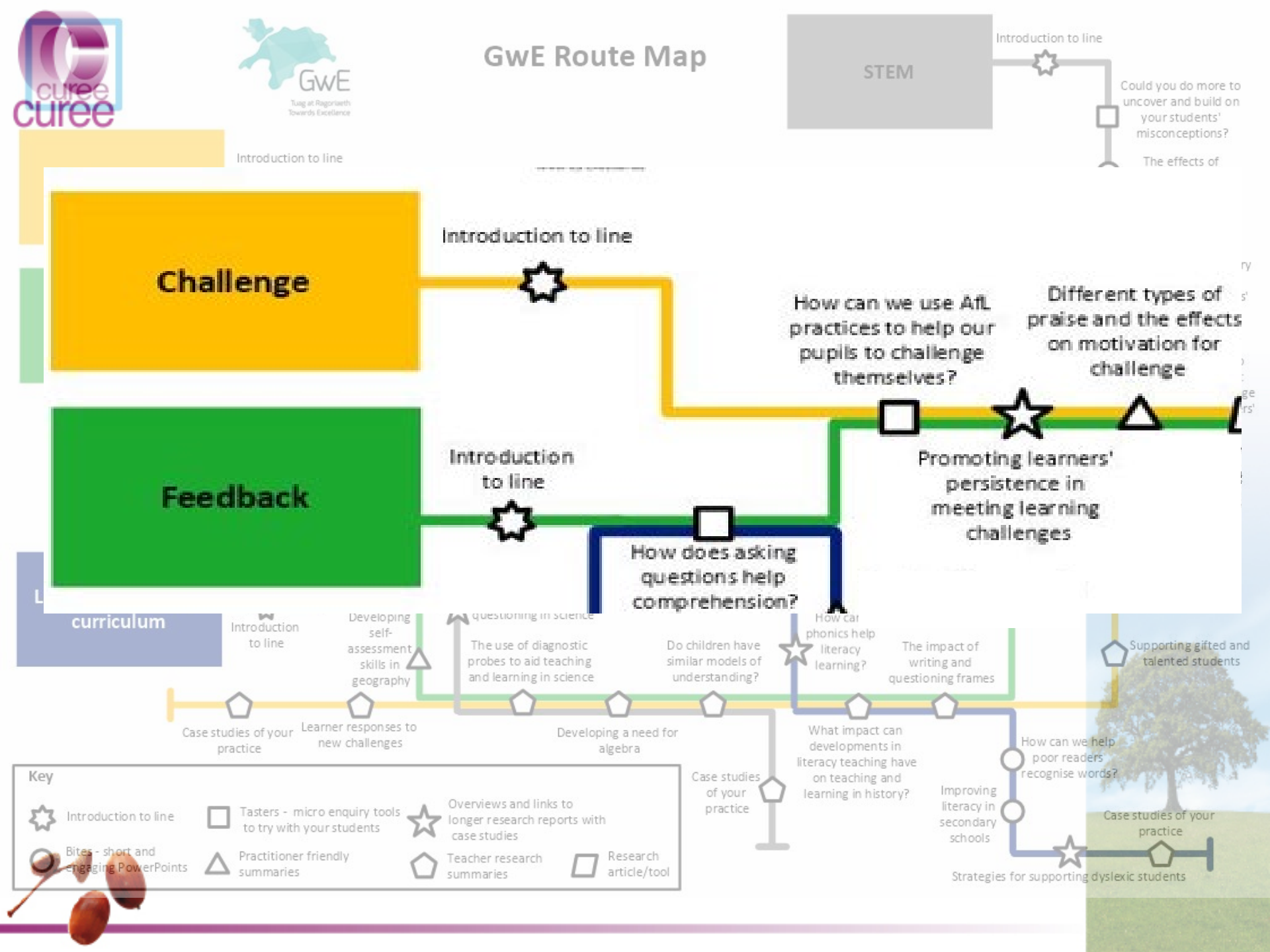
- However good the evidence, professional judgement of its relevance and interpretation of the results and conclusions for context is key
- So teachers and school leaders need layering:
  - High level messages/maps from systematic research reviews
  - High quality, qualitative and quantitative classroom level studies to help them identify implications for context
  - High quality teacher case studies to connect research with their own world - properly theorised/ linked to wider evidence to help them make connections
- And some powerful processes to put them to work!



A case study from GWE - The core process

- We built on school led policy to promote research and evidence informed practice via an on line research route map
- We co-constructed priorities with Research Champions building on the:
  - Aspirations of Challenge Advisers and Subject Leads for the pupils and teachers they are supporting and their responses to the research
  - Research about effective CPD, leadership and development at scale in education
- To build capacity for evidence informed practice among Champions underpinned by tools and resources to embed/ systematise use of research based strategies, initially via micro enquiries and coaching

GwE Route Map



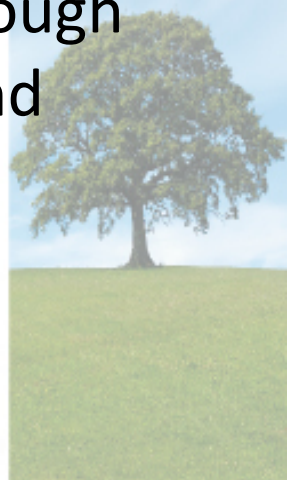
The different Route Map tools

- The strategies explored through Route Maps are *based on systematic reviews relevant to local priorities*
- There are five types of resource on Research Route Maps:
  - Introductions to strategies/ lines based on systematic reviews
  - Micro-enquiry tools
  - Research summaries of different lengths/ depths – Bites, Digests
  - Supported theory - illustrated at classroom level
  - Quality assured, teacher or school leader-researched case studies; and now, studies from GWE!
- ... supplemented with action planning and reporting frameworks focused on a particular topic.

Responses GWE

- Most subject leads grasped the opportunity and dived in directly
  - Supporting others via others with their micro enquiries early on
  - modelling evidence-informed practice via larger scale enquiries designed using route map frameworks and resources
  - use coaching to sustain effort and role

  Now have a group of well constructed enquiry reports that capture and analyse impressive progress from participating schools
- Most Challenge Advisers worked more indirectly, through the school leaders they support, through coaching and
  - Building enquiries in to post-ESTYN action plans
  - Setting up cross school enquiry groups



A metaphor for the role of research, tools and effective CPDL

The research accessed and the evidence used and generated help us know where to cross and which stepping stones to rely on

Specialist expertise, collaboration, tools and shared risk taking – all focussed on aspirations for students offer powerful handrails