

Putting Evidence to Work

A School's Guide to Implementation

2021 K12 GLOBAL

IMPLEMENTATION

VIRTUAL SUMMIT

Presented by



IMPACT
Learning and Leading Group

Jonathan Sharples

Professorial Research Fellow

Education Endowment Foundation



Education
Endowment
Foundation



Putting Evidence to Work – A School's Guide to Implementation

Prof. Jonathan Sharples, Education Endowment Foundation

Ice breaker



Education
Endowment
Foundation

How confident do you feel applying implementation research to your day-to-day work?

Education Endowment Foundation



Education
Endowment
Foundation

Synthesis



Generation

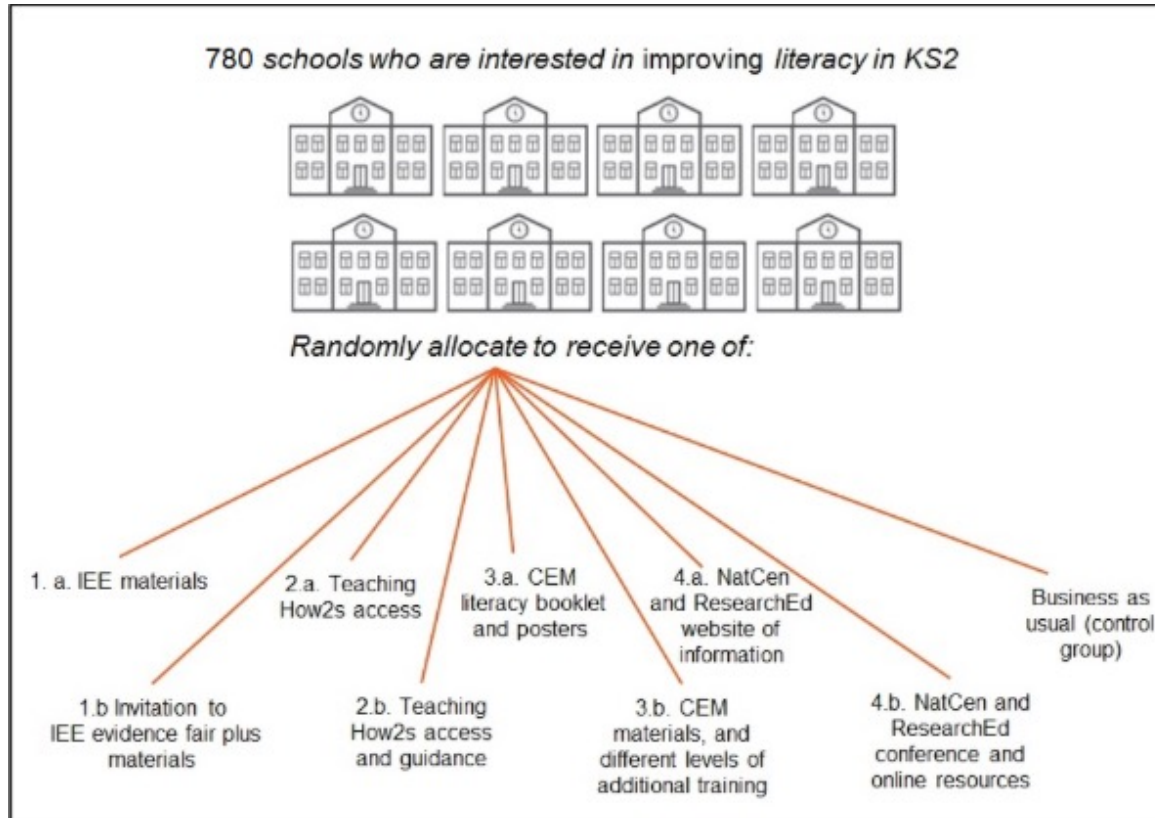
Mobilisation

The 'Literacy Octopus' project










Education
Endowment
Foundation

Two multi-armed Randomised Controlled Trials (RCTs) investigating different approaches to communicating and engaging schools with research on primary literacy



No impacts on any measure across both arms of every intervention!

Outcome/Group	Impact - the size of the difference between The Literacy Octopus: Communicating and Engaging with Research pupils and other pupils ?	Security – how confident are we in this result? ?
1A 'Improving Reading' guide	0 Months' Progress	
2A Evidence updates & website	0 Months' Progress	
3A Webinar	0 Months' Progress	
4A Teaching How2s website	0 Months' Progress	
1A 'Improving Reading' guide, FSM	0 Months' Progress	N/A
2A Evidence updates & website, FSM	0 Months' Progress	N/A
3A Webinar, FSM	0 Months' Progress	N/A
4A Teaching How2s website, FSM	0 Months' Progress	N/A
1B Evidence updates & website	0 Months' Progress	
2B Evidence updates & website + event	0 Months' Progress	
3B Teaching How2s website	0 Months' Progress	

Engagement does not equal use!

Why implementation in education?

