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Putting evidence into action in schools: Experiences from England

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Introduction



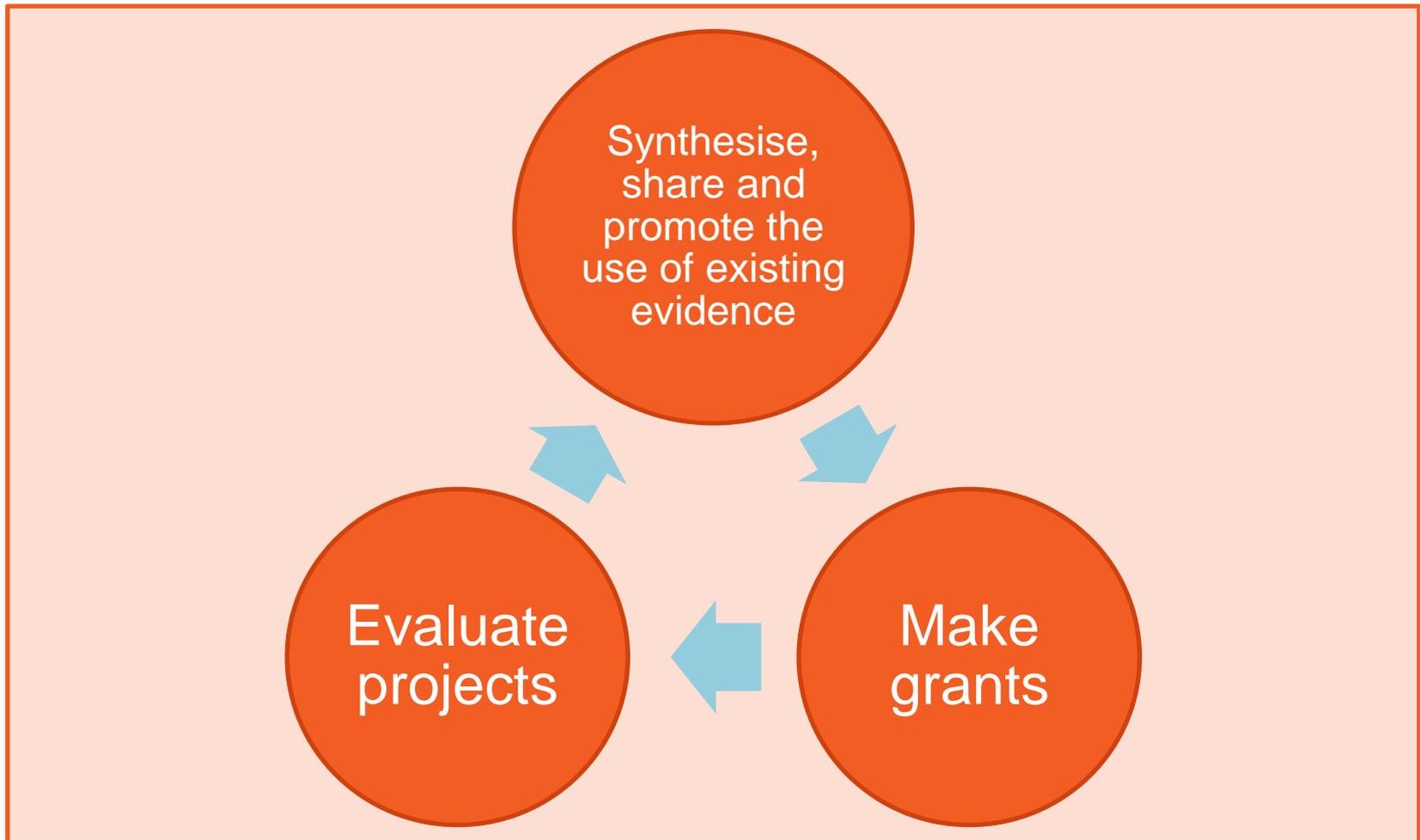
- The EEF is an independent charity dedicated to breaking the link between family income and educational achievement.
- We were founded in 2011 by two 'parent charities' the Sutton Trust and Impetus, and are funded by a Department for Education grant of £125m.



