

OECD初期教員準備調査に関するナショナルシンポジウム (Towards Evidence-Based, Research-Informed Decision-Making in Initial Teacher Preparation)

邦題：教員の養成・採用・研修をめぐるエビデンスと研究の活用) 投影資料

- パート1：教育政策と実践におけるエビデンスとは何か？（2ページから18ページ）
- パート2：エビデンスに基づく教師教育改革をどのように展開するのか？（19ページから39ページ）

PANEL 1

Introduction

What is evidence in initial teacher preparation?



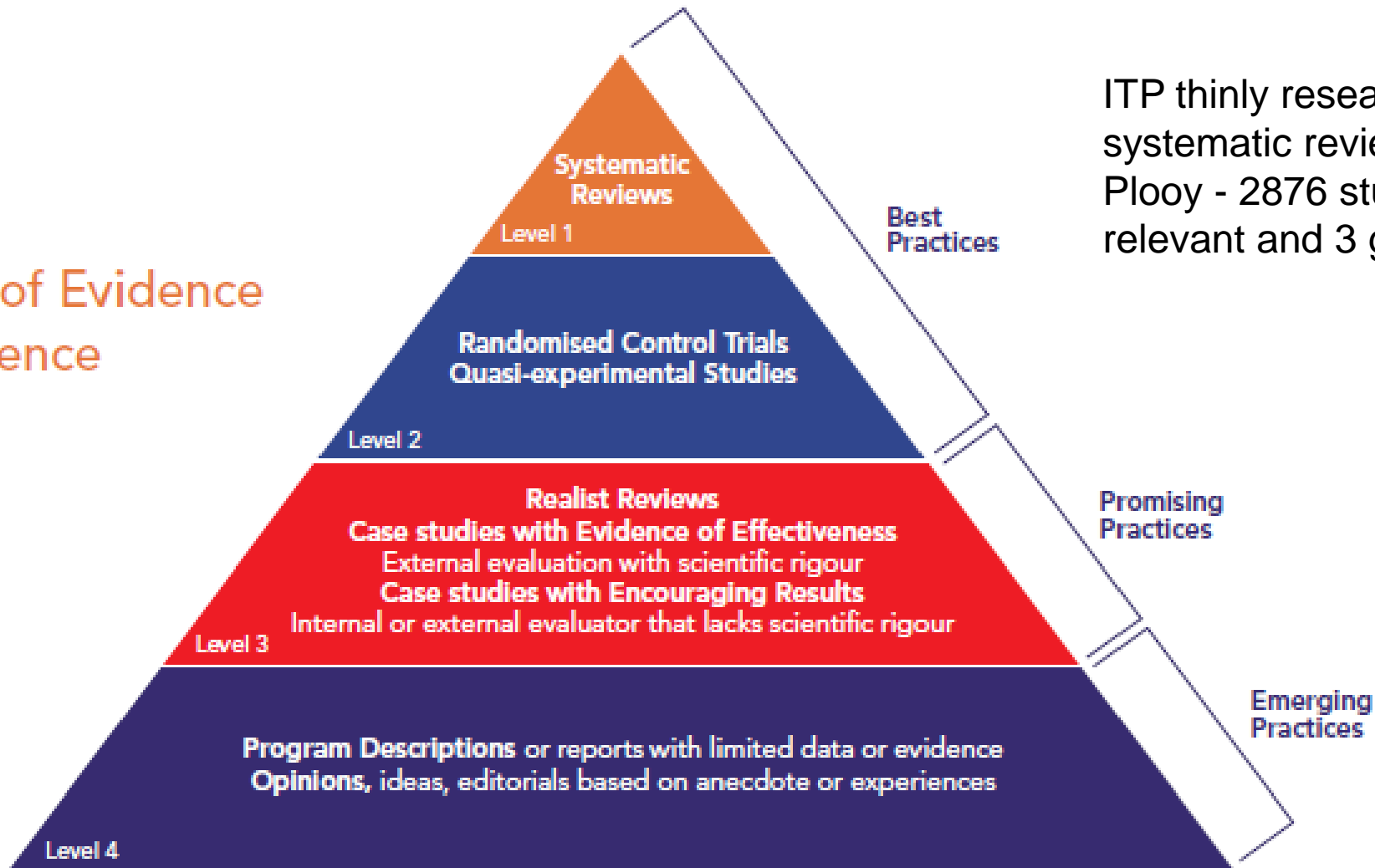
What is data and evidence?

- Data: facts or statistics collected for reference or analysis
- Evidence: the available body of facts or information indicating whether a belief or proposition is true or valid
- Our questions, good mixed methods research studies and our goals convert one into the other



There are different types of evidence that serve different purposes

Levels of Evidence Confidence



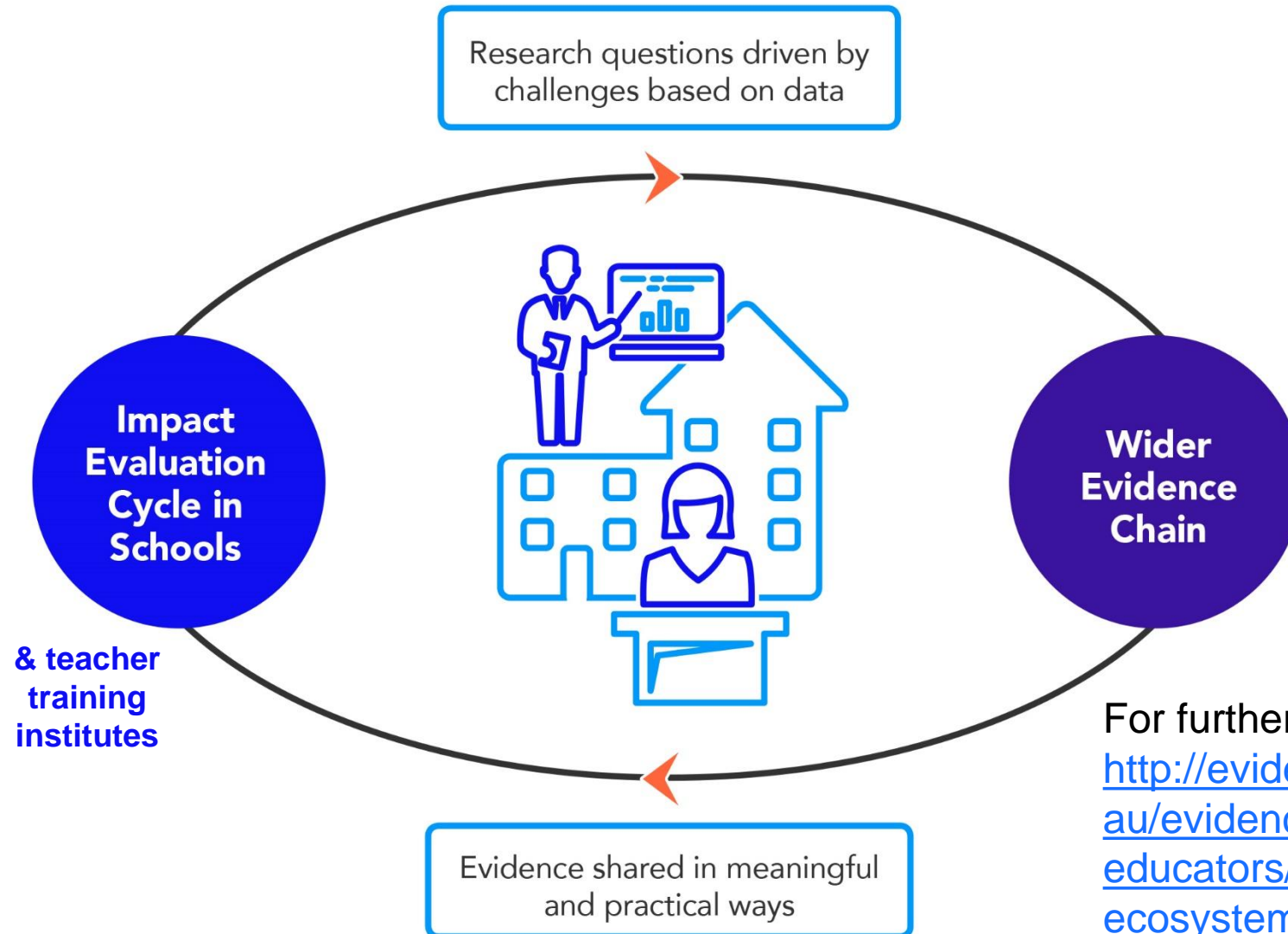
ITP thinly researched, e.g. a systematic review in 2016, du Plooy - 2876 studies, 19 relevant and 3 good ones



