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Explainer

Using implementation strategies

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Implementation strategies are the actions that support the implementation of evidence-based practices. Strategies might include creating an implementation plan, holding regular progress meetings, modelling and coaching. Some implementation strategies will be familiar and well-used by schools, but intentionally selecting and using a combination of strategies to support the implementation of an evidence-based practice may not be as common.

This explainer is one in a series of 5 that outlines the key components of a deliberate and structured approach to implementation. The series includes:

- taking an evidence-informed approach to implementation

- using a staged approach (implementation component 1)

- addressing enablers and barriers (implementation component 2)

- using key implementation strategies (implementation component 3)

- monitoring implementation outcomes (implementation component 4).

School leaders can use these explainers to engage with the key research and ideas that underpin effective implementation. The Australian Education Research Organisation (AERO) is working with schools to learn more about implementation in different contexts, and we intend to share insights as our understanding deepens.

Using implementation strategies is one component of a deliberate and structured approach to implementation, as shown in Figure 1.

Figure 1: Implementing well in schools – Using a deliberate and structured approach to the implementation of evidence-based practices
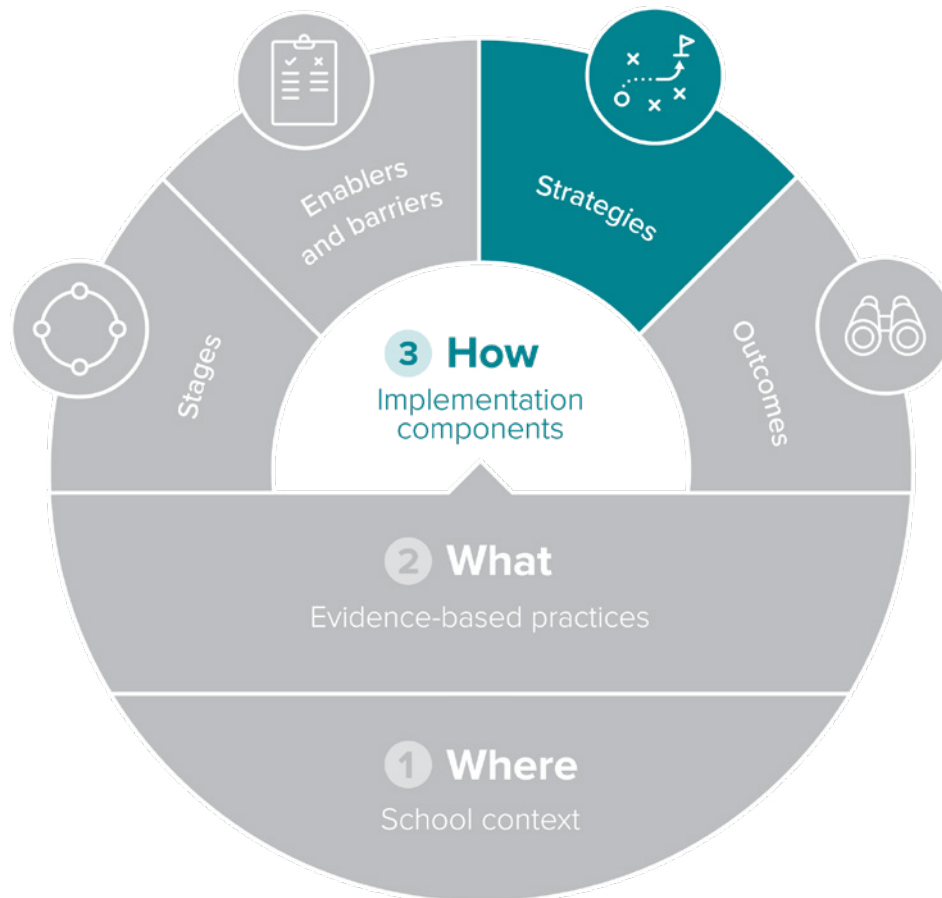
Key points

- Strategies are the actions schools take to support the implementation of evidence-based practices.
- Schools will be familiar with some well-known implementation strategies (such as professional learning), so using a taxonomy can help surface different strategies to consider.
- There can be inconsistencies with how implementation strategies are defined and used. A framework to support operationalising the strategies can help create consistency around what's being actioned, why and by whom.
- Strategies help to address implementation barriers in a school and take place at different stages of implementation. Strategies are also linked to implementation outcomes.