*“The amount of preparation required for introducing the interventions is a common issue that occurs across **all** programmes.”*

*“Where there are problems of implementation these often appear to be **linked to a lack of shared understanding** among senior leaders and teachers of what is involved.*

Dr. Jake Anders, University College London

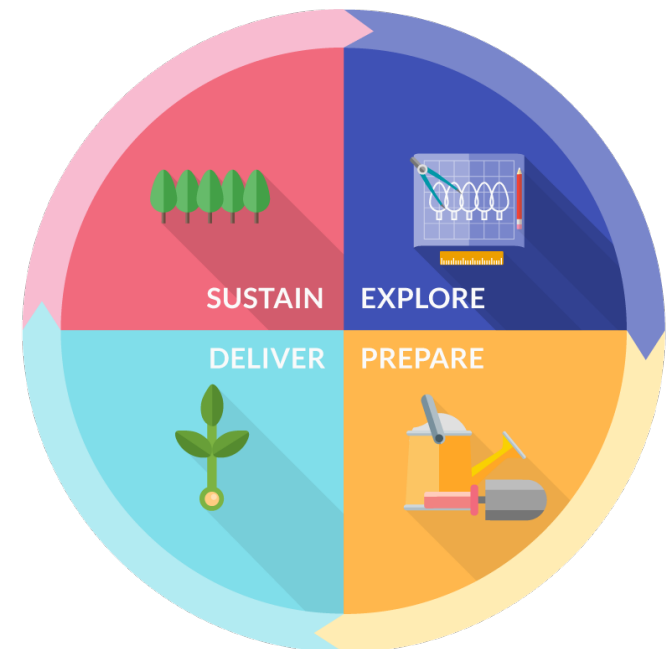
*“There are indications that provision may be more effective when there is an emphasis on **how to implement change within schools.**”*

Prof. Bronwen Maxwell, Sheffield Hallam University



Making, and acting on, evidence-informed decisions

- Identifying priorities;
- Selecting the right approaches to implement;
- Judging fit and feasibility;
- Writing implementation plans;
- Designing professional development;
- Monitoring implementation;
- Developing an improvement culture etc.



What have I learnt?



Education
Endowment
Foundation

Implementation...

- is lots of small things done well – ‘uncommon common sense’
- is rare – vision > shared vision > shared practice
- is often about making implicit actions and processes explicit
- isn't sexy! (Sir Kevan Collins)

“It doesn't matter how great an educational idea or intervention is in principle; what really matters is how it manifests itself in the day-to-day work of people in schools – the practitioner IS the intervention!”

Exercise: Implementation Card Sort

a) Divide the cards into two lists:

Features of effective vs less effective implementation

b) Reflect on how these statements relate to your work.
How prevalent are these features?

<p>We decide on a few clear choices and pursue them diligently</p>	<p>We assume that staff know how to implement changes effectively</p>	<p>We take on multiple (>5) implementation projects simultaneously</p>
<p>New initiatives are based on robust evidence of what has and hasn't worked before</p>	<p>Less effective strategies are stopped to free up time and resources</p>	<p>Having made a decision to implement something we deliver it quickly, without fully preparing</p>
<p>An implementation plan is written, but tends to sit on the shelf</p>	<p>There isn't a culture of quality improvement – staff feel pressured to get it right immediately</p>	<p>Communication about the innovation and change happens on a regular basis</p>
<p>Implementation problems are identified and acted on quickly</p>	<p>Initial training is reinforced with follow-on support from expert coaches and mentors</p>	<p>No contingency plans are put in place for unexpected changes</p>

FOUNDATIONS FOR GOOD IMPLEMENTATION



1 Treat implementation as a process, not an event; plan and execute it in stages.

- Allow enough time for effective implementation, particularly in the preparation stage; prioritise appropriately.



2 Create a leadership environment and school climate that is conducive to good implementation.

- Set the stage for implementation through school policies, routines, and practices.
- Identify and cultivate leaders of implementation throughout the school.
- Build leadership capacity through implementation teams.



EXPLORE

3 Define the problem you want to solve and identify appropriate programmes or practices to implement.

- Specify a tight area of focus for improvement that is amenable to change.
- Determine a programme of activity based on existing evidence of what has – and hasn't – worked before.
- Examine the fit and feasibility of possible interventions to the school context.
- Make an adoption decision.



PREPARE

4 Create a clear implementation plan, judge the readiness of the school to deliver that plan, then prepare staff and resources.

- Develop a clear, logical, and well-specified implementation plan:
 - Specify the active ingredients of the intervention clearly: know where to be 'tight' and where to be 'loose'.
 - Develop a targeted, yet multi-stranded, package of implementation strategies.
 - Define clear implementation outcomes and monitor them using robust and pragmatic measures.
- Thoroughly assess the degree to which the school is ready to implement the innovation.
- Once ready to implement an intervention, practically prepare for its use:
 - Create a shared understanding of the implementation process and provide appropriate support and incentives.
 - Introduce new skills, knowledge, and strategies with explicit up-front training.
 - Prepare the implementation infrastructure.



DELIVER

5 Support staff, monitor progress, solve problems, and adapt strategies as the approach is used for the first time.

- Adopt a flexible and motivating leadership approach during the initial attempts at implementation.
- Reinforce initial training with follow-on coaching within the school.
- Use highly skilled coaches.
- Complement expert coaching and mentoring with structured peer-to-peer collaboration.
- Use implementation data to actively tailor and improve the approach.
- Make thoughtful adaptations only when the active ingredients are securely understood and implemented.



SUSTAIN

6 Plan for sustaining and scaling an intervention from the outset and continuously acknowledge and nurture its use.

- Plan for sustaining and scaling an innovation from the outset.
- Treat scale-up as a new implementation process.
- Ensure the implementation data remains fit for purpose.
- Continuously acknowledge, support, and reward good implementation practices.