What is evidence in relation to ITP policy, reform and practice?

Evidence exists within an ecosystem of research, policy and practice

Evidence-informed decisions are about *'integrating professional expertise with the best external evidence from research to improve the quality of practice'* (Sharples, 2013, p 7).



For further information:

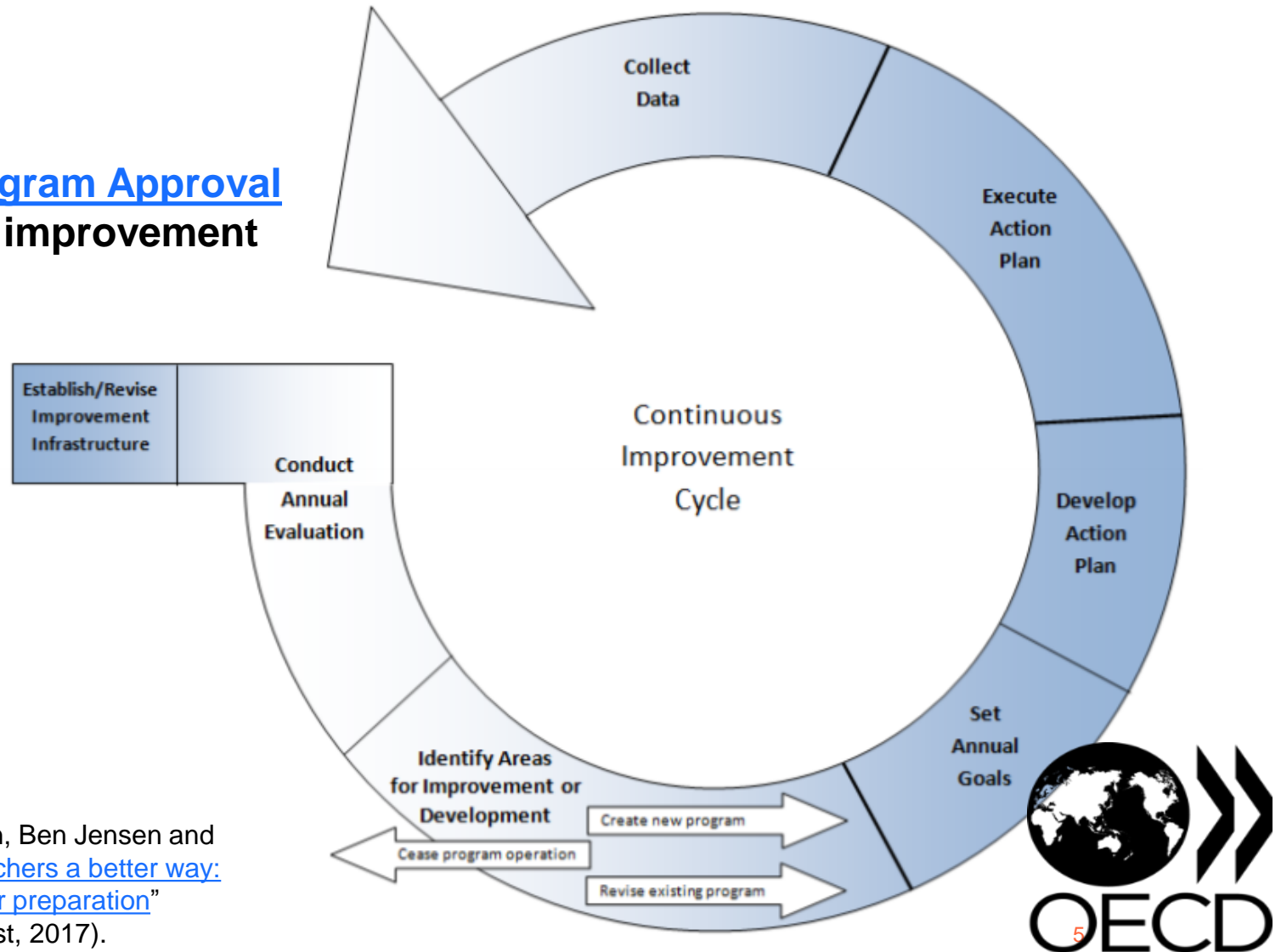
<http://evidenceforlearning.org.au/evidence-informed-educators/evidence-ecosystem/>



Building evidence in ITP: local evidence

Cycles of continuous improvement to build local evidence of what works in particular contexts

The [Massachusetts Guidelines for Program Approval](#) include an illustration of a continuous improvement cycle



For more details see: Danielle Toon, Ben Jensen and Samara Cooper, [“Teaching our teachers a better way: Continuous improvement in teacher preparation”](#) (Melbourne, Australia: Learning First, 2017).

What is evidence in initial teacher preparation in the United States?

Jenny DeMonte

American Institutes of Research, United States



How can we improve research teacher preparation?

Teacher educators in the U.S. often criticize research because it does not yield evidence that can help them improve programs.

Evidence can lead to more questions and experimentation



What features of research might yield findings that are useful to providers?

Formative

Research that provides timely feedback on practices and programs while they are being implemented.

Nuanced

Research that differentiates among program components, including particular instructional or administrative practices.

Contextualized

Research that illuminates the contexts and conditions that enable or constrain program impact.

Actionable

Research that illuminates why a program is working or falling short of expectations.



Possible research designs

1. Why do teachers leave the profession?
2. Improving practices of mentor teachers
3. Does rehearsing teaching improve what teacher candidates' pedagogy?

1. National survey data can provide evidence that teachers with more pedagogical courses stay in teaching longer; no information about content of courses
2. Train mentors, collect and analyze data on how they implement practices; need new ways to measure implementation and why
3. Candidates watch a lesson, then teach it two more times; measuring improvement between lessons is challenging

What is evidence in initial teacher preparation from the European Union perspective?