The importance of implementation strategies

Implementation strategies are important for influencing and supporting practice change and are a key component of implementation. They are the main 'how to' element of turning research into practice (Proctor et al., 2013). More specifically, implementation strategies are the different methods or techniques used to enhance the adoption, implementation and sustainment of an evidence-based practice (Lyon et al., 2019). Examples that schools might use include delivering professional learning, making a detailed implementation plan or providing modelling and coaching on the evidence-based practice being implemented.

Strategies can be selected to support implementation across different domains (i.e., strategies for individuals or school-wide strategies),[1] and can be used to address the barriers and strengthen the enablers that arise during implementation. While some implementation strategies will be well-known to schools, it's important to consider what strategies will be most relevant each time an implementation process is undertaken.

A taxonomy of implementation strategies

Implementation science researchers have created frameworks and methods to help identify and categorise different implementation strategies so they can be systematically selected, used and refined.

The Expert Recommendations for Implementing Change (ERIC) project is the most comprehensive taxonomy of implementation strategies but isn't specific to education and schools (Waltz et al., 2019). The School Implementation Strategies, Translating ERIC Resources (SISTER) project adapts ERIC for schools and highlights 75 strategies across 9 domains (Cook et al., 2019). These strategies are outlined in Table 1.

Table 1: 9 SISTER domains and adapted examples of implementation strategies

Domain	Example implementation strategies
Use evaluative and iterative strategies.	• Pilot or trial the practice. • Develop a detailed implementation plan. • Develop and organise a quality monitoring system.
Provide interactive assistance.	• Peer-assisted learning. • Facilitation/interactive problem-solving.
Adapt and tailor to context.	• Tailor strategies. • Promote adaptability.
Develop stakeholder interrelationships.	• Build partnerships to support implementation. • Capture and share local knowledge. • Identify and prepare champions. • Model and simulate change.
Train and educate stakeholders.	• Conduct educational meetings. • Provide ongoing consultation/coaching. • Develop educational material.
Support educators.	• Develop resource-sharing agreements. • Improve implementers' (teachers') buy-in.

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1   The Consolidated Framework for Implementation Research (CFIR) identifies 5 domains that influence implementation: evidence-based practice, process, system and community, school, and individuals. See Addressing Enablers and Barriers to Implementation for more information.

Domain	Example implementation strategies
Engage consumers.	• Increase demand and expectations for implementation. • Involve students, family members, and other staff.
Financial strategies.	• Make implementation easier by removing burdensome documentation tasks. • Alter student or school personnel obligations to enhance participation in or delivery of new practice.
Change infrastructure.	• Change/alter environment. • Prune competing initiatives.

Selecting and preparing to use implementation strategies

Schools will choose different implementation strategies for different reasons. Using a taxonomy (such as SISTER) can help schools engage with the breadth of implementation strategies and be targeted in what they select, depending on the evidence-based practice being implemented and their school context. It may be relevant for schools to consider the following when selecting implementation strategies:

- the combination of implementation strategies that are needed. Different combinations of strategies will influence different practice changes (Flottorp et al., 2013).

- the sequence of implementation strategies. For example, schools may deliver professional learning strategies to develop teachers' knowledge about specific elements of an evidence-based practice prior to enacting any strategies related to teaching observations and coaching.

- how the implementation strategies may help to address current implementation barriers and strengthen enablers (Leeman et al., 2017; Kirchner et al., 2020).

- how each implementation strategy can be used to support different implementation outcomes (e.g., acceptability, feasibility).

- the evidence that underpins a strategy – how effective it's been in similar settings.

