

*It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.*

*Mark Twain – or not...*

Kevan Collins

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It's not broken - but it's not working well enough for some...

My top three - today...

### **Early Years**

Self regulation, language and communication, parental engagement

### **Teaching - best bets**

Meta cognition, improving feedback, securing early literacy, going beyond academics

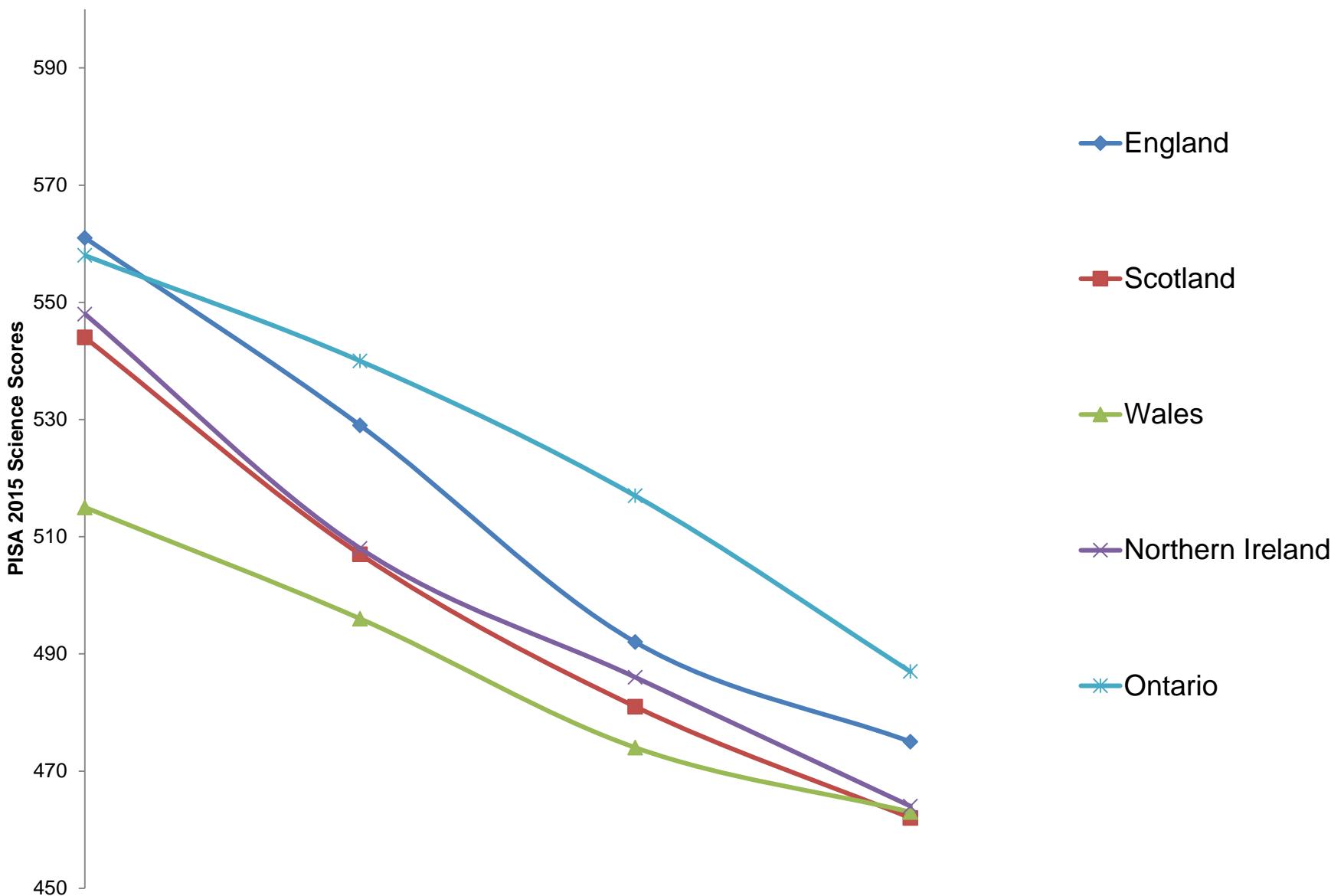
