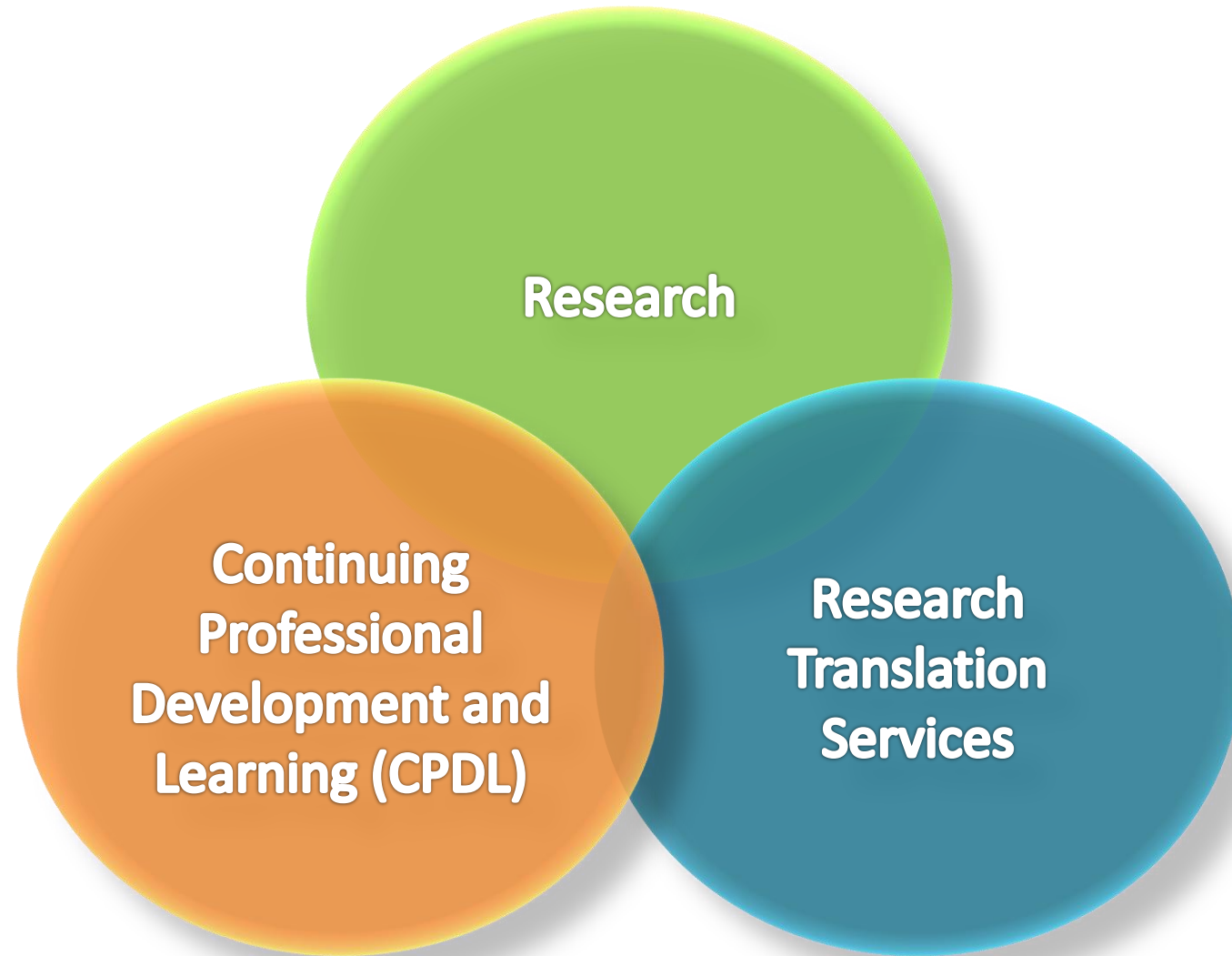# Research Route Maps: putting the evidence at practitioners' fingertips

Niamh Mc Mahon

Centre for the Use of Research and Evidence in Education (CUREE)

What CUREE offers

Research

Continuing Professional Development and Learning (CPDL)

Research Translation Services

What CUREE has achieved

- Working nationally and internationally CUREE contributes towards major initiatives; e.g. new English National Standards for CPD, Harvard transforming Teaching Programme and National Framework for Mentoring and Coaching

- Presented to prestigious conferences including American Education Research Association, Swedish Royal Academy