IMPLEMENTATION PROCESS BEGINS



Treat s
implem

ity that is
ge

Continuously acknow
support and reward
implementation prac

tematically explore
grammes or practices
implement

Plan for sustaining and
scaling the intervention
from the outset

Examine the fit and
feasibility with the
school context

**STABLE USE
OF APPROACH** →

← **ADOPTION
DECISION**

Use implementation data
to drive faithful adoption
and intelligent adaption

Develop a clear, logical
and well specified plan

Reinforce initial trai
with follow-on supp
within the school

ess the readiness of
school to deliver the
plementation plan

**NOT READY
- ADAPT PLAN**

READY

Sup
pro
leadership approach

e.g.

infrastructure

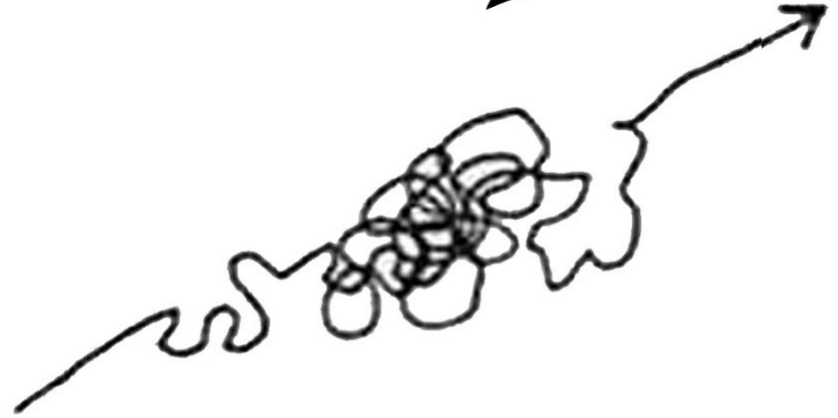
DELIVERY BEGINS

Success



what people think
it looks like

Success



what it really
looks like

Foundations for good implementation


1 Treat implementation as a process, not an event; plan and execute it in stages.



- Treat implementation as a **process** with multiple stages – not an event...
- **Allow enough time for implementation, particularly before ‘Delivery’**: 2+ years expected for complex whole-school initiatives
- **Do fewer things better** – organisations tend to take on too many projects (and underestimate the implementation requirements)
- Decide what you can **stop** doing to make room – de-implementation

Foundations for good implementation

2 Create a leadership environment and school climate that is conducive to good implementation.



“If not present already, an ‘implementation friendly’ climate cannot be created overnight.”

a) Leaders set the stage for effective – or ineffective - implementation

- Establish a **clear vision for implementation** and standards of excellence (underpinned by policies and systems)
- Model best implementation practice – **‘walk the walk’**
- Create an environment of **openness, trust, safe experimentation, collective efficacy**

“Culture eats strategy for breakfast”

Foundations for good implementation

2 Create a leadership environment and school climate that is conducive to good implementation.



b) Identify and cultivate leaders of implementation

- Cultivate **distributed leadership** of implementation
- Explicitly create opportunities for staff to take on implementation leadership responsibilities
- Acknowledge behaviours and attitudes that support good implementation.

Foundations for good implementation

2 Create a leadership environment and school climate that is conducive to good implementation.



c) Build leadership capacity through implementation teams

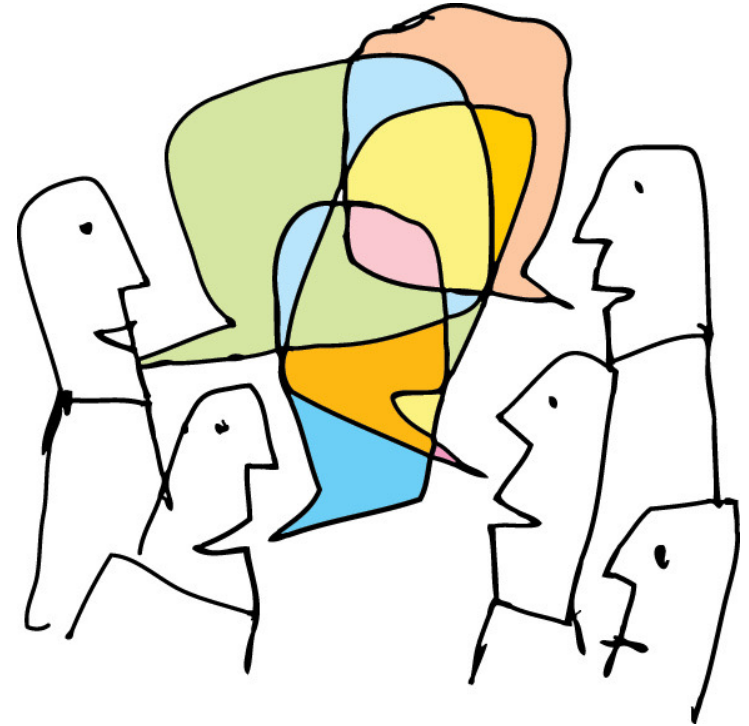
- 3-6 people who **turn a plan into reality**
- **Manage the multiple tasks and factors** that make up successful implementation - e.g. creating readiness, building shared understanding, solving problems
- Bring together **different types of expertise** e.g. implementation ('process') and area of practice ('content')

What about you?



Education
Endowment
Foundation

How does this approach compare with your own experience and ideas on school improvement?



IMPLEMENTATION PROCESS BEGINS

Treat scale-up as a new implementation process

Identify a key priority that is amenable to change

Continuously acknowledge support and reward good implementation practices

Systematically explore programmes or practices to implement

Plan for sustaining and scaling the intervention from the outset

Examine the fit and feasibility with the school context

STABLE USE OF APPROACH

ADOPTION DECISION

Use implementation data to drive faithful adoption and intelligent adaption

Develop a clear, logical and well specified plan

Reinforce initial training with follow-on support within the school

NOT READY - ADAPT PLAN

Assess the readiness of the school to deliver the implementation plan

READY

Support staff and solve problems using a flexible leadership approach

Prepare practically e.g. train staff, develop infrastructure

DELIVERY BEGINS



Why implementation in education?