### **Post 16 and the 'forgotten 40%'**

Tackling misconceptions, diagnostic assessment and planned learning programmes

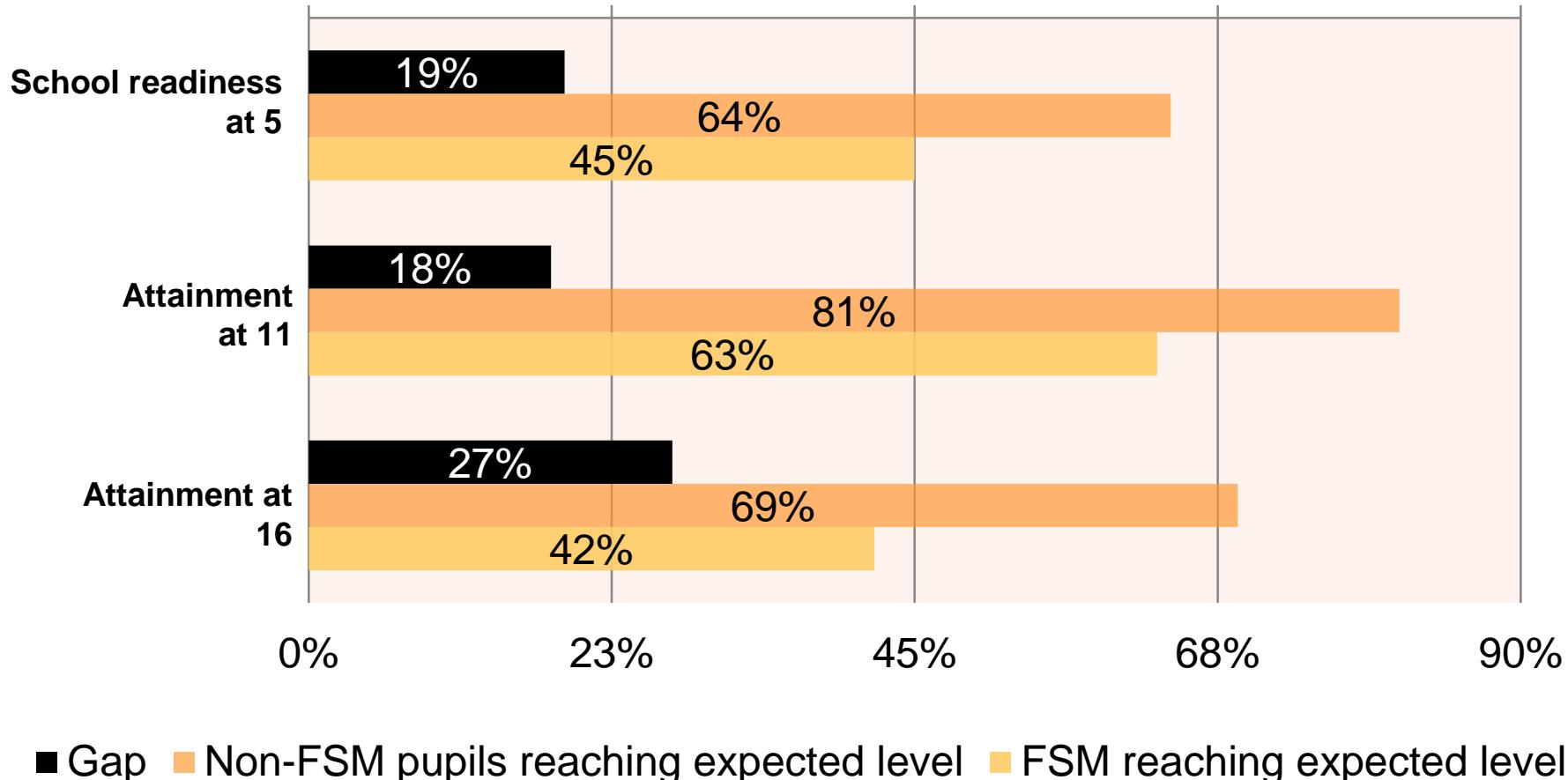
# Education and socio-economic disadvantage

- It's a global issue
- England's gap
- Variation between and within schools
- The 1:7 and 1:12
- It's both what you do and the way that you do it

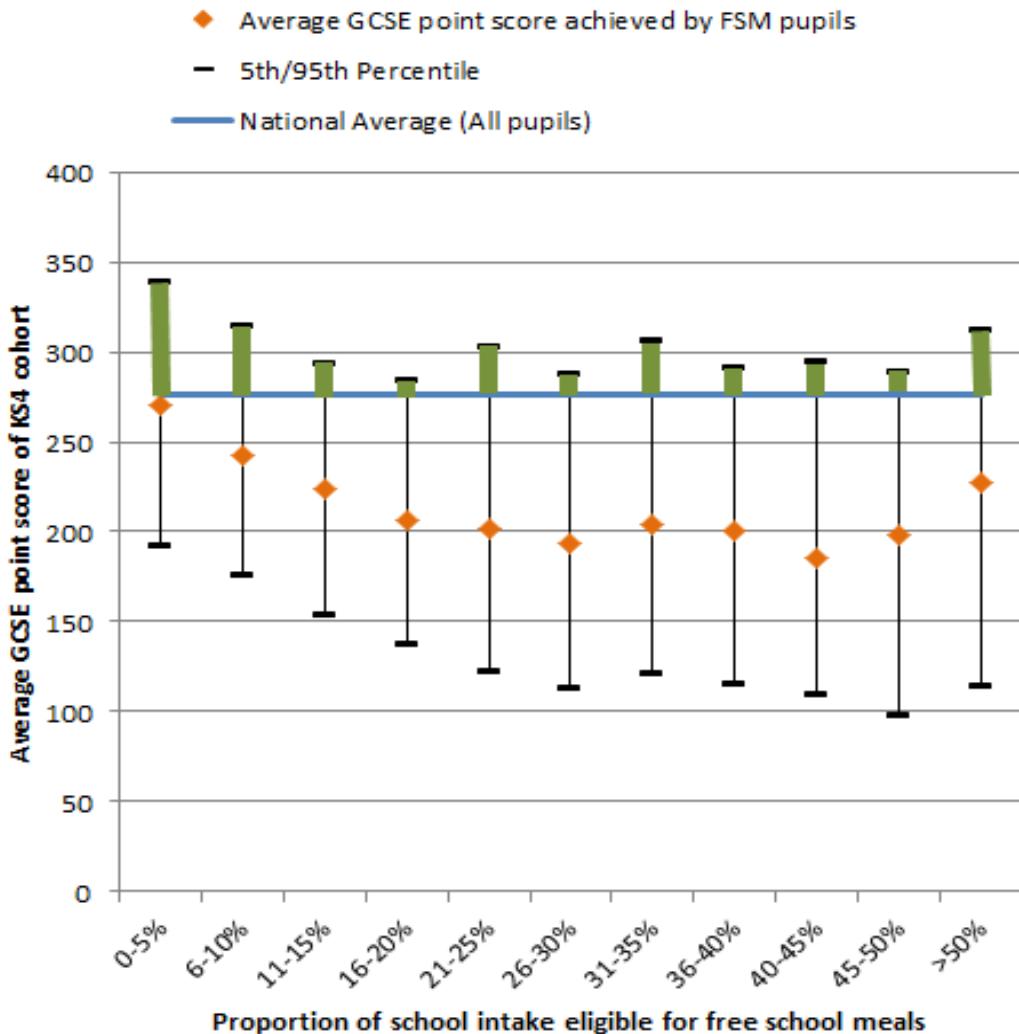
# PISA 2015 Science performance by socio economic background