Francesca Caena
Policy consultant, Italy



EU perspectives

EURYDICE' (2015) *The teaching profession in Europe*

>evidence = analysis of combination of data from different sources: factual data, views of teachers, education policies and regulations (qualitative data from Eurydice network, quantitative data from Eurostat and OECD TALIS)

>>on conditions affecting teachers' practices/perceptions

EURYDICE (2018) *Teaching Careers in Europe: Access, Progression, Support*

>evidence=analysis of qualitative and documentary data; comparative approach

>>on key aspects of teachers' professional lives; focus on high quality training and attractiveness (eg. supply/demand, mobility, appraisal, competence frameworks)

EURYDICE, *Digital scoreboard*

>evidence=data analyses/cycles; cross-country monitoring/ benchmarking (indicators Digital Agenda Data Tool; datasets DG Connect's EU Open Data Portal; Eurostat ICT surveys data)

>>on EU countries' performance in connectivity, human capital, internet use, digitisation of businesses, digital public services, research and development)

Case study: a European framework (DigCompEdu, 2017)

EC, *Digital Competence Framework for Educators*:

>**evidence=systematic review** analysing, clustering, synthesizing existing framework models into one general reference framework, with validation cycles by different stakeholder groups

>>to **describe** facets of digital competence for educators; to **help assess** competences and training needs; to **improve training** effectiveness

>>>to provide **scientifically sound background framework** to guide policy and implement regional/national tools and programmes

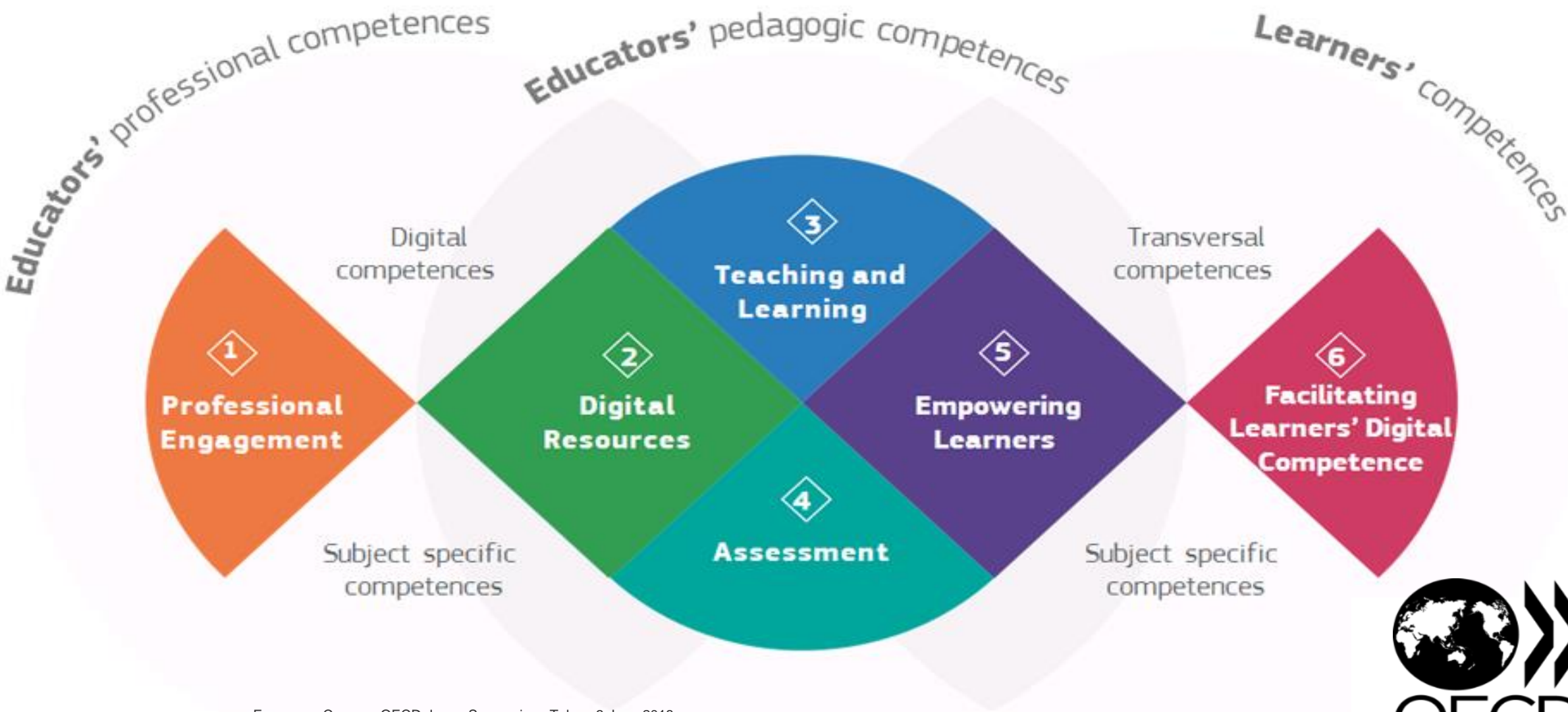
>>>>to provide **common language and approach**; to support exchange of best practices across borders;

>>>>>to **facilitate dialogue within/across stakeholder groups** (policymakers, education agencies/institutions at different system levels, ITP/CPD providers practitioners, education experts)