Education
Endowment
Foundation

*“The amount of preparation required for introducing the interventions is a common issue that occurs across **all** programmes.”*

*“Where there are problems of implementation these often appear to be linked to **a lack of shared understanding among senior leaders and teachers of what is involved.***

Dr. Jake Anders, University College London



4 PREPARE

Create a clear implementation plan, judge the readiness of the school to deliver that plan, then prepare staff and resources

Implementation / Prepare



- a. Create a clear, logical, and well-specified plan. Describe:
 - **why** we are doing this – a definition of the problem
 - **what** the intervention entails – the active ingredients/core components
 - **how** it will be implemented – the implementation activities
 - a means of knowing **how well** implementation is going – the implementation outcomes
 - and the final intended outcomes (**and so?**) – the overall objectives

The process is more important than the output – social constructivism

5 INTRODUCING KNOWLEDGE ORGANISERS

Durrington High School - Worthing

Problem (why?)	Intervention Description (what?)	Implementation Activities (how?)	Implementation Outcomes (how well?)	Final Outcomes (and so?)
<p>Teachers</p> <ul style="list-style-type: none"> New specifications require decisions about what knowledge to teach in restricted lesson time. There is a lack of cohesion and accumulation between knowledge taught at KS3 and KS4. There can be a lack of consistency between lessons in the same subjects regarding what knowledge is being taught. There can be a lack of challenge in lessons for all or some students. Curriculum Teaching Assessment policy has an expectation of explicit vocabulary instruction (of tier 2 and tier 3 vocabulary) in all subjects. <p>Students</p> <ul style="list-style-type: none"> Students experience different lesson content dependent on teacher. Many students are using ineffective revision strategies. Students do not have a framework or schema for organising new information. There is a lack of automaticity of knowledge making higher-order learning less likely. There is a gap in tier 2 and tier 3 vocabulary knowledge between different groups of students (disadvantaged and non-disadvantaged). <p>Attainment</p> <ul style="list-style-type: none"> Attainment gap evident for disadvantaged students when compared to national and non-disadvantaged students at DHS Overall attainment for all students 2017/2018: +X.XX PB, XXX A8 XXX% basics 5+ Attainment for PP students 2017/2018 -X.XX PB XX.X A8 XX.X% basics 	<p>Active Ingredient 1</p> <p><i>Curriculum Planning:</i></p> <ul style="list-style-type: none"> A knowledge organiser, based on knowledge that will build cultural capital as well as meet specification demands, to be in place for every unit of work in Year 9 and Year 10 for all subjects by September 2018. <p>Active Ingredient 2</p> <p><i>Explicit Vocabulary Instruction:</i></p> <ul style="list-style-type: none"> All knowledge organisers to include tier 2 and tier 3 vocabulary. This vocabulary is taught explicitly using strategies such as 'STI'. <p>Active Ingredient 3</p> <p><i>Lesson Planning:</i></p> <ul style="list-style-type: none"> All teachers of the same subject explicitly teach the knowledge on the knowledge organiser and go beyond this as appropriate. <p>Active Ingredient 4</p> <p><i>Assessment & Metacognition:</i></p> <ul style="list-style-type: none"> Teachers to use knowledge organisers for formative assessment strategies such as quizzing, and students to use knowledge organisers for monitoring of learning, for example through self-quizzing and self-checking of work. 	<p>Mandate change</p> <ul style="list-style-type: none"> Use of CTA policy to declare a knowledge-based curriculum to staff and students. Declare knowledge organisers for Year 9 and Year 8 as a whole-school priority from September 2018. <p>Conduct ongoing training</p> <ul style="list-style-type: none"> Introduction of knowledge organisers at November INSET. Share examples from different teachers in January and March INSET. Refresher for new members of staff in September 2018 INSET. <p>Coaching/tailor strategies</p> <ul style="list-style-type: none"> T&L senior leaders offer in-school support with production and use of knowledge organisers for individual teams. <p>Identify and prepare champions</p> <ul style="list-style-type: none"> Identify an individual per curriculum area who motivates colleagues and models effective implementation. These teachers to present at INSETs in 2018/2019 and lead one SPDs per term on the knowledge organiser in use for Year 9 and Year 10. <p>Develop academic partners</p> <ul style="list-style-type: none"> Partner curriculum leaders and other teachers responsible for creating knowledge organisers with external subject specialists, for example departments in other schools, exam boards or university partners, to help create and moderate KOs. <p>Model change</p> <ul style="list-style-type: none"> Share models of KOs via school VLE. <p>Monitoring</p> <ul style="list-style-type: none"> Review of KOs a standing agenda item for T&L line management meetings (last fortnight of every term). Line managers to review departmental use of knowledge organisers at termly T&L reviews. Ongoing discussion and review of KOs at T&L briefings with curriculum leaders. Periodic moderation of knowledge organisers by SLT via VLE to ensure fidelity. Actions fed back to line managers. 	<p>Short term</p> <p><i>Fidelity:</i></p> <ul style="list-style-type: none"> Production of knowledge organisers for all units in Year 9 and Year 10 from September 2018. Knowledge organisers to incorporate knowledge that builds student cultural capital. Assessments, including vocabulary assessment, match knowledge on knowledge organisers. Curriculum leaders to be accountable for ensuring knowledge organisers are used in their areas. <p><i>Reach:</i></p> <ul style="list-style-type: none"> All teachers using knowledge organisers for Year 9 and Year 10 lessons by September 2018. <p><i>Acceptability:</i></p> <ul style="list-style-type: none"> Staff experience a reduction in time spent on medium-term and lesson planning for Year 10 and Year 9. Clarity about knowledge to be taught in specific units. <p>Medium term</p> <p><i>Fidelity:</i></p> <ul style="list-style-type: none"> Knowledge organisers used to plan and review curriculum for Year 9 and Year 10 on an ongoing basis. Production of knowledge organisers for all units in Year 11 from December 2018. <p><i>Reach:</i></p> <ul style="list-style-type: none"> All teachers using knowledge organisers for Year 11 teaching and revision materials by January 2019. <p><i>Acceptability:</i></p> <ul style="list-style-type: none"> Staff experience a reduction in time spent on medium-term and lesson planning for Year 11. Revision sessions and resources are centralised. <p>Long term</p> <p><i>Fidelity:</i></p> <ul style="list-style-type: none"> KOs in place for all year groups by September 2019. Knowledge organisers are updated as part of curriculum reviews. <p><i>Reach:</i></p> <ul style="list-style-type: none"> All teachers using knowledge organisers for all year groups. 	<p>Short term – Year 9 and 10</p> <ul style="list-style-type: none"> Increased understanding of the aims of a knowledge organiser, including an understanding of what is a knowledge-based curriculum. <p><i>From September 2018:</i></p> <ul style="list-style-type: none"> Increased engagement with knowledge organisers as part of lessons and homework. Students experience clarity about knowledge they need to know by the end of each unit. <p>Medium term – Year 11 (plus Year 9 and 10)</p> <p><i>As above plus:</i></p> <ul style="list-style-type: none"> All students using knowledge organisers as part of lessons and homework/revision. All students using knowledge organisers to self-check their learning, including inclusion of tier 2 and tier 3 vocabulary. All students engaging with knowledge organisers as a metacognitive tool to plan, monitor and evaluate their learning. <p>Long term – All year groups</p> <p><i>As above plus:</i></p> <ul style="list-style-type: none"> All students able to independently plan effective revision sessions using knowledge organisers as a central resource. All students experience more accurate self-monitoring of their learning. Increased level of progress for disadvantaged students (and other identified in September analysis).