# The Attainment Gap



# Variation between similar schools

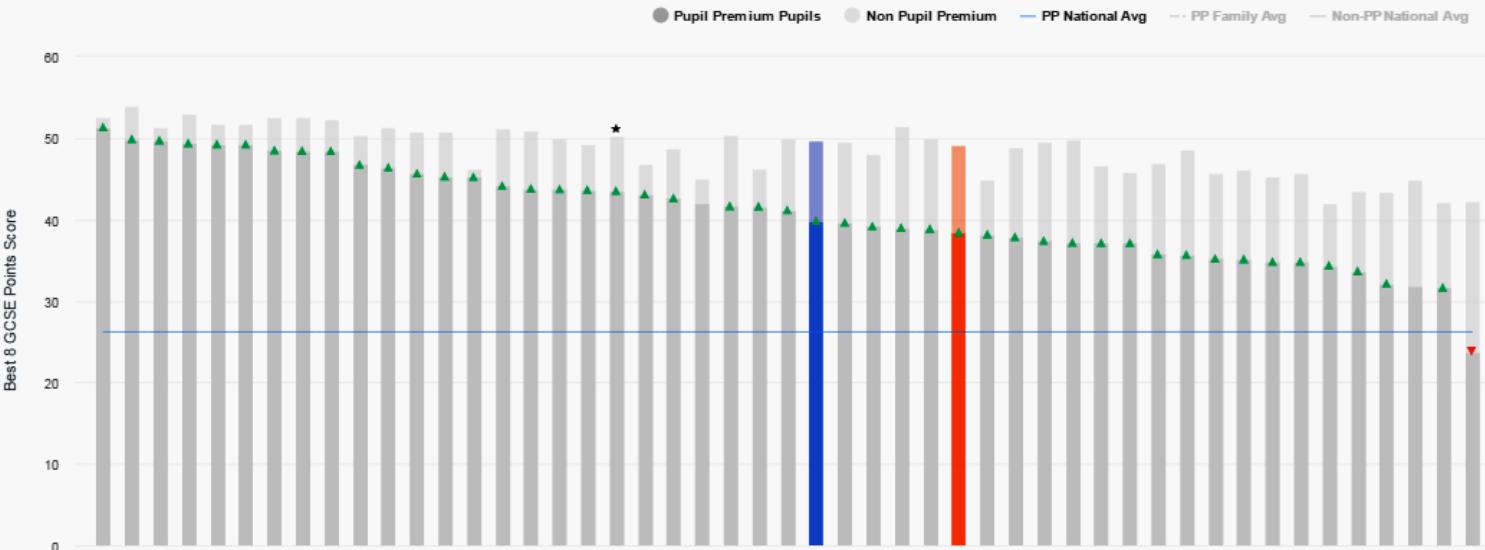


- There are 428 secondary schools (15% of our data set) in which the average GCSE point score of FSM pupils *exceeds* the national average for all pupils (276.7 points).
- In the graph these are schools in green above the horizontal blue line.
- These top performing schools come from across the spectrum of disadvantage

Note: this analysis excludes independent, special and selective schools



The figures combine data from 2013, 2014 and 2015, to produce an overall three year average. The national average line for Pupil Premium pupils is shown automatically.