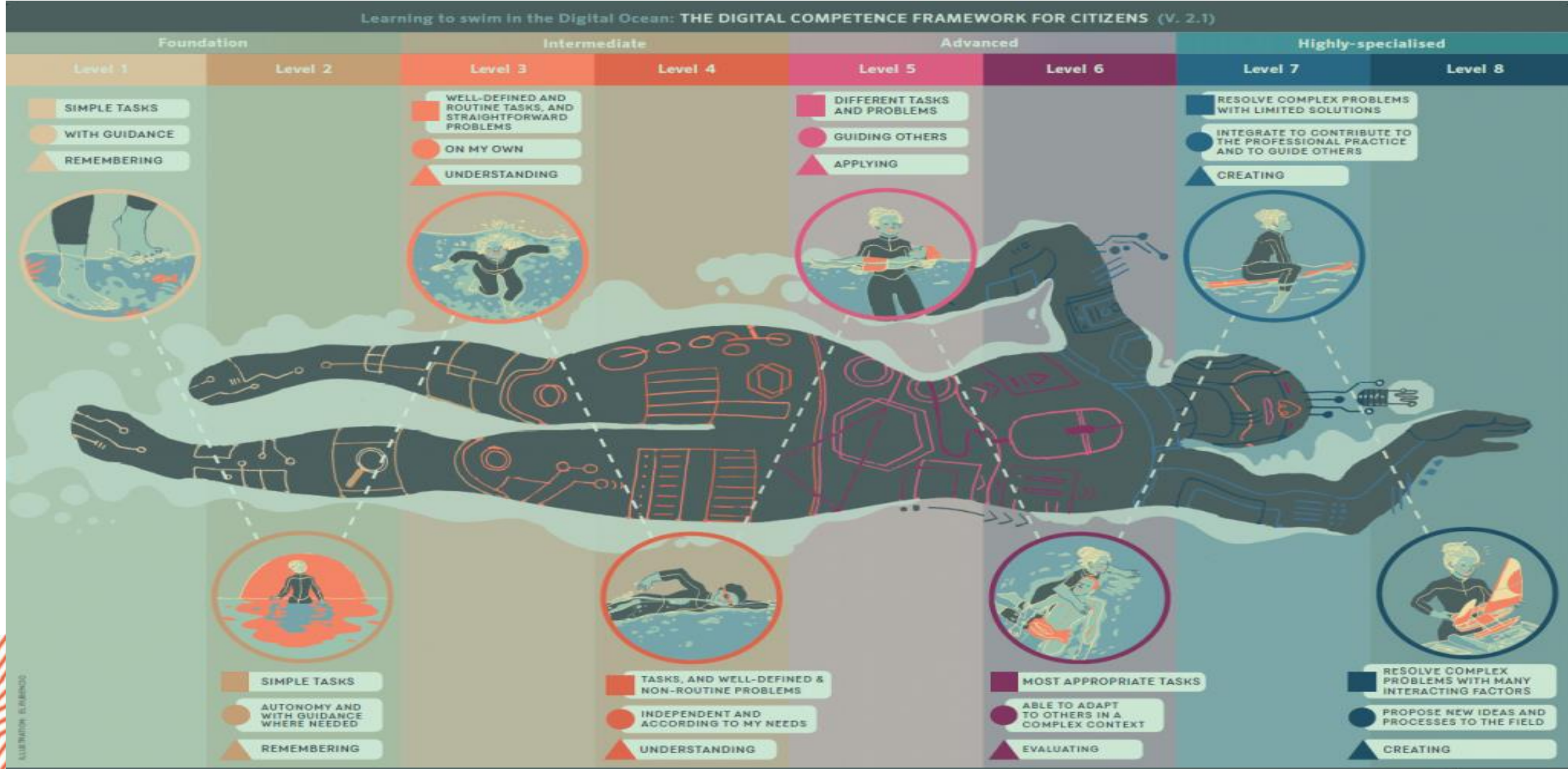


DigCompEdu:

6 areas (22 competences). 6 proficiency levels (A1-C2)



Links with DigComp 2.1 (for citizens)



Building, sharing and using evidence in Australia

Danielle Toon

Social Ventures Australia

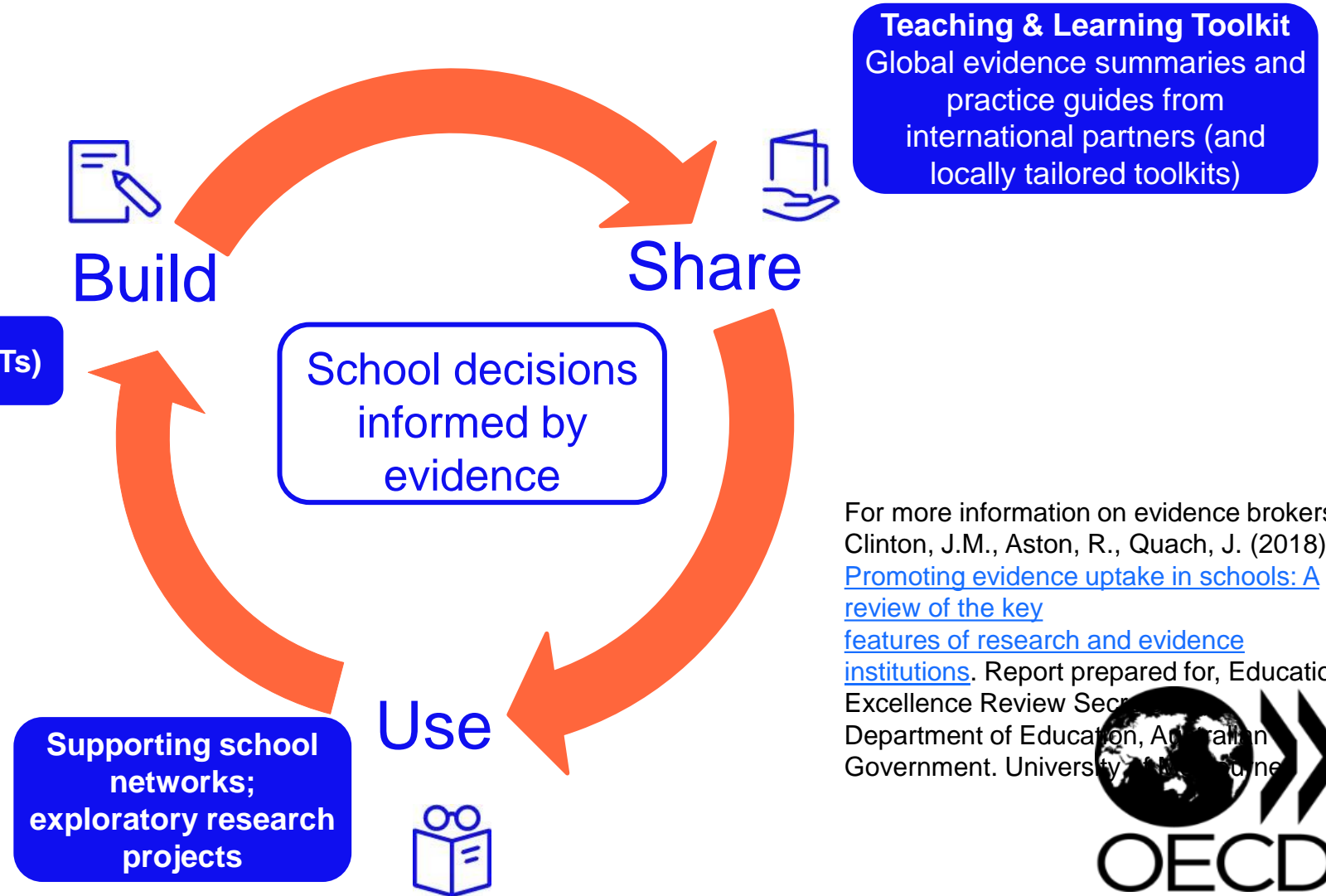


Case study: Evidence for Learning, Australia (i)

A national, not-for-profit knowledge broker partnering with education departments, schools, researchers, government and philanthropists.

We are an **Evidence Intermediary**; we play a broking role between research and practice.

We specialise in **translating evidence** and then **help implementing** it in real world settings.



For more information on evidence brokers: Clinton, J.M., Aston, R., Quach, J. (2018). [Promoting evidence uptake in schools: A review of the key features of research and evidence institutions](#). Report prepared for, Education Excellence Review Secretariat, Department of Education, Australian Government. University of Melbourne.