Active Ingredients

‘ACTIVE INGREDIENTS’ – the essential principles and practices for an intervention, which need to be adopted closely (i.e. with fidelity) to get the intended outcomes

What activities & behaviours will you see when it is working?



Basis for: creating shared understanding; implementation activities; implementation outcomes; fidelity; anchor when it goes pear shaped!

PUTTING EVIDENCE TO WORK: A SCHOOL'S GUIDE TO IMPLEMENTATION

Implementation theme - Active ingredients

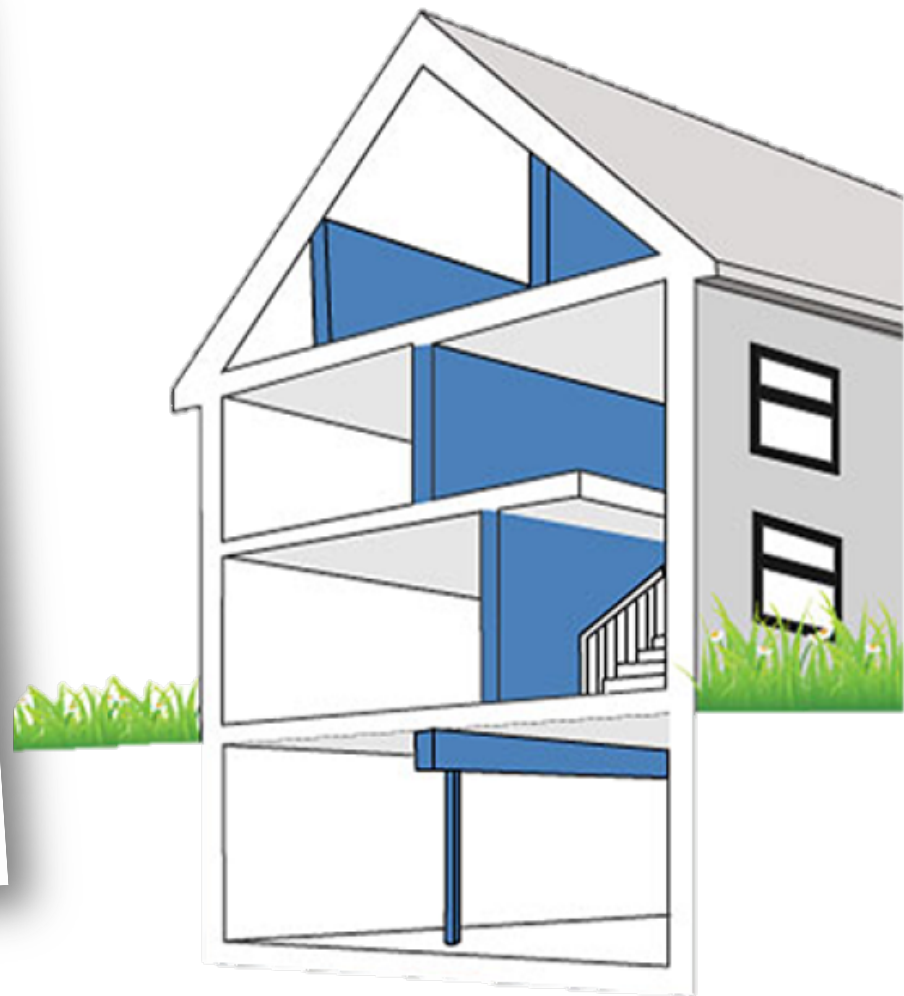


In 2018, the EEF published *Putting Evidence to Work: A School's Guide to Implementation*—a guide for schools on how to implement their plans and interventions with the best chance of success. The guide is designed around a stage-by-stage approach to implementation.