#### Why am I in this family? National Distribution

#### Key Summary Data

#### The Holt School Your School

#### KS2    FSM%    EAL%    IDACI%

4.9    8.5%    6.4%    5.9%

#### Hitchin Girls' School Similar School

#### KS2    FSM%    EAL%    IDACI%

5.0    11.8%    10.7%    6.0%

#### Click a school above Selected School

Select a school from your family above to display its comparison data alongside your most statistically similar school

#### Attainment Gap

Total number of pupils on roll

Including English & Maths

Avg score of best 8 grades

Comparison with expected grades

#### Non PP    PP    Gap

920    85    -

83%    59%    -24%

49.2    38.5    -10.7

4.6    0.9    -3.7

#### Non PP    PP    Gap

725    97    -

88%    60%    -28%

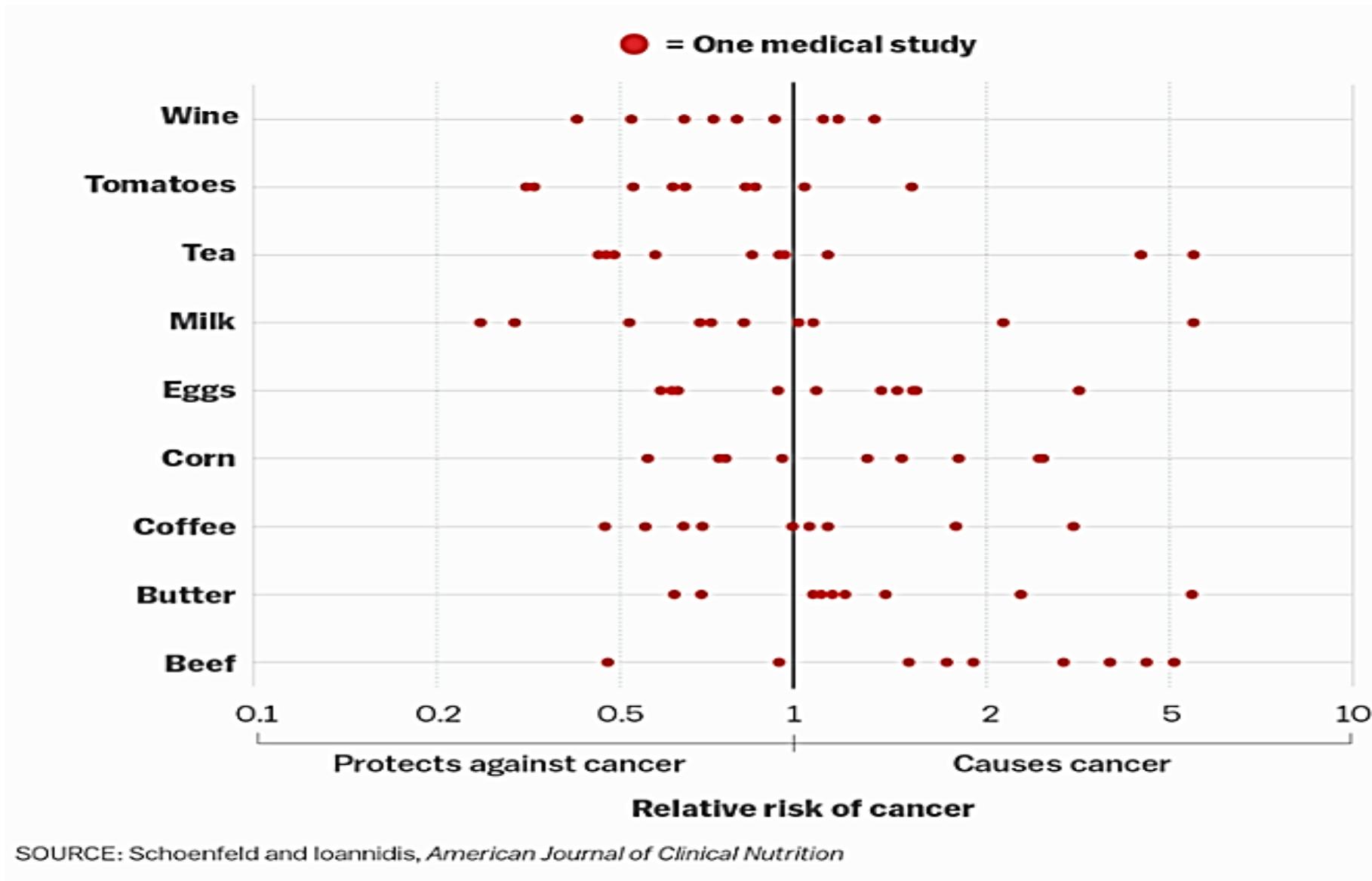
49.7    39.9    -9.9

3.2    0.4    -2.8

# Towards an evidence informed system...



# Associations between foods and cancer



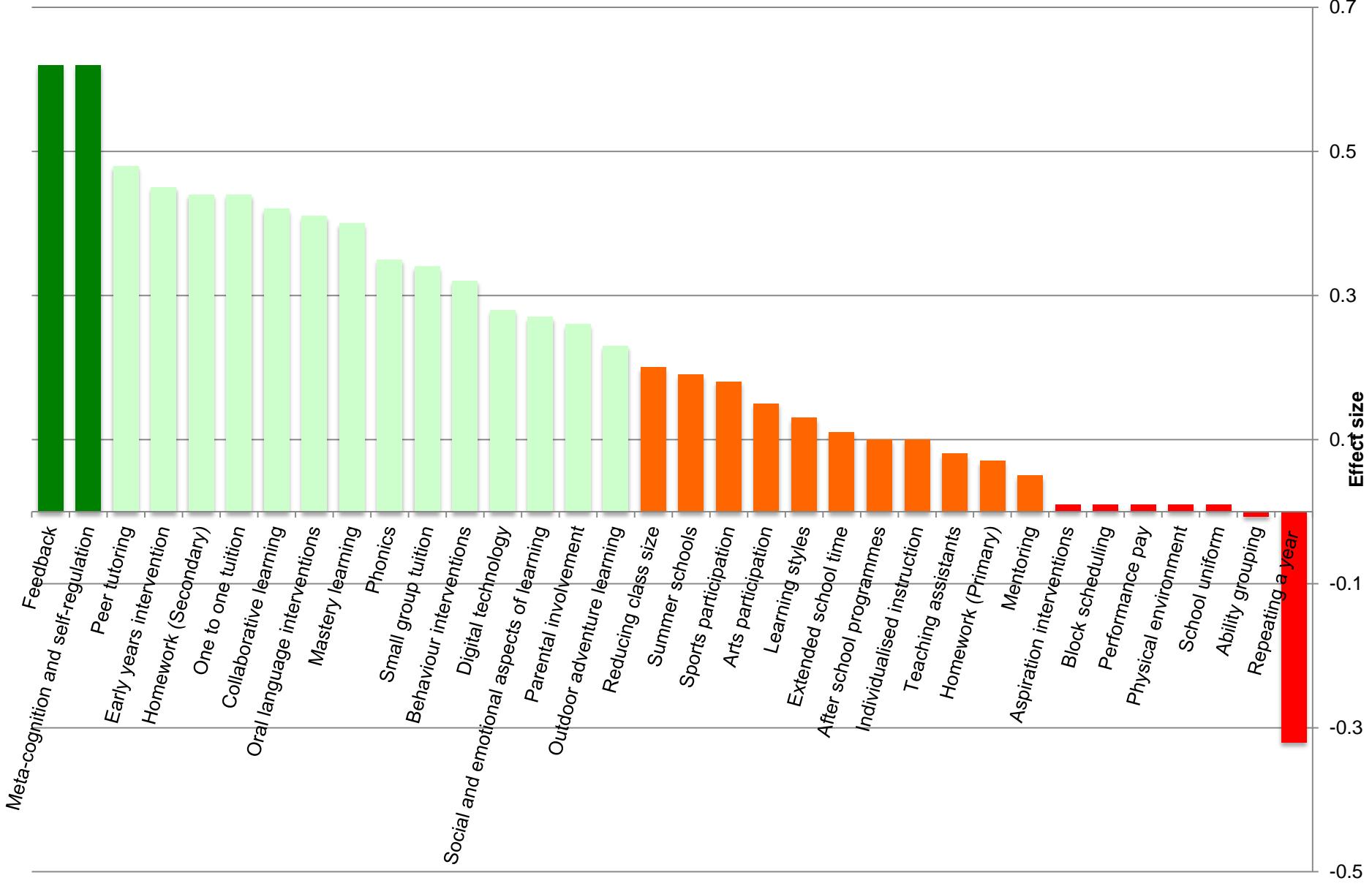
# Teaching and Learning Toolkit

Toolkit Strand ▾	Cost ▾	Evidence Strength ▾	Moderator Impact ▾	
<b>Arts participation</b> Low impact for low cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Aspiration interventions</b> Very low or no impact for moderate cost based on very limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	0	
<b>Behaviour interventions</b> Evidence suggests that behaviour interventions can produce large improvements in academic performance	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+4	
<b>Block scheduling</b> Very low or no impact for very low or no cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	0	
<b>Collaborative learning</b> Moderate impact for very low cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Digital technology</b> Moderate impact for moderate cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+4	
<b>Early years intervention</b> Moderate impact for very high cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Extending school time</b> Low impact for moderate cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Feedback</b> High impact for low cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+8	
<b>Homework (Primary)</b> Low impact for very low or no cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Homework (Secondary)</b> Moderate impact for very low or no cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Individualised instruction</b> Low impact for low cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Learning styles</b> Low impact for very low cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Mastery learning</b> Moderate impact for very low cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Mentoring</b> Low impact for moderate cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+1	