Case study: Evidence for Learning, Australia (ii)

Collaboration and communication between stakeholders is needed to build a common understanding of evidence and the use of evidence



E4L's Expert Reference Council: an independent group of experts in education, school improvement and equity including:

- Chair, AITSL
- CEO, ACEL
- CEOs / directors of research bodies and alliances
- Executive directors of state education departments and independent systems
- Lead Teacher
- Principal

E4L's Research Use and Evaluation Committee: independent group of technical experts in the field of school evidence evaluation and research including:

- Executive directors of state education research areas
- Senior Research Fellows
- Associate Deans / Professors of education faculties
- School-based Dean of Research and Pedagogy
- Principal
- Evaluation Manager from Education Endowment Foundation (UK)



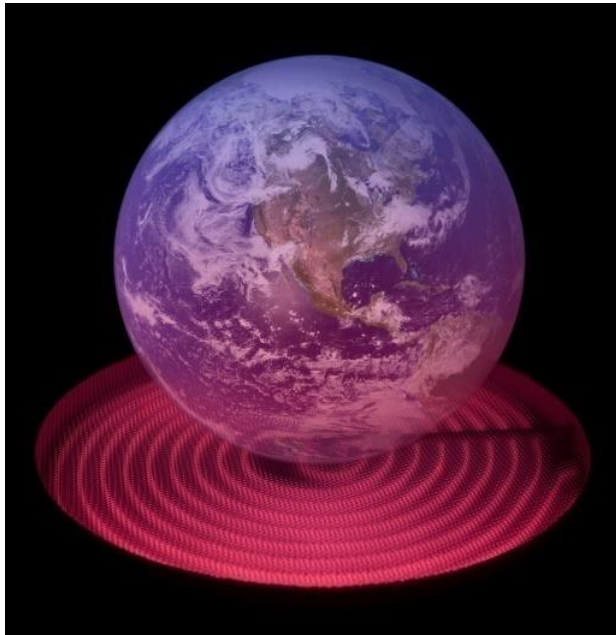


Panel 2. Introduction

How is evidence used in initial teacher preparation?



Data, evidence and knowledge creation for policy and practice - two worlds?



Policy makers

- When creating reform and setting ITP policies, ministers and their officials do pay attention to evidence in relation to:
 - International data - including, perhaps especially PISA
 - Local system data – including e.g. student performance and surveys; and
 - And, increasingly, large scale studies and systematic reviews - where available
- processed/ interpreted through the lens of***
- System starting points,
 - Political goals and values
 - Political timescales
 - Existential consequences





Providers

- When responding to policy reforms, ITP providers, mainly higher education institutions, focus on:
 - The evidential requirements of higher education quality assurance systems
 - Evidence from research
 - The evidential requirements of teacher qualification standards

Interpreted through the lens of

- Practice starting points
- Professional goals and values
- Academic timescales/ years/ cycles
- Existential consequences



Beneficiaries

- Student teachers, new teachers and school leaders engage with evidence from e.g.:
 - Government data, from PISA and accountability systems and from research
 - From students and their work, from teachers and from classrooms
- Through the lens of
 - What makes a difference to students and teachers and school improvement
 - Professional values
 - The school year/ cycle
 - Accountability systems and existential consequences





How is evidence used in Australia? Policy perspective

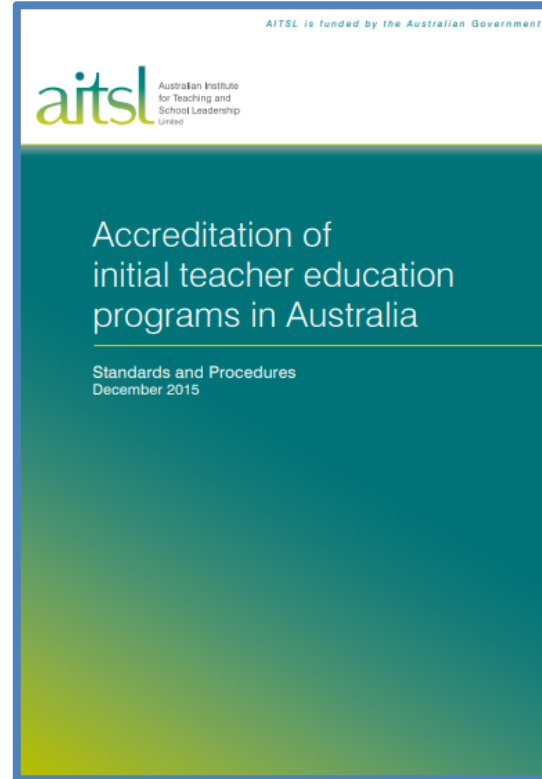
Danielle Toon
Social Ventures Australia



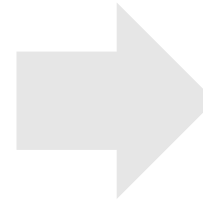
How evidence is used in ITP policy: an Australian case study (i)



2014 'TEMAG Report'



2015 revisions to the [Accreditation of Initial Teacher Education in Australia: Standards and Procedures](#)



aitssl		TEMAG REPORT CARD		
		In 2014 The Australian Government appointed a Teacher Education Ministerial Advisory Group (TEMAG) to make recommendations to improve initial teacher education (ITE) to better prepare new teachers and ensure new graduates are classroom ready.		
	Outcomes achieved	Next steps	Impact of reforms	
1. Selection Ensuring entrants to ITE are suited to teaching	<ul style="list-style-type: none"> All providers publish clear entry requirements 	<ul style="list-style-type: none"> All providers publish data on all students admitted to ITE programs 	<ul style="list-style-type: none"> All of the 30,000 annual entrants to ITE programs are assessed for their academic and non-academic capabilities Graduates possess qualities that lead to success as a teacher 	
2. Quality Assurance All initial teacher education programs meet rigorous new standards	<ul style="list-style-type: none"> Standards agreed by all Education Ministers All providers redesign programs to meet new Standards Approximately 317 transition plans, Stage 1 and Stage 2 applications submitted to regulatory authorities 	<ul style="list-style-type: none"> All programs assessed against new standards by end 2017 17 Stage 1 and Stage 2 programs already accredited 	<ul style="list-style-type: none"> ITE programs across Australia are consistently high quality, within and across States and Territories ITE providers actively improve their programs based on evidence 	
3. Robust Assessment All graduates pass a teaching performance assessment (TPA) of their classroom readiness	<ul style="list-style-type: none"> Assessment tools being developed 2000 pre-service teachers involved in teaching performance assessment trials in 2017 	<ul style="list-style-type: none"> From 2018 pre-service teachers are consistently assessed in the classroom 	<ul style="list-style-type: none"> The 10,000 teachers who graduate annually have a consistently high level of readiness for the classroom 	
continued overleaf				

aitssl		TEMAG REPORT CARD		
	Outcomes achieved	Next steps	Impact of reforms	
4. Primary Specialisation Primary teaching graduates have a specialisation in a learning area of the Australian Curriculum	<ul style="list-style-type: none"> Standard agreed by all Education Ministers 	<ul style="list-style-type: none"> All primary pre-service teachers undertake a specialisation from 2019 	<ul style="list-style-type: none"> Primary teaching graduates have additional expertise and confidence in their area of specialisation, leading to improved outcomes for their students and school 	
5. Professional Experience Better school placements for	<ul style="list-style-type: none"> Written partnership agreements with all placement schools 	<ul style="list-style-type: none"> Improved communication and deeper relationships between 	<ul style="list-style-type: none"> Pre-service teachers get a better start to their careers through higher 	

2017 [report card on progress](#)



How evidence is used in ITP policy: an Australian case study (ii)

- Evidence is not the only factor in policymaking decisions, and there is often variability in the way policy is implemented

TEMAG found “... a high degree of variability in the quality of practice across initial teacher education in Australia”, and significant differences in the level of preparation of beginning teachers entering our schools.