This supplementary set of summaries draws together recommendations relating to specific themes across those stages—this one focuses on active ingredients and fidelity. It provides further information on what we mean by 'active ingredients', how to define them, and ways in which they can be used to support implementation. We discuss the importance of fidelity and how to balance fidelity with thoughtful adaptation.

Key points

- What do we mean by 'active ingredients'?
- Real-world examples of active ingredients—outside education
- Real-world examples of active ingredients—in education
- How do we define the active ingredients for our approach?
- Use your active ingredients to anchor the implementation process
- Ensure programmes and practices are delivered as intended, i.e. with fidelity
- Make thoughtful adaptations only when the active ingredients are securely understood and implemented.

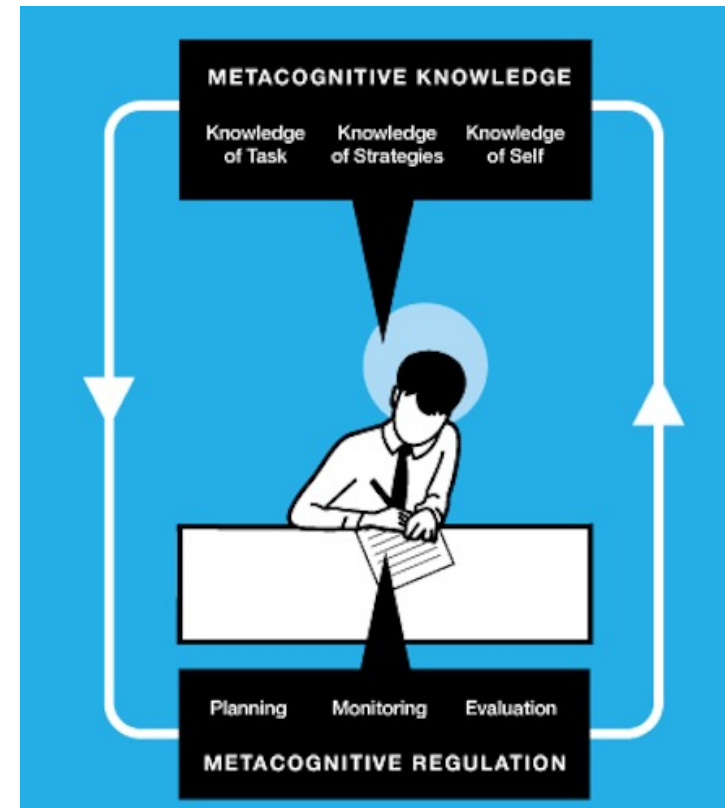


Active ingredients - metacognition

ACTIVE INGREDIENT 1

– Shared mental model

- Staff have a shared understanding of metacognition
- Staff are able to spot opportunities to apply that model in the classroom



When is a bike not a bike?!



What are the active ingredients of a bicycle?!

“The observable, replicable and irreducible components of an intervention (Michie et al., 2013).”

Faithful adoption vs intelligent adaptation



Is it a bicycle?! Critical adaptation?