<b>Meta-cognition and self-regulation</b> High impact for very low cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+8	
<b>One to one tuition</b> Moderate impact for high cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<hr/>				
<b>Oral language interventions</b> Moderate impact for low cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Outdoor adventure learning</b> Moderate impact for moderate cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+3	
<b>Parental involvement</b> Moderate impact for moderate cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+3	
<b>Peer tutoring</b> Moderate impact for very low cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Performance pay</b> Low or no impact for low cost, based on very limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	0	
<b>Phonics</b> Moderate impact for very low cost, based on very extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+4	
<b>Physical environment</b> Very low or no impact for low cost based on very limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	0	
<b>Reading comprehension strategies</b> Moderate impact for low cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+5	
<b>Reducing class size</b> Low impact for very high cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+3	
<b>Repeating a year</b> Negative impact for very high cost based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	-4	
<b>School uniform</b> Very low or no impact for very low cost, based on very limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	0	
<b>Setting or streaming</b> Negative impact for very low or no cost, based on moderate evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	-1	
<b>Small group tuition</b> Moderate impact for moderate cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+4	
<b>Social and emotional learning</b> Moderate impact for moderate cost, based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+4	
<b>Sports participation</b> Moderate impact for moderate cost based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Summer schools</b> Moderate impact for moderate cost based on extensive evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+2	
<b>Teaching assistants</b> Low impact for high cost, based on limited evidence.	£ £ £ £ £	⊕ ⊕ ⊕ ⊕ ⊕	+1	