The EEF approach



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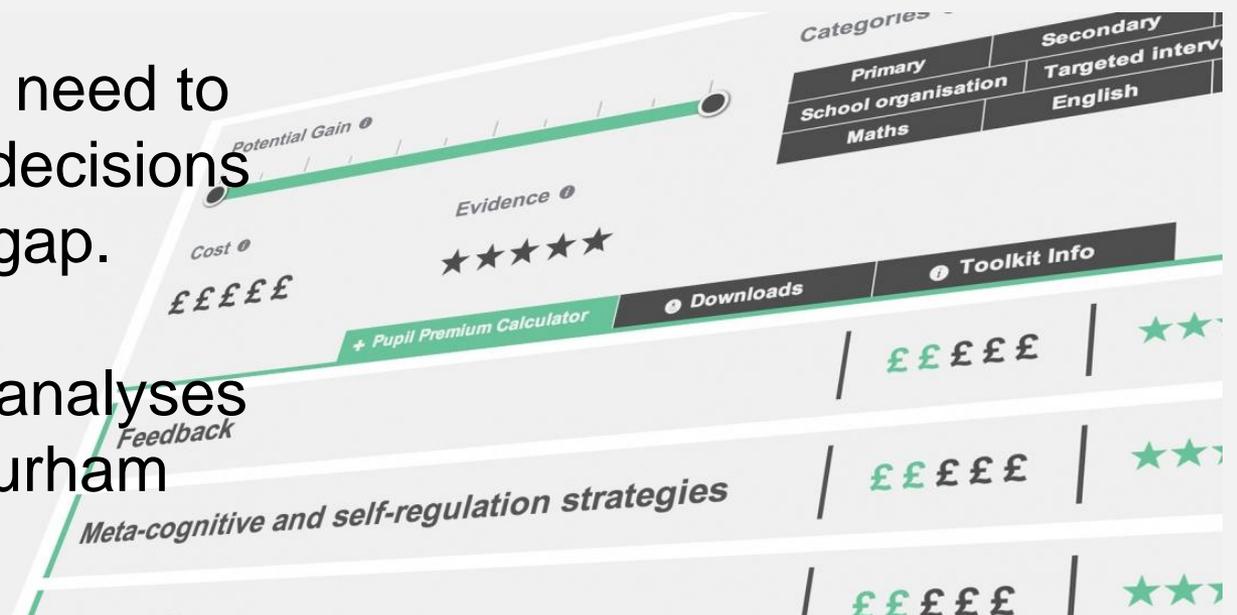


Teaching and Learning Toolkit



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- The Toolkit is an accessible, teacher-friendly summary of educational research.
- Practice focused: tries to give schools the information they need to make informed decisions and narrow the gap.
- Based on meta-analyses conducted by Durham University.



Overview table



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Feedback	£££££	★★★☆☆	+8 months	Sports participation	£££££	★★☆☆*	+2 months
Meta-cognition and self-regulation	£££££	★★★★☆	+8 months	Arts participation	£££££	★★★☆☆	+2 months
Peer tutoring	£££££	★★★★☆	+6 months	Extended school time	£££££	★★☆☆*	+2 months
Early years intervention	£££££	★★★★☆	+6 months	Individualised instruction	£££££	★★★☆☆	+2 months
One to one tuition	£££££	★★★★☆	+5 months	After school programmes	£££££	★★☆☆*	+2 months
Homework (Secondary)	£££££	★★★☆☆	+5 months	Learning styles	£££££	★★★☆☆	+2 months
Collaborative learning	£££££	★★★★☆	+5 months	Mentoring	£££££	★★★☆☆	+1 month
Phonics	£££££	★★★★☆	+4 months	Homework (Primary)	£££££	★★★☆☆	+1 month
Small group tuition	£££££	★★☆☆*	+4 months	Teaching assistants	£££££	★★☆☆*	0 months
Behaviour interventions	£££££	★★★★☆	+4 months	Performance pay	£££££	★☆☆☆☆	0 months
Digital technology	£££££	★★★★☆	+4 months	Aspiration interventions	£££££	★☆☆☆☆	0 months
Social and emotional aspects of learning	£££££	★★★★☆	+4 months	Block scheduling	£££££	★★☆☆*	0 months
Parental involvement	£££££	★★★☆☆	+3 months	School uniform	£££££	★☆☆☆☆	0 months
Reducing class size	£££££	★★★☆☆	+3 months	Physical environment	£££££	★☆☆☆☆	0 months
Summer schools	£££££	★★☆☆*	+3 months	Ability grouping	£££££	★★★☆☆	-1 month

Example: Approach summary



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Toolkit

About the Toolkit

Using the Toolkit

Pupil Premium Calculator

Videos and Case Studies

Approaches A-Z

Ability grouping

After school programmes

Arts participation

Aspiration interventions

Behaviour interventions

Block scheduling

Collaborative learning

Digital technology

Teaching assistants

Very low or no impact for high cost, based on limited evidence.