IMPLEMENTATION PROCESS BEGINS

Treat scale-up as a new implementation process

Identify a key priority that is amenable to change

Continuously acknowledge support and reward good implementation practices

Systematically explore programmes or practices to implement

Plan for sustaining and scaling the intervention from the outset

Examine the fit and feasibility with the school context

STABLE USE OF APPROACH

SUSTAIN

EXPLORE

ADOPTION DECISION

Use implementation data to drive faithful adoption and intelligent adaption

DELIVER

PREPARE

Develop a clear, logical and well specified plan

Reinforce initial training with follow-on support within the school

Assess the readiness of the school to deliver the implementation plan

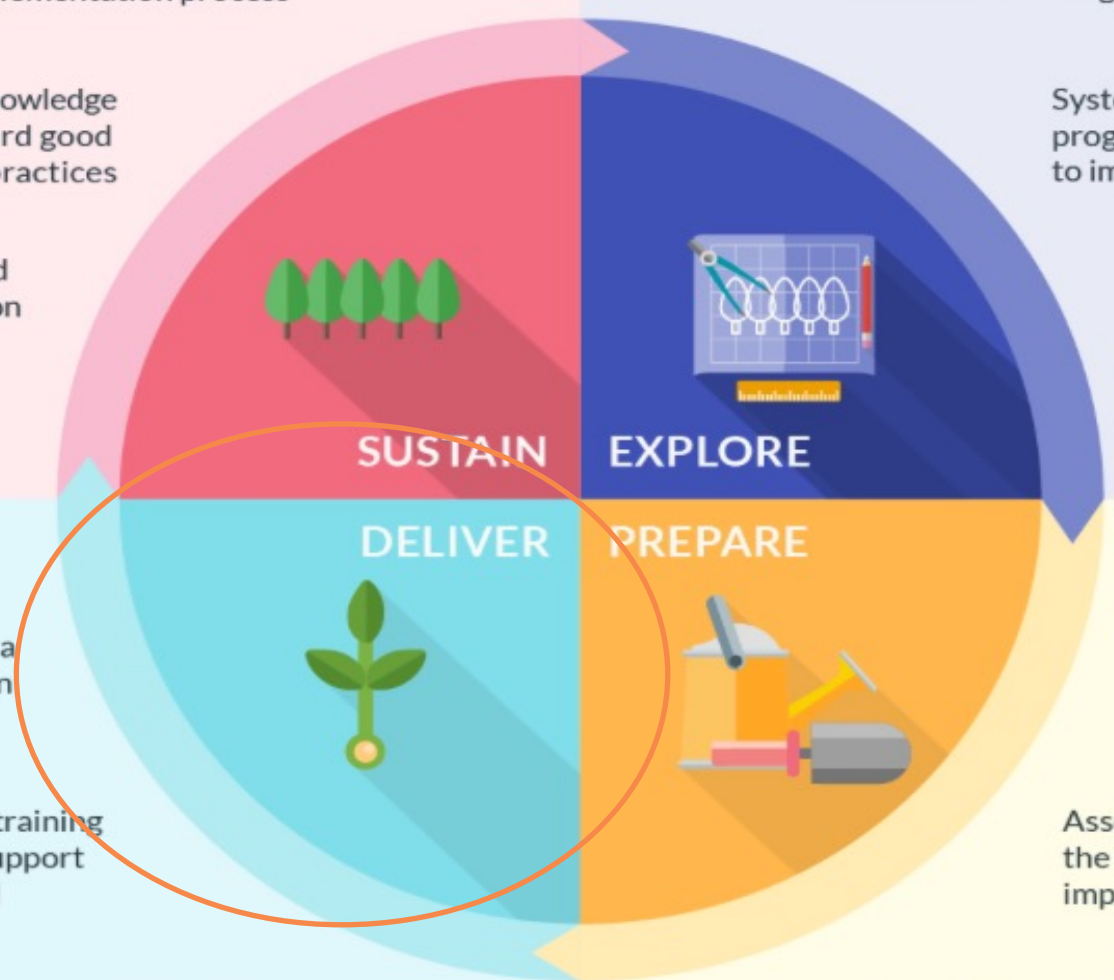
NOT READY
- ADAPT PLAN

READY

Support staff and solve problems using a flexible leadership approach

Prepare practically e.g. train staff, develop infrastructure

DELIVERY BEGINS





DELIVER

5 Support staff, monitor progress, solve problems, and adapt strategies as the approach is used for the first time.

- Adopt a flexible and motivating leadership approach during the initial attempts at implementation.
- Reinforce initial training with follow-on coaching within the school.
- Use highly skilled coaches.
 - Complement expert coaching and mentoring with structured peer-to-peer collaboration.
- Use implementation data to actively tailor and improve the approach.
 - Make thoughtful adaptations only when the active ingredients are securely understood and implemented.

This stage is about...

continuous dynamic improvement

- Motivating and modelling
- Identifying and solving problems
- Identifying and using successes
- Helping staff apply their knowledge

What are the characteristics of effective professional development?



Education
Endowment
Foundation

- ✓ Introduce new skills, knowledge and strategies with explicit up-front training
- ✓ Follow-on support – e.g. instructional coaching– within the school setting, helps **apply** the skills and knowledge that are introduced in initial training
- ✓ Complement expert coaching and mentoring with structured peer-to-peer collaboration.
- ✓ Ensure there is a rhythm, duration and alignment to professional development activities (don't overwater!)

Key points



- Implementation matters – the practitioner *is* the intervention!
- View implementation as a process not an event
- Implementation needs time, especially for preparation
- Benefits from dedicated but distributed leadership
- Have a clear, logical and well-specified plan
- Specify the elements of the approach that you believe are critical to its success – i.e. the ‘active ingredients’
- Treat ‘Delivery’ as a learning process

School's Guide to Implementation online course

An interactive online course, which guides you through some key activities in the guidance report. The course contains two video case studies of schools that have used the guide to support changes in practice.

School's Guide to Implementation online course

Introduction

Contents

- Introduction
- Foundations for implementation - structured process
- Foundations for implementation - implementation climate
- Explore
- Prepare (1)
- Prepare (2)
- Deliver
- Sustain

Practical Tools

Introduction Jonathan Sharples

Watch later Share

Activities

Exercise one: Project post-mortem

- Think of a project you were involved with, that, despite the best intentions, lost momentum and faded away.
 - Why and when did that happen?
 - Was it something that happened before delivery?
 - Did it get moving but initial problems weren't spotted or dealt with quickly?
 - Was the project initially successful but it lost momentum?
- Use this example to reflect on your school's wider approaches to implementation.
 - Do we give enough attention to how new approaches are implemented?
 - Do we fall into similar patterns of behaviour between projects?
 - When has something been implemented well? What lessons can we learn from this?

PUTTING EVIDENCE TO WORK: A SCHOOL'S GUIDE TO IMPLEMENTATION

Master checklist

Education Endowment Foundation

'Putting Evidence to Work: A School's Guide to Implementation' contains checklists at the end of each section to help you reflect on implementation in your school. All six checklists are outlined below.

1 Treat implementation as a process, not an event; plan and execute it in stages.

- Do we implement changes across the school in a structured and staged manner?
- Is adequate time and care taken when preparing for implementation?
- Are there opportunities to make fewer, but more strategic, implementation decisions and pursue these with greater effort?
- Are there less effective practices that can be stopped to free up time and resources?

2 Create a leadership environment and school climate that is conducive to good implementation.

- Does our school have a climate that is conducive to good implementation?
- Does the school leadership team create a clear vision and understanding of expectations when changing practices across the school?
- Do staff feel empowered to step forward and take on implementation responsibilities?
- How do day-to-day practices affect the motivation and readiness of staff to change?

3 EXPLORE: Define the problem you want to solve and identify appropriate programmes or practices to implement.

- Are we confident we have identified a strong school improvement priority that is amenable to change?
- What are we looking to achieve by adopting a new programme or practice?
- Have we systematically identified the right approach to achieve these goals?
- Is there reliable evidence it can have the desired impact, if implemented well?
- Is it feasible within our context?