# Teaching and Learning Toolkit

Filter Toolkit	Toolkit Strand ▾	Cost ▾	Evidence Strength ▾	Months Impact ▾
<p>Filter results by keywords</p> <hr/> <p>£ Cost</p> <p>🔒 Evidence</p> <p>+1 Months Impact</p> <p><a href="#">Reset</a></p>	<b>Parental involvement</b> Moderate impact for moderate cost, based on moderate evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+3
	<b>Outdoor adventure learning</b> Moderate impact for moderate cost, based on moderate evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+4
	<b>Oral language interventions</b> Moderate impact for very low cost, based on extensive evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+5
	<b>One to one tuition</b> Moderate impact for high cost, based on extensive evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+5
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	<b>Learning styles</b> Low impact for very low cost, based on limited evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+2
	<b>Individualised instruction</b> Moderate impact for very low cost, based on moderate evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+3
	<b>Homework (Secondary)</b> Moderate impact for very low cost, based on moderate evidence.	£ £ £ £ £	🔒 🔒 🔒 🔒 🔒	+5

# Average Effects



# Inside the Meta-cognition Toolkit strand

## Meta-cognition and self-regulation

High impact for very low cost, based on extensive evidence.



### Contents

- [01. What is it?](#)
- [02. How effective is it?](#)
- [03. How secure is the evidence?](#)
- [04. What are the costs?](#)
- [05. What should I consider?](#)

[Toolkit A-Z](#)

## Meta-cognition and self-regulation

Meta-cognition and self-regulation approaches (sometimes known as ‘learning to learn’ approaches) aim to help learners think about their own learning more explicitly. This is usually by teaching pupils specific strategies to set goals, and monitor and evaluate their own academic development. Self-regulation means managing one’s own motivation towards learning. The intention is often to give pupils a repertoire of strategies to choose from during learning activities.

### How effective is it?

Meta-cognition and self-regulation approaches have consistently high levels of impact, with pupils making an average of eight months’ additional progress. The evidence indicates that teaching these strategies can be particularly effective for low achieving and older pupils.

### Resources



[Printable Summary](#)  
19th May, 2016 - Toolkit/EEF\_meta-cognition-and-self-regulation.pdf



[EEF\\_Technical\\_Appendix\\_Meta Cogr](#)  
29th March, 2016 -  
Projects/EEF\_Technical\_Appendix\_Meta\_Cognition\_and\_Self\_Regulation.pdf  
137 KB pdf

### Related Projects

We have funded 6 Meta-cognition and

# Disciplined innovation

We are working to fund, develop and evaluate projects that:

- Build on existing evidence
- Improve outcomes for FSM pupils
- Generate significant new understanding of 'what works'.
- Can be replicated cost effectively if proven to work.

**Examples:** Providing breakfast, increasing exercise in schools, addressing pupil well-being, starting the school day later, flipped learning



# Innovations we're trialling...

## **Family and wider community activities**

- Do financial incentives improve parental engagement?
- Can texting improve attendance and achievement?
- Does involvement in the Fire Brigade Cadets improve wider outcomes?
- Does training parents to read with their children improve attainment?

## **Teaching and pedagogy**

- Can peer observation by teachers, improve practice?
- Do hand held response devices increase the pace and quality of learning?
- Does teaching children to play chess boost their attainment in Maths?
- What are the best ways of grouping students, and what impact does this have on attainment?

## **School organisation**

- What are the best ways of training and supporting Teaching Assistants?
- What impact, if any, does giving children breakfast in schools have?
- Does delaying school start times for adolescents boost Key Stage 4 attainment?

# Parenting Projects

Project	Summary	Age	Impact	Security
<b><i>Parenting Academy</i></b>	The Parent Academy was a series of classes for pupils' parents,	<b>Key Stage 2</b>	<b>0 months</b>	
<b><i>Texting Parents</i></b>	The project used school platforms and communications systems to send texts to parents	<b>Key Stage 3 and 4</b>	<b>+1 months</b>	
<b><i>Supporting Parents on Kids' Education in Schools (SPOKES)</i></b>	A ten-week intervention that teaches parents strategies to support their children's reading	<b>Year 1</b>	<b>0 months</b>	
<b><i>Mind the Gap</i></b>	Teachers were trained to embed metacognitive approaches in their work, and to effectively and strategically involve parents.	<b>Year 4</b>	<b>-2 months</b>	