When starting to plan for *using* implementation strategies, schools may find they're not well-described, lack enough detail to be operationalised, or are presented as part of a 'package' making it challenging to tease out and understand individual strategies (Waltz et al., 2014). To overcome this challenge, schools can follow a framework for naming, defining and specifying implementation strategies (Proctor et al., 2013). Working through the process of naming, defining and specifying can help establish which strategies are appropriate and feasible to use, and can assist schools in clarifying exactly what it will look like in their context. Table 2 sets out the requirements for naming, defining and specifying an implementation strategy in preparation for its use, along with practical school-based examples.

Table 2: Principles for clarifying implementation strategies with school-based examples

Prerequisite	Requirements	School example
1. Name it	Name the selected strategy, preferably using language that reflects existing literature.	The named strategy is 'coaching' (SISTER equivalent – 'model and stimulate change').
2. Define it	Define the implementation strategy and any discrete components operationally so they can be used.	Coaching in this school: • is the use of observations, reflections and feedback to help improve teacher practice and fidelity of explicit instruction • occurs in cycles that have a specific and narrow focus (e.g., learning objectives and success criteria) • includes setting and working towards practice goals.
3. Specify it:		
a. The actor	Identify who enacts/delivers the strategy.	The leader in the school responsible for curriculum and pedagogy, as well as other school leaders, enacts this strategy.
b. The action	Use active verb statements to detail the specific actions, steps or processes to be enacted.	The actions to be taken include: • Create a coaching timetable with a specific area of focus (e.g., learning objectives and success criteria) and share with teachers. • Share a coaching 'checklist' with teachers ahead of time. • Observe teaching. • Discuss observations aligned with strategies on the checklist. • Create and agree on a goal for future focus.
c. Action target	Specify targets according to conceptual models of implementation. Identify the unit of analysis for measuring implementation outcomes.	The target audience is Year 3 to 6 teachers who are implementing explicit instruction in writing. The intended outcomes are: • Knowledge of specific explicit instruction practices and routines (e.g., learning objectives and success criteria) will increase. • Skill in using explicit instruction (specifically the use of learning objectives and success criteria) will improve.

Prerequisite	Requirements	School example
d. Temporality	Specify when the strategy is used (e.g., start date, sequence, stage of implementation).	The strategy of coaching is used following the delivery of the relevant professional learning module and modelling of the strategy. It should occur within 2 weeks of this, as part of a learning loop.
e. Dose	Specify dosage of the implementation strategy.	The implementation strategy is delivered in 30- to 45-minute sessions each week.
f. Implementation outcome affected	Identify and measure the implementation outcome(s) likely to be affected by each strategy.	The implementation outcome affected is fidelity – for example, in guided practice for explicit instruction, the teacher links to success criteria and checks for understanding.
g. Justification	Provide empirical, theoretical or pragmatic justification for the choice of strategy.	Coaching has been identified in meta-analyses as a promising approach for improving teacher practice (Kraft et al., 2018; Kretlow & Bartholomew, 2010). Coaching includes a number of mechanisms that are likely to make professional learning effective (Collin & Smith, 2021). When coaching is used with professional learning modules, it builds knowledge, motivates teachers, develops teaching techniques and embeds practice.

Source: Adapted from Implementation Strategies: Recommendations for Specifying and Reporting, by Enola K. Proctor, Byron J. Powell and J. Curtis McMillen (2013), licensed under a CC BY 2.0 licence.

Aligning strategies with stages, implementation outcomes, and enablers and barriers

Implementation strategies can be used at different stages of implementation to meet different objectives (Aarons et al., 2011). For example:

- In the Prepare stage, schools may use strategies to develop staff knowledge of implementation and the evidence-based practice (e.g., professional learning modules and dissemination of educational resources). They will also develop an implementation plan and continue developing staff buy-in.

- In the Deliver stage, the implementation strategies should support the initial use of the evidence-based practice, which could see modelling and coaching sessions occurring, and identifying champions who are using the evidence-based practice with fidelity and could support a train the trainer process.

- In the Sustain stage, schools may look at implementation strategies that support ongoing use of the evidence-based practice, such as using champions, distributing educational resources and continuing regular meetings with implementation teams and/or coordinators.