It said that improving teaching quality is a national issue needing a coordinated response — across states and territories, accrediting bodies, deans of education, academics, principals, teachers and parents.

Source: [AITSL website](#)





How is evidence used in initial teacher preparation in the United States? Programme/practitioner perspective

Emily Rainey

University of Pittsburgh



Big Questions

- How can we best prepare new teachers?
- What tools, structures, and pedagogies will support our efforts?





Informing Program Design

- Question of supportive program:
 - How evident are program goals in novices' early teaching attempts?
- Design:
 - Analysis of videoed novice instructional practice; examined entire program cohort (5 certification areas)
- Findings:
 - Novices revealed some—but not all—of our program goals in their practice

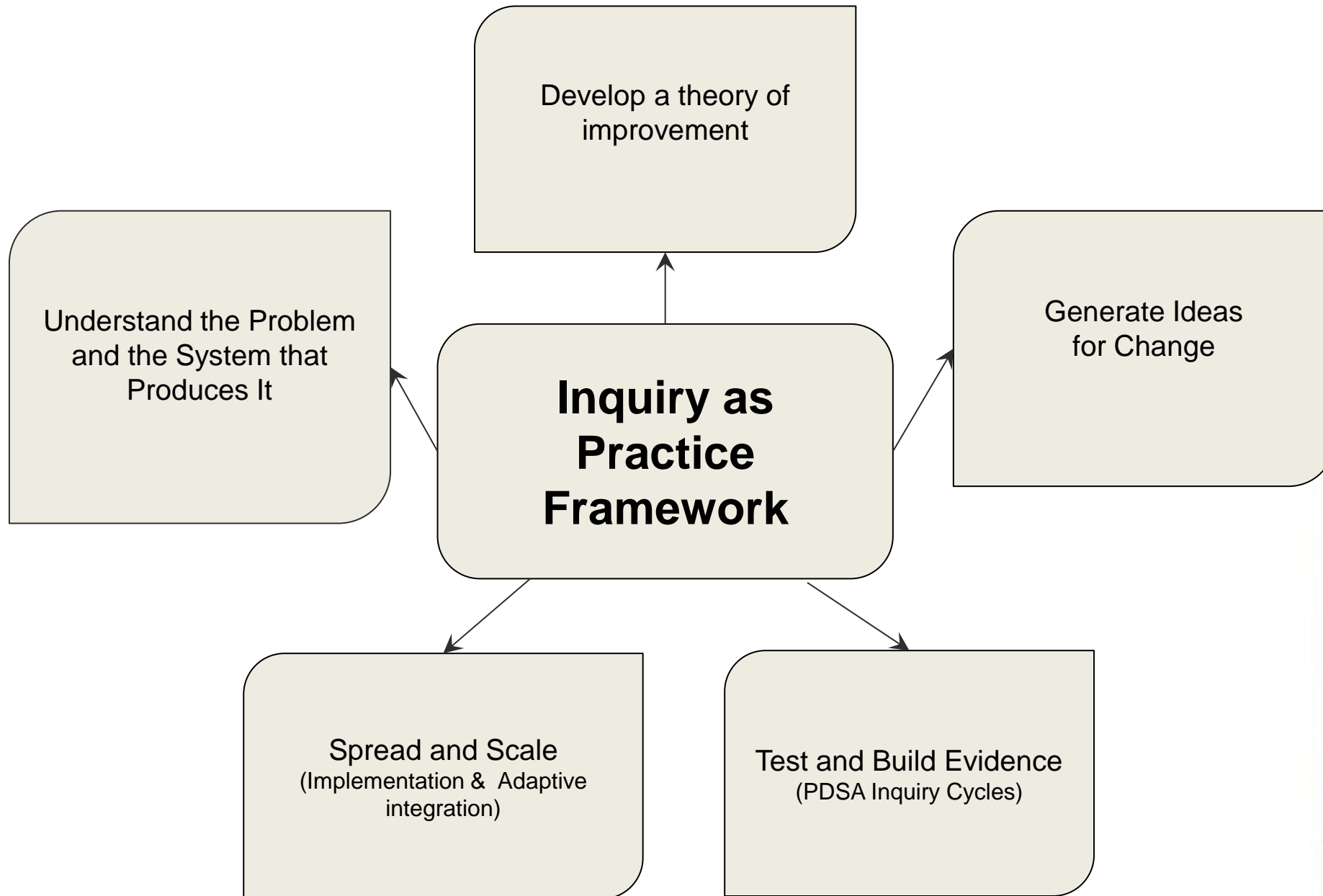




Informing our program

- How can we improve the opportunities to learn so that all novices meet all program goals?
 - New tools
 - Shared language of program goals
 - Cornerstone videos: novice and veteran
 - Common teacher education assessment tool
 - New pedagogies
 - Shared video annotation activities
 - In-the-moment coaching in schools (with mentor teachers)
 - Represent, decompose, approximate
- Does this also suggest something about the developmental trajectory of novice teachers?





How is international evidence used in initial teacher preparation in the United Kingdom?