# Teaching Assistants: promising results

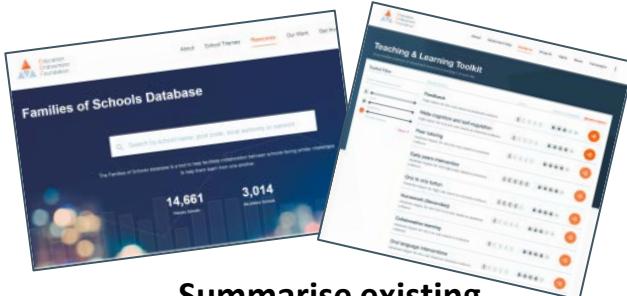
Project	Summary	Age	Toolkit theme	Effect size	Padlocks and stage
<b>Catch Up Literacy</b>	One-to-one tailored TA support on phonics and comprehension.	Years 3-6	<b>Literacy/Phonics</b>	<b>+2 months</b>	
<b>Catch Up Numeracy</b>	One-to-one TA numeracy instruction for struggling learners	Years 2-6	<b>Numeracy</b>	<b>+3 months</b>	
<b>Nuffield Early Language Intervention</b>	Oral language intervention for nursery and reception pupils, delivered by TAs	EYFS	<b>Communication and language approaches (Early Years toolkit)</b>	<b>+4 months</b>	
<b>REACH</b>	Language and comprehension intervention for struggling readers, delivered by TAs	Year 7	<b>Reading comprehension; Oral language</b>	<b>+4 months</b>	
<b>Switch-on Reading</b>	10 week TA intervention drawing on Reading Recovery	Year 7	<b>Reading comprehension</b>	<b>+3 months</b>	
<b>Talk for Literacy</b>	Speaking and listening interventions delivered by TAs.	Year 7	<b>Oral language</b>	<b>+3 months</b>	

# Metacognition: some promising results

Project	Summary	Age	Effect size	Padlocks
<b>Changing Mindsets</b>	Developing pupils “growth mindset”, through structured workshops for pupils	Year 5	+ 2 months	
<b>Philosophy for Children</b>	Weekly teacher-led pupil dialogues, focused on philosophical issues	Years 4 and 5	+ 2 months	
<b>Thinking, Doing, Talking Science</b>	Training teachers to make science lessons more practical, creative and challenging	Year 5	+3 months	
<b>Using Self-regulation to improve writing</b>	Whole-class structured writing programme using memorable experiences as inspiration	Year 6 & 7	+9 months	

# Towards an evidence informed education system

## Generating evidence

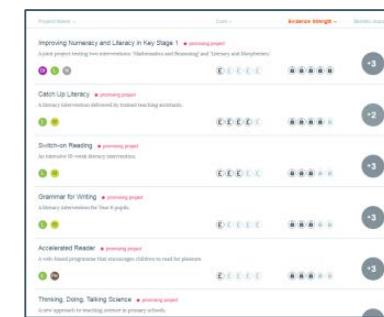
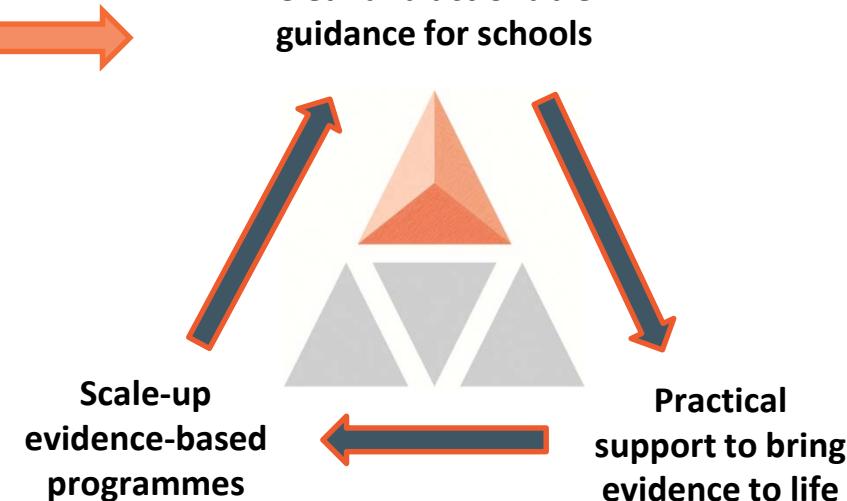
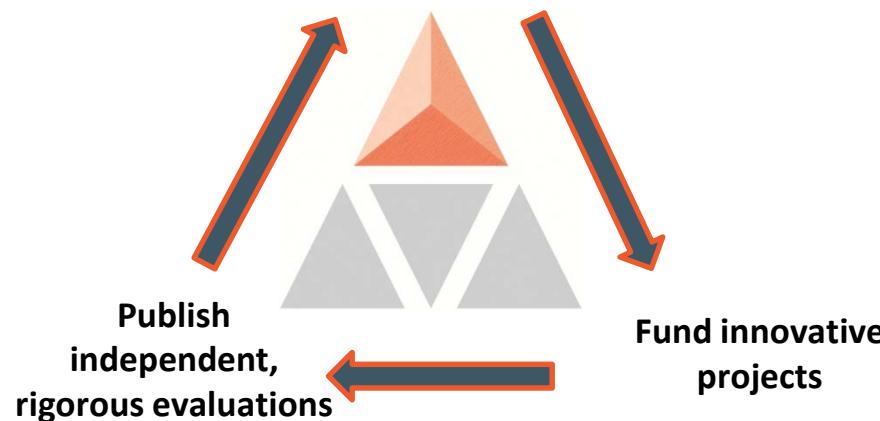