£ £ £ £ £

★ ★ ★ ★ ★

0
months

Primary, Secondary, Classroom strategies, School organisation, Targeted interventions



What is it?

A teaching assistant (TA) is someone who supports a teacher in the classroom. Their duties can differ dramatically from school to school, though the main tasks tend to be working with small groups of children who need extra support in an area of the curriculum such as literacy or numeracy. They are also often responsible for hearing children read and helping teachers with administrative tasks.

How effective is it?

Overall, research shows that students in a class with a teaching assistant present do not on average outperform those in one where only a teacher is present. This average finding covers a range of recorded impacts: in some cases teachers and teaching assistants have worked together effectively leading to increases in attainment, while in others pupils (particularly those who are lower attaining) have performed worse in classes with teaching assistants present compared to those without.

One clear implication of this surprising finding is that schools should think carefully about the deployment, training (both of the teacher and TA) and evaluation of their TAs if they hope to

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summary as PDF



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Toolkit



Videos & Case Studies

Toolkit Talks: Teaching assistants



Projects In This Area

References

Toolkit

About the Toolkit

Using the Toolkit

Pupil Premium Calculator

Videos and Case Studies

Approaches A-Z

Ability grouping

After school programmes

Arts participation

Aspiration interventions

Behaviour interventions

Block scheduling

Collaborative learning

Digital technology

Early years intervention

Extended school time

Feedback

Homework (Primary)

Homework (Secondary)

Individualised instruction

Learning styles

Mentoring

References: Feedback

Summary of effects	
Study	Effect size
Bangert-Drowns et al., 1991	0.26
Fuchs & Fuchs, 1986	0.72
Kingston & Nash, 2011 (AFL)	0.20
Kluger & DeNisi, 1996	0.41
Lysakowski & Walberg, 1989	0.97
Tenenbaum & Goldring, 1989	0.72
Walberg, 1982	0.81
<i>Indicative effect size</i>	0.62

Meta-analyses abstracts	
Study	Abstract
Bangert-Drowns et al. (1991).	Feedback is an essential construct for many theories of learning and instruction and an understanding of the conditions for effective feedback should facilitate both theoretical development and instructional practice. In an early review of feedback effects in written instruction Kulhavy (1977) proposed that feedback's chief instructional significance is to correct errors. This error-correcting action was thought to be a function of presentation timing, response certainty and whether students could merely copy answers from feedback without having to generate their own. The present meta-analysis reviewed 58 effect sizes from 40 reports. Feedback effects were found to vary with for control for pre-search availability, type of feedback, use of pretests and type of instruction and could be quite large under optimal conditions. Mediated intentional feedback for retrieval and application of specific knowledge appears to stimulate the correction of erroneous responses in situations where its mindful (Solomon & Globerson, 1987) reception is encouraged.
Fuchs & Fuchs, (1986).	While the aptitude treatment interaction (ATI) approach to educational measurement emphasizes establishing salient learner characteristics, systematic formative evaluation provides ongoing evaluation for instructional program modification. Systematic formative evaluation appears more tenable than ATI for developing individualized instructional programs. This meta-analysis investigates the effects of educational programs on student achievement. Twenty-one controlled studies generated 95 relevant effect sizes, with an average effect size of .72. The magnitude of effect size was associated with publication type, data evaluation methods, and use of behavior modification. Findings indicate that unlike reported ATI approaches to individualization, systematic formative evaluation procedures reliably increase academic achievement. This suggests that, given an adequate measurement methodology, practitioners can inductively formulate successful individualized educational programs.