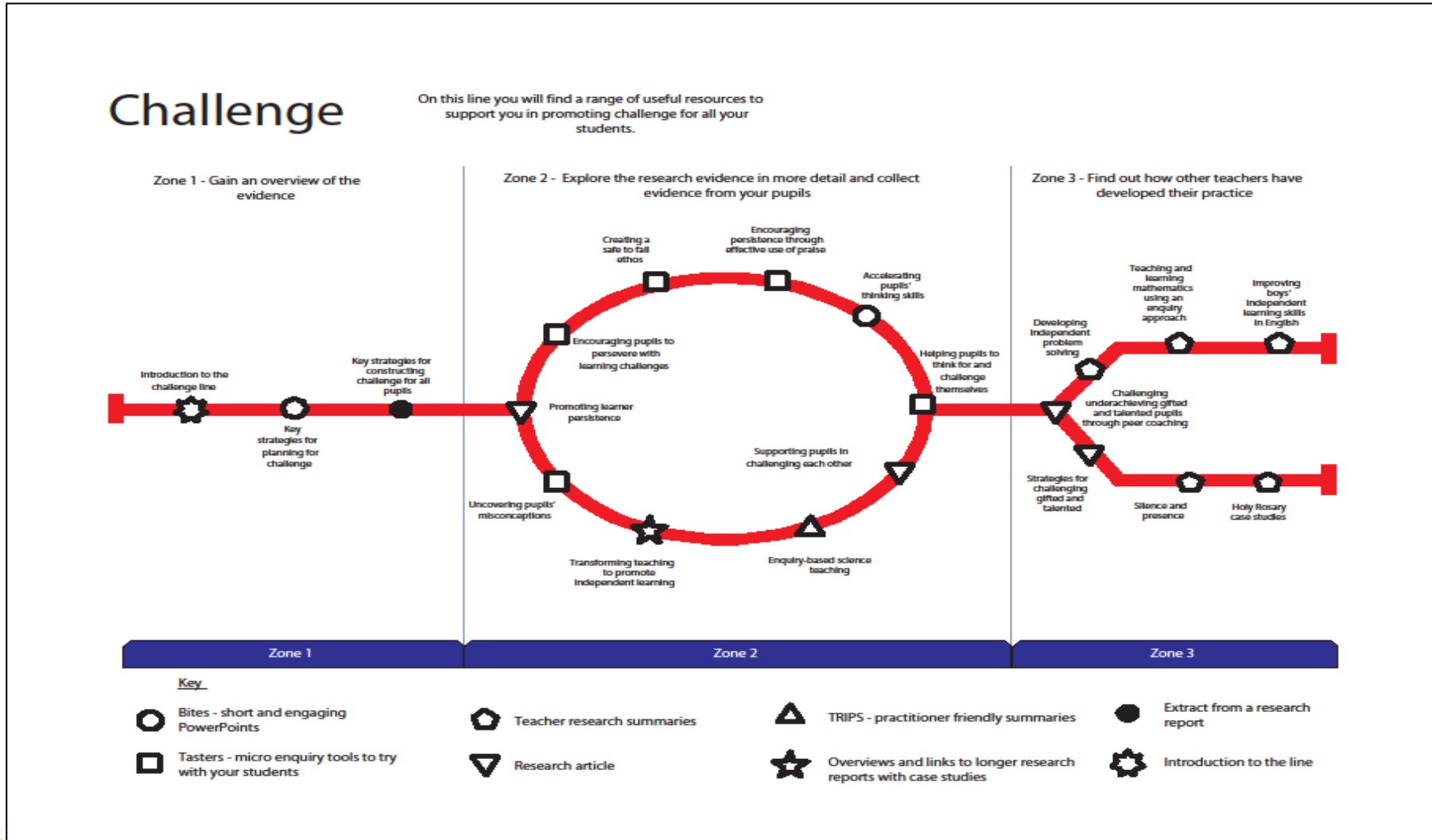
School perspective

Philippa Cordingley

Centre for the Use of Research and Evidence



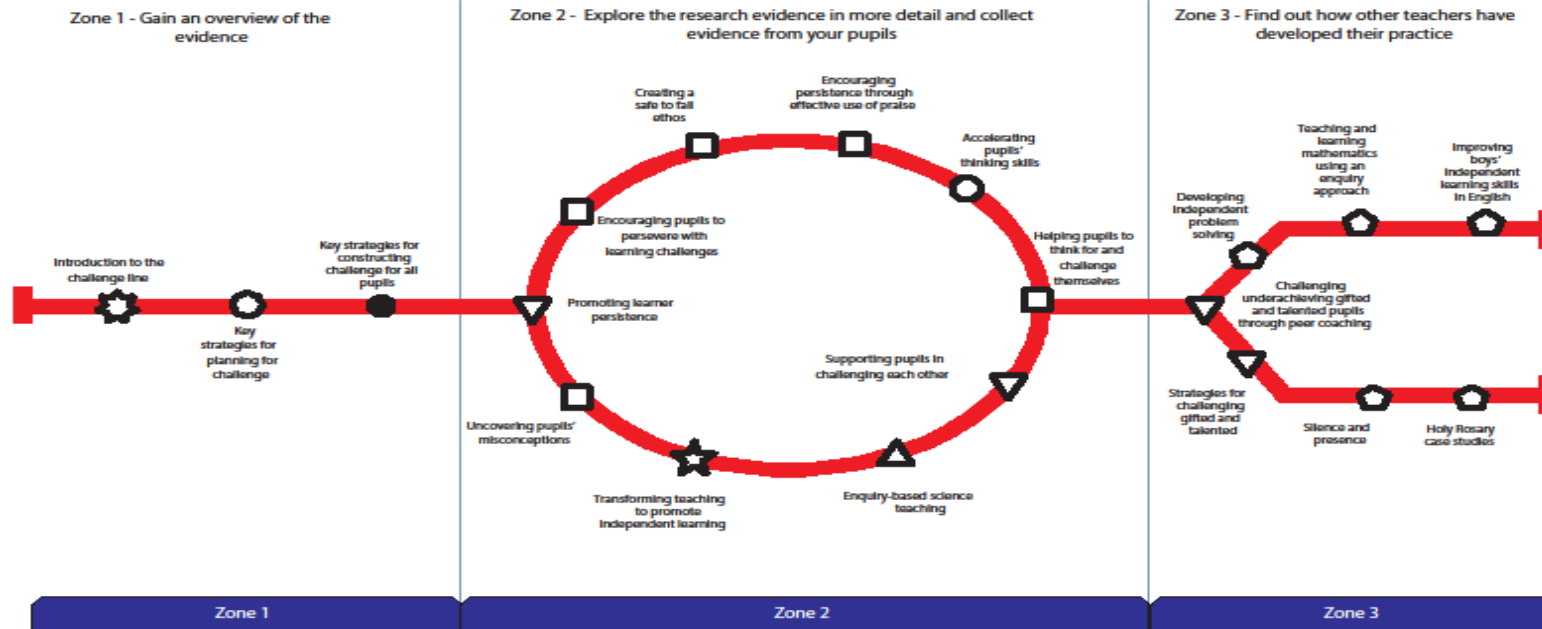
The first Route Map...



The first Route Map...

Challenge

On this line you will find a range of useful resources to support you in promoting challenge for all your students.



The different tools from the Route Map

- There are five major types of resource which CUREE typically uses in the creation of Research Route Maps:
 - Micro-enquiry tools to focus CPD on needs of sub groups of pupils and scaffold evidence collection/ AFL for teachers
 - Research summaries of 3 different lengths/ depths – Bites, Digests, illustrated summaries of findings plus theory
 - Supported theory illustrated by case studies for teachers
 - Quality assured, teacher or school leader-researched case studies
 - Videos
- ... supplemented with action planning frameworks, reporting frameworks, coaching and Quality Assurance of new stations