Summarise existing evidence

## Using evidence



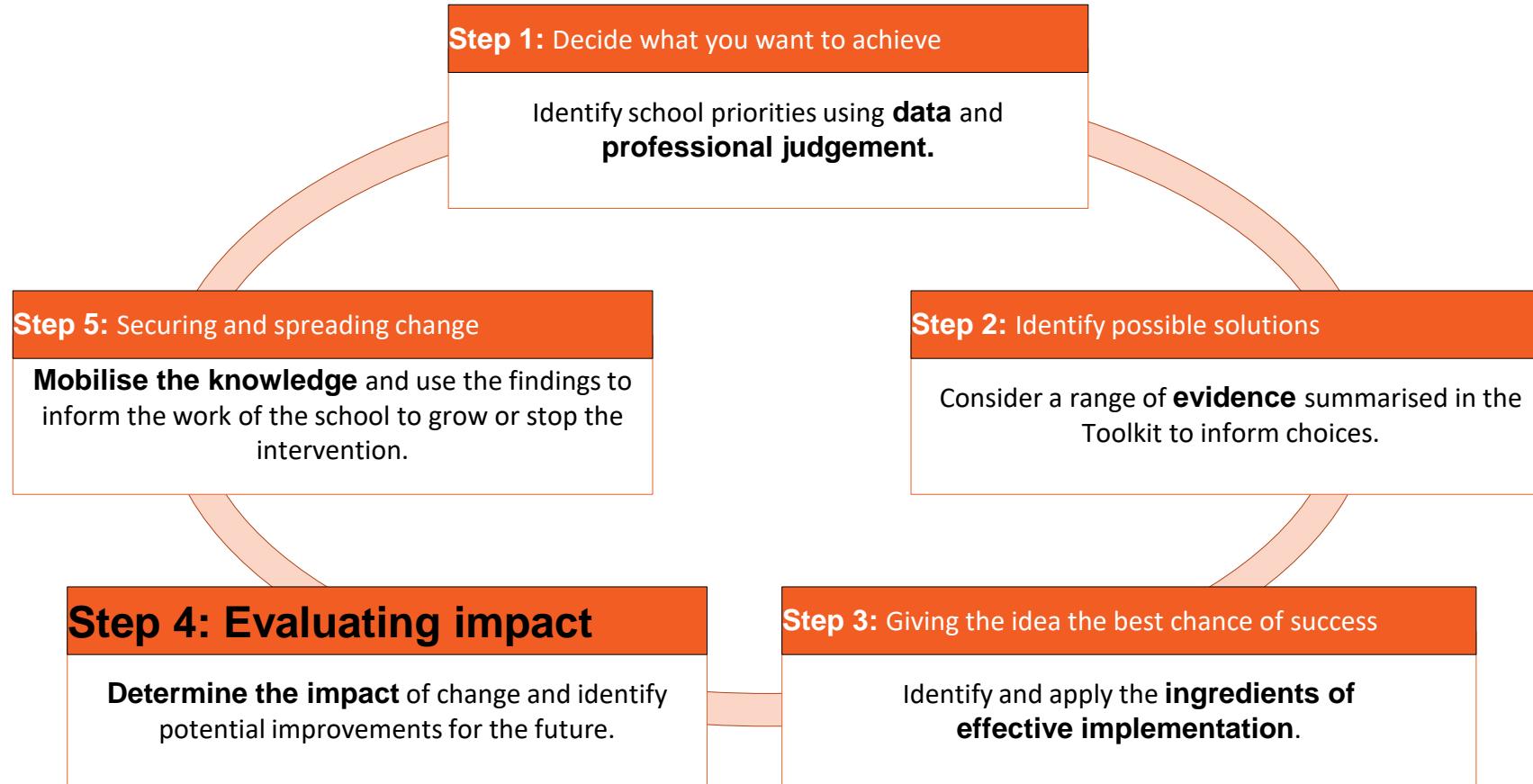
Clear and actionable guidance for schools



# Working with Local Authorities

- **EEF/LA partnerships**  
Excellence Fund approaches in Suffolk, Stockport, Lincolnshire
- **EEF / and local advocates**  
South Yorkshire TA guidance, North East Literacy Campaign
- **EEF / Research Schools**  
23 Research schools funded for 3 years
- **EEF/DFE - adding value and resources**  
Strategic School Improvement Fund, TLIF and Opportunity Areas
- **EEF funded trials of LA led innovations**  
Hackney Lit programme, Bolton Vocab enrichment, Nottingham Switch On

# Applying evidence in practice



# Conclusions

1. *The new focus on evidence will support informed professional debate - it's not a panacea*
2. *Education evidence is more accessible than ever before our professional obligation is to start from what we know and reject uninformed fads*
3. *Adopting an evidence led approach carries new obligations - informing and leading the professional debate*
4. *Delivering education's contribution to drive social mobility demands the active engagement of local government and local stakeholders.*
5. *Enduring question - why is the education sector so weak at spreading and sharing lessons from disciplined and informed innovation?*



# How to get involved

## Apply for funding

Our new general funding round opens this month.

Visit: <http://educationendowmentfoundation.org.uk/apply-for-funding/>

## Volunteer to take part

We are always looking for schools to volunteer to take part in EEF-funded projects.

Visit: <http://educationendowmentfoundation.org.uk/projects/how-can-i-get-involved/>

## Do it yourself

Our DIY Evaluation Guide, developed with Durham University, is a resource intended to help teachers and schools understand whether a particular intervention is effective within your own school context.

Visit: <http://educationendowmentfoundation.org.uk/evaluation/diy-evaluation-guide/>