- Have led the Teaching and Leadership Advice service across the West Midlands for the English NCTL

- Worked on a sustained basis with councils, networks and schools to help evaluate and improve research informed CPDL

- Developed successful strategies for integrating research into everyday CPDL, teaching and learning via on line Research Route Maps

Empowering teachers…

Evidence about effective leadership of professional learning

- Drawn from Best-Evidence Synthesis work, conducted by a New Zealand-based team of academics (Robinson, V., Hohepa, M., and Lloyd, C., University of Auckland, 2009)

- Analysed and synthesised research which explored direct and indirect links between leadership & student outcomes, by focusing on:
  - Research for which there was good statistical evidence that leaders' actions caused improvements in learner outcomes, and
  - Studies of interventions in teacher CPD which had **positive impact on student learning,** and then identifying leaders' contributions which enabled those outcomes

- 8 key findings, five of which had effect sizes associated, three more without. Of this second group of findings, one of special relevance here – the importance of selecting, developing and using smart tools to support teachers' professional learning

Key features of smart tools

- The researchers identify the following key features which make a learning tool a "smart tool" - smart tools:
  - clearly explain the rationale for change
  - acknowledge the existing understandings of practitioners and integrate them into the document
  - signpost possible ways a principle could be misinterpreted
  - clearly connect abstract principles to implementation approaches, with examples
  - are logically structured around a clear and unambiguous purpose
  - maximise coherence and minimise complexity
  - support understanding through visual aids (eg charts, diagrams) which make explicit connections to the text

Discussion Activity

- Take a moment to think of some examples of CPD materials you have come across, and evaluate them against the list of key features of smart tools listed by Robinson & Hohepa

- In particular, identify a feature which a CPD resource you've encountered does well, and another one which that resource (or a different one) does not do well

Research Route Maps

Holy Rosary Route Map 2019
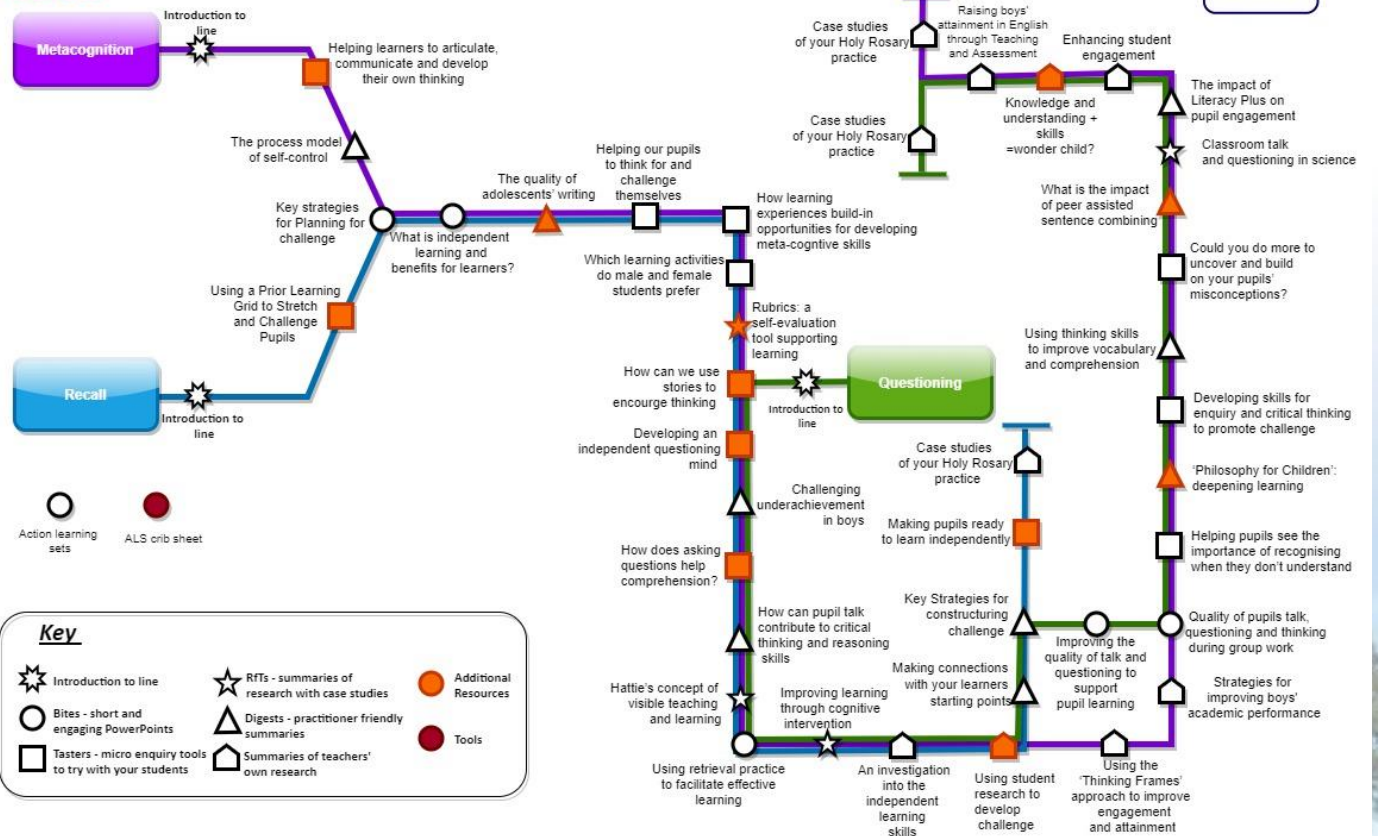
Key Design Features of Route Maps