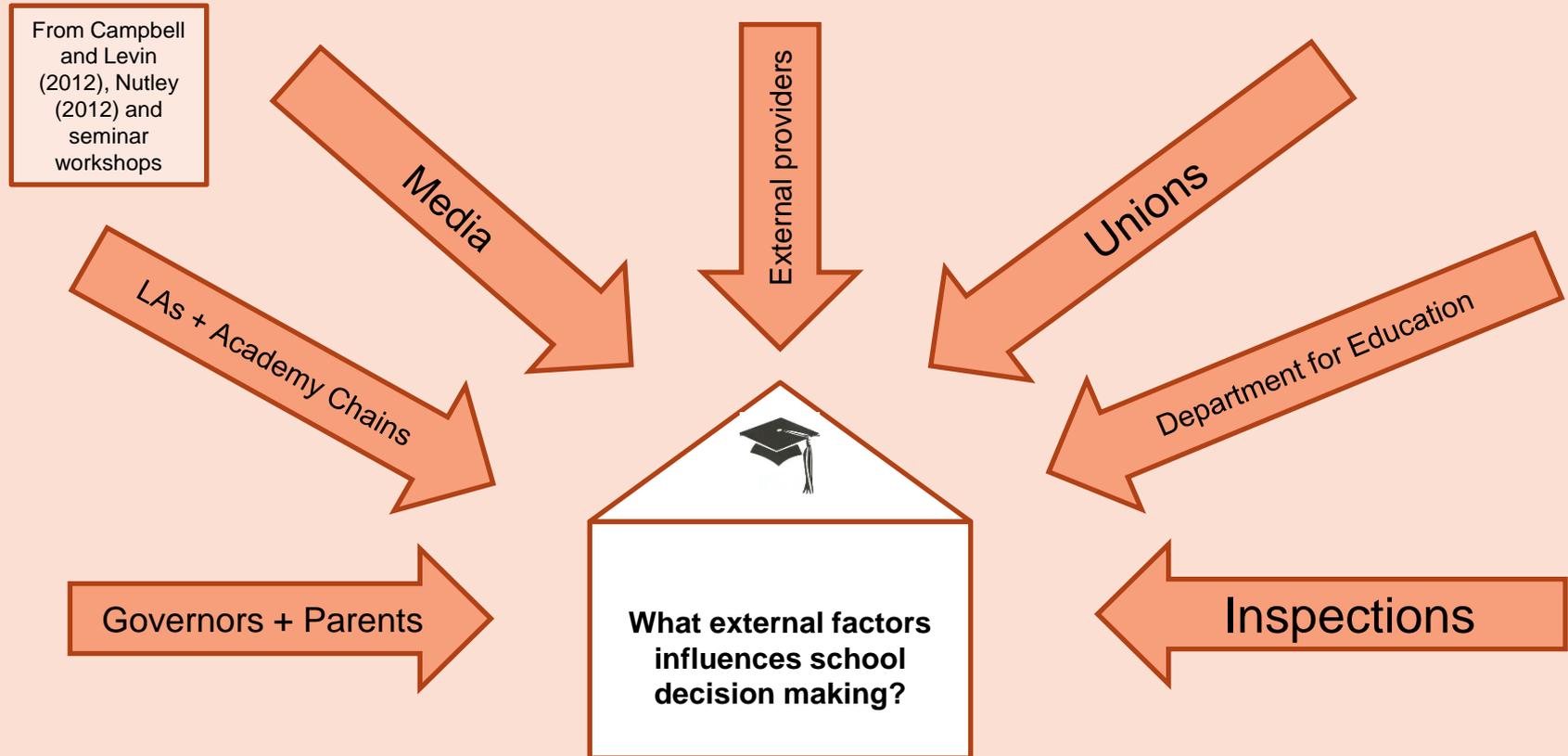


Successes

- Reception for the Toolkit from schools has been very positive. We have spoken to 1 in 7 head teachers and website has received c.15,000 unique hits since re-launch (25.01.13).
- We are recommended by Government, Ofsted and a number of teaching unions.
- Starting to see signs of use by schools, particularly with reference to the Pupil Premium (though more measurement is needed).



Challenges: External



Schools respond to multiple levers, all of which may or may not value evidence. Schools will not change behaviour just because evidence suggests that they should, or adopt a programme because it is “proven”. Some levers are powerful, but risk fidelity.

Challenges: Internal

From Campbell and Levin (2012), Nutley (2012) and seminar workshops



Internal challenges:

Lack of time, skills and resources; professional identity doesn't include evidence; no trust of research; culture of not taking risks

In addition to external drivers of change (“push factors”), there are a number of internal drivers and barriers (“pull factors”) which affect the extent to which evidence is used by schools. These factors may be do with capacity to change (e.g. lack of time, skills) or be cultural.