Implementation strategies should also connect with the <u>enablers and barriers being experienced in a school</u> (Leeman et al., 2017). Ideally, specific strategies are selected to address barriers and continue strengthening enablers. <u>Implementation outcomes</u> are part of this process and are used to monitor how well implementation is going. Specific strategies align with outcomes and can be used to reflect on and adapt implementation as needed.

Implementation strategies in practice

Using implementation strategies is one of the 4 components of a <u>deliberate and structured approach to implementation</u>. AERO is working with schools to learn more about the deliberate and structured approach to the implementation of evidence-based practice in the <u>Learning Partner project</u>.

The AERO Learning Partner project

AERO used the SISTER taxonomy to inform the process of selecting and prioritising implementation strategies, as well as:

- identifying strategies with evidence of effectiveness in school implementation studies
- incorporating feedback about strategies from previous Learning Partner projects
- considering the appropriateness and feasibility of these strategies in Learning Partner schools
- considering the extent of support and guidance possible for AERO to provide.

The process of selecting strategies involves balancing different priorities. For example, where possible, AERO has encouraged schools to use existing structures, processes and networks rather than create new ones, to assist with the appropriateness and feasibility of implementation strategies.

The key implementation strategies that have been selected as part of the Learning Partner project include:

- developing detailed **implementation plans**
- promoting **staff buy-in**
- **regular meetings** between the school-based Implementation Coordinator and the AERO Implementation Consultant
- delivery of **professional learning modules**
- delivery of **modelling and coaching** activities, including **classroom observations**
- **learning loops** to discuss learnings and reflections of the current focus area (e.g., learning intentions and success criteria), using data to inform decisions and adjust implementation as needed
- **cluster engagement**, where local groups of schools discuss the project and learnings so far
- distributing AERO **educational resources** <u>on explicit instruction</u> to consolidate content from professional learning modules
- **trialling with a smaller group** before scaling (e.g., working with Years 3 to 6 teachers first before teachers in all year levels)
- using **train-the-trainer activities** to develop the capability of key people within a school to lead/co-lead implementation activities
- **using champions** to promote and sustain explicit instruction.

Implementation strategies (modelling, coaching, regular coordinator meetings) at Glendore Public School

Glendore Public School is 15 km west of Newcastle, New South Wales. The school has 637 students and 33 teaching staff. Glendore Public School has an Index of Community Socio-educational Advantage (ICSEA) of 1,006 and a diverse student population, including 24% of students with a language background other than English. Glendore is a Learning Partner school.

In the 2023 Learning Partner project, Glendore Public School focused on implementing explicit instruction in mathematics for Years 3 to 6. When the school joined the project, they were in a period of change, with a new principal appointed in Term 2. While some staff were familiar with explicit instruction, there was no shared understanding, and it was not used consistently.

When Glendore was in the Prepare and Deliver stages of implementing explicit instruction, the school's Implementation Coordinator and AERO's Implementation Consultant were intentional about the implementation strategies they selected, how they would be used and how they related to implementation outcomes – especially fidelity. Modelling and coaching were chosen as key strategies.

The Coordinator was eager to lead modelling and coaching alongside AERO's Implementation Consultant to ensure every teacher received regular feedback and support and so that explicit instruction could be sustained in the longer term. Modelling and coaching cycles were planned, and these were complemented by professional learning to develop teachers' knowledge of explicit instruction. Each coaching and modelling cycle focused on a specific element of explicit instruction (e.g., using clear learning objectives and success criteria), which was reflected in feedback and observation proformas and reflective discussions.

The Coordinator initially observed AERO's Implementation Consultant model and coach, before stepping into leading modelling and coaching sessions with the Consultant's support, and finally, independently leading modelling and coaching activities. This scaffolded approach ensured the Coordinator was leading these strategies successfully and teacher support was optimised. Weekly meetings between the Coordinator and Consultant focused on fidelity of the practice. The meetings created space for sharing:

- insights from observations and discussions with teachers
- identifying teachers who were excelling in different elements of explicit instruction
- celebrating the wins (and then sharing these back with the broader team)
- determining where additional time and reinforcement of a specific element of explicit instruction may be needed and planning for this.

Figure 2: Glendore's Implementation Coordinator modelling explicit instruction in mathematics

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