- Designed using high-quality research evidence eg systematic reviews to give overall package of materials coherence

- Structured using general principle of largest->smallest scale (i.e. starts with large scale research, ends at individual practitioner level)

- Aims to use variety to exemplify principles – resources designed to introduce practitioners to evidence in a variety of ways

- Users choose how and at what level of depth to interact with the RM – can take a single resource as focus, aim to cover entirety of one topic (or multiple topics), or take a sub-set of resources, organised by evidence-based teaching strategies, to explore

Research Summary Resources

Topic: Early years, Thinking skills, Literacy

How can we encourage more pupils to access more challenging material?

Research evidence

Large scale national surveys of pupils from 2007-2010 showed that over 20% of pupils felt persistently under challenged by their curriculum. Yet research shows that providing challenge in the curriculum improves pupils' performance, motivation and engagement. It also helps pupils to experience different kinds of feedback and gives teachers a new window into pupils' experience of learning.

Your evidence

You could survey your pupils discover the kinds of activity they find easy/challenging. You could also try to find out why pupils find particular activities challenging. You may find the tool below helpful for this. You could ask pupils to complete it at the end of several lessons to give you a broader picture. Ask another colleague teaching some of these pupils to try the same approach so you can explore together how challenge and feedback work for these pupils in different subjects.

Name	How did you find today's lesson?	What would you like to see in future lessons as a result?
Something I found challenging/hard in today's lesson		
Why I found it challenging/hard		
Something I found easy about today's lesson		
Why I found it easy		

A classroom investigation of the growth of metacognitive awareness in kindergarten children through the writing process

Introduction

A starting point for what metacognition is about focuses on "knowing about knowing and thinking about thinking". It is considered an essential part of learning. Although research suggests metacognition is an important element in the reading and writing processes, little has so far been discovered about when – and how - it develops in the very young learner.

This small-scale study takes a first step towards addressing this, by looking at the growth of metacognitive awareness in terms of literacy development at (the equivalent of) Year 1. By regularly asking the children the same small series of questions concerning their work and the thought processes that went into it over a six-month period, the researcher attempted to raise the children's awareness of t... skills. The research also considered t... supported the growth of the childre... about how they thought, i.e. their m...

Do children have similar models of understanding for seeing, hearing and smelling?

National Teacher Research Panel
engaging teacher expertise

What is independent learning and what are the benefits for learners?

RESEARCH BITE

Key Design Features of
Research Summary Resources

- Start by describing key evidence findings from relevant research
- Demonstrate what findings re: practice look like "in the real world"
  - In some cases, provide opportunities for practitioners to collect evidence which demonstrates these findings in their classroom (via eg evidence collection tables)
- Explore implications for practitioners and leaders which emerge from the evidence
- Briefly(!) summarise methodology behind the original research (in most cases)
- Provide an evidence trail for further reading of both the original research being summarised and other related material

Discussion Activity

- How does the approach to creating Research Route Maps and accompanying resources reflect evidence about smart tools?

- How might the Route Maps and accompanying resources be improved?

Niamh Mc Mahon

Senior Operations Manager

02476 243716

Niamh.mcmahon@curee.co.uk

@NiamhMc_2017

@CUREE_official

http://www.curee.co.uk/

CUREE Ltd. 3, The Quadrant, Coventry, CV1 2DY