PUTTING EVIDENCE TO WORK: A SCHOOL'S GUIDE TO IMPLEMENTATION

Gathering and interpreting data to identify priorities



1 Confidently identify a priority

Often, the decision to begin with an interest, a feeling or a hunch. Existing beliefs about problems in school can be powerful and useful, but they can also blind them to other possibilities. The main aim is to check and challenge our initial thinking so we are confident that the identified problem is both important and real to a priority. (Each confidence value or two factors.)

a. Gathering relevant and rigorous data

b. Generating plausible and credible interpretations of that data

Remember that any data you use are simply representations of the effects of a problem—none of the 'truthful masterpiece glasses' that you can have in the classroom. Consider how to interpret the complex data with the confidence of a problem.

For example, low attainment at Key Stage 2 will be an outcome of underlying issues (see the figure in section 4).

To generate evidence and insights on the problem we have to interpret data and use judgement, and that begins by questioning the quality of your data.

2 Gather data that is fit-for-purpose

We sometimes use data that we have to hand rather than what we need. Examine information from a range of sources to build a picture of the school. Investigating the strength and weaknesses of different sources. Find the gaps in the data. Go beyond the headlines and explore the nuance.

Ask yourself: 'What is the nature of the problem does this data represent?', 'What are the trends in the data over time?', 'What are the underlying issues?'

External data	Internal data	Lesson observations	OFSTED data	Surveys/questionnaires
Contextual data Demographics of school Socio-economic status School performance School improvement plan	Performance data Test scores Progress data Attendance Absence data Behaviour data Staff workload Staff turnover	Quality of teaching Quality of lesson delivery Quality of assessment Quality of feedback Quality of marking Quality of planning Quality of resources Quality of relationships	External performance Progress data Progress of individual schools Progress of individual teachers Progress of individual subjects	Staff and student views Staff surveys Student surveys Focus groups Interviews Questionnaires Focus groups Interviews Questionnaires

Initial knowledge and beliefs → Relevant and rigorous data → Plausible and credible interpretations → Confidence that the issue is a priority

4 Provide credible and plausible interpretations

To generate evidence of a problem we have to provide credible and plausible interpretations of the data—this requires bringing data from different sources and using judgement to draw accurate conclusions.

Here are some things to bear in mind:

- Describe how each source of data provides evidence to the problem or behavioural issues, reported through lesson observations, expert feedback, and so on, and how you are going to use that information. Identify the evidence needs, and how to acquire that evidence.
- Ask: 'What are the data to your preconceptions—what do you and your colleagues think you know? Is it attributable to the data? Do the data corroborate your preconceptions and your colleagues that you are right, focus on demonstrating an issue with evidence.'
- Check your interpretation with people who might disagree. Identify a few more things you could investigate if it will have the desired effect than continuing. Gather that trying to convince yourself and your colleagues that you are right, focus on demonstrating an issue with evidence.
- Share your interpretation with people who might disagree. Identify a few more things you could investigate if it will have the desired effect than continuing. Gather that trying to convince yourself and your colleagues that you are right, focus on demonstrating an issue with evidence.

3 Recognise weaknesses in the data

There are always weaknesses in the data schools use—everything from the wording of questions, to how well the person making the reports is, to what the robustness of the interpretation. This is something we need to accept and respond to constructively by interrogating data for its quality. Ask yourself:

- Are your biases, and those of colleagues, skewing your interpretations of the data?
- Are there significant gaps in your data? If so, are you filling these gaps with your own assumptions and generalisations?
- Is the most robust and rigorous data—that which is most fit-for-purpose—being prioritised, with data of less relevance and rigor treated with greater discretion?

Source of weakness **How to identify the issue**

Source of weakness	How to identify the issue
Biases in the data	Be clear what the data represent and don't represent, and how they were generated. Explain the process step by step of the data and how it was collected. Identify any gaps in the data and how you are going to fill them. Consider how you can use the data to address the problem.
Data not valid	Be clear that your source of information is actually measuring what you set out to measure. Consider how you can use the data to address the problem. Identify any gaps in the data and how you are going to fill them. Consider how you can use the data to address the problem.
Data not reliable	Be clear that your source of information is actually measuring what you set out to measure. Consider how you can use the data to address the problem. Identify any gaps in the data and how you are going to fill them. Consider how you can use the data to address the problem.
Data not interpretable	Be clear that the process of gathering and interpreting data can introduce bias. Think of the value of gathering data with the question: 'What is it for?' (e.g. a survey of staff or a school improvement plan) and what the data are for. Be clear that you are gathering data for a purpose.

This resource supports the *Putting Evidence to Work: A School's Guide to Implementation* guidance report.

PUTTING EVIDENCE TO WORK: A SCHOOL'S GUIDE TO IMPLEMENTATION

Implementation plan template



Problem (why?)	Intervention Description (what?)	Implementation Activities (how?)	Implementation Outcomes (how well?)	Final Outcomes (and so?)
What needs to change e.g. teacher behaviour, student behaviour, attainment?	What are the essential 'active ingredients' of the intervention? What activities and behaviours will you see when it is working?	How will it be done? What blend of activities are required?	How will you know that it is working? Do staff feel the approach is feasible and useful? Short term Medium term Long term	How will pupils, teachers and the school benefit?

This resource supports the *Putting Evidence to Work: A School's Guide to Implementation* guidance report.



Thank you!

jonathan.sharples@eefoundation.org.uk

[@Sharples_J](https://twitter.com/Sharples_J) 

[@EducEndowFoundn](https://twitter.com/EducEndowFoundn)