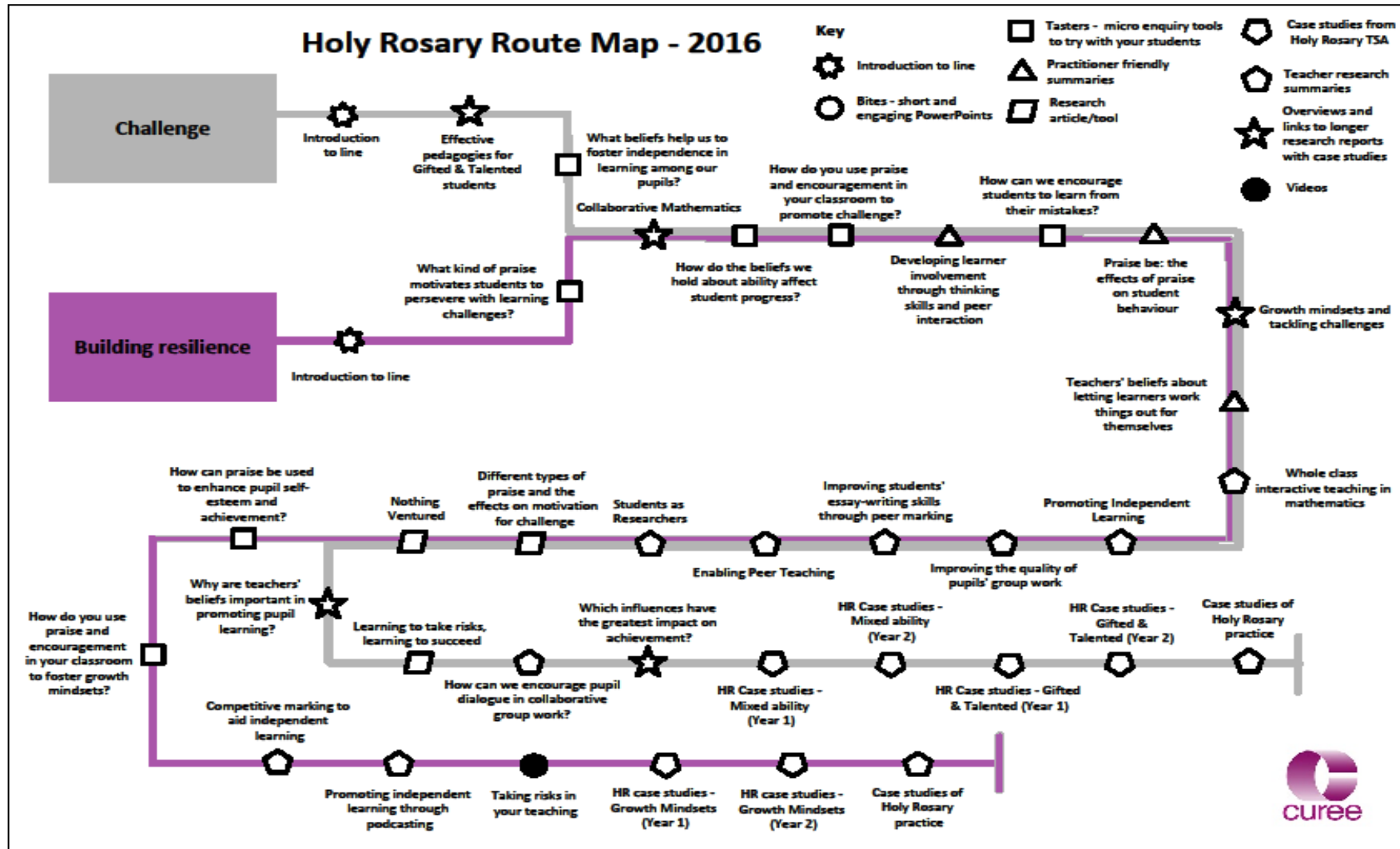


Holy Rosary case study

- Workshops, iterative learning cycles & annual analysis reveal progress and new priorities themes
 - strategies for challenge for 'higher achieving students and
 - Resilience; and now
 - Depth in questioning for accelerating meta-cognition
- Mentors, Teachers, new teachers supported in writing up enquiries. Reports edited and resulting reports added to the route map.
- Every educator now involved. CPDL programme for the year now wholly organised around a gradually deepening & extending route map use to make CPDL visible
- Over 30% of teachers in other Alliance schools joined in and other schools join the Alliance to access the route map



Three years on...



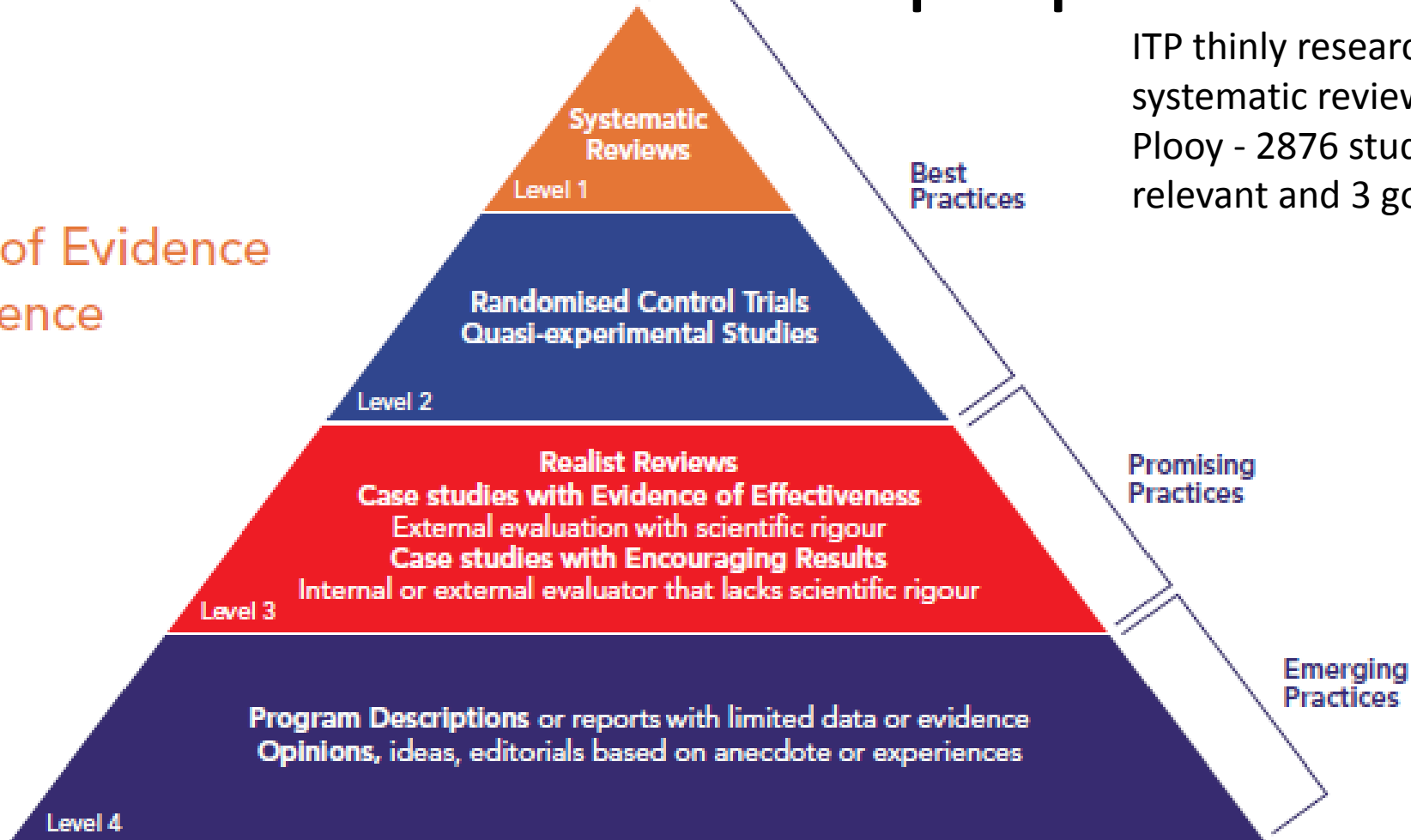
The impact

- Big differences to teachers' commitment and investment in action research focused on Challenge
- Visibility of impact on the pupils involved
- Infectiousness **“The great power is in seeing our own staff do it rather than somebody else. Teachers look at it and think ‘well why can’t I do that?’”**.
- Individual reports also featured in TES
- Use of route map embedded in phase and departmental meetings
- Route Maps now creating a research legacy for the Alliance
- Teachers within the Alliance now engaging with the Route Map from their NQT year onwards



There are different types of evidence that serve different purposes

Levels of Evidence Confidence



ITP thinly researched, e.g. a systematic review in 2016, du Plooy - 2876 studies, 19 relevant and 3 good ones

