

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.

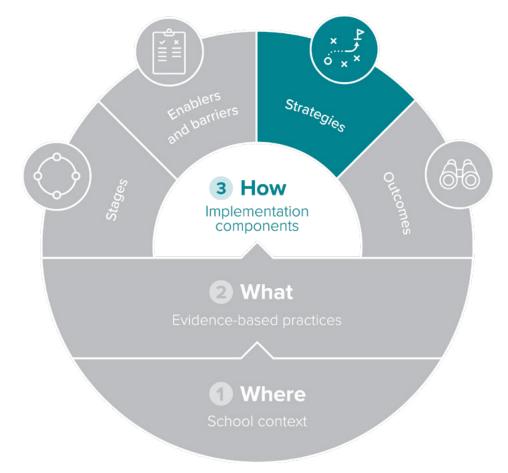
This explainer is one in a series of 5 that outlines the key components of a deliberate and structured approach to implementation. The series includes:

- 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 developing a plan), 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 considering readiness, communicating commitment to the change or delivering professional learning cycles that include knowledge-building sessions, planning support, modelling, coaching and group reflective conversations.

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). Examples of implementation strategies, with definitions tailored for Australian schools, can be found in <u>Appendix A</u>.

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 <u>implementation barriers and</u> <u>strengthen enablers</u> (Leeman et al., 2017; Kirchner et al., 2020).

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 <u>Addressing Enablers and Barriers</u> to Implementation for more information.

- how each implementation strategy can be used to support different <u>implementation outcomes</u> (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 1 sets out the requirements for naming, defining and specifying an implementation strategy in preparation for its use, along with practical 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.

Table 1: Principles for clarifying implementation strategies with school-based examples

Prerequisite	Requirements	School example
c. Action target	Specify targets according to conceptual models of implementation.	The target audience is Year 3 to 6 teachers who are implementing explicit instruction in writing.
	Identify the unit of analysis for <u>measuring</u> <u>implementation outcomes</u> .	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.
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 session 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 sessions, 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 <u>CC BY 2.0</u> licence.

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

Implementation strategies can be used at <u>different stages of implementation</u> 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 sessions 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 who could support others to understand and use the practice.
- 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</u> <u>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</u> to implementation. 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
- delivering professional learning cycles on core elements of explicit instruction (e.g., using learning intentions and success criteria) that include knowledge-building sessions, planning support, modelling, coaching and group reflective conversations
- cluster engagement, where local groups of schools discuss the project and learnings so far
- distributing <u>AERO</u> educational resources on explicit instruction to consolidate content from professional learning sessions
- trialling with a smaller group before scaling (e.g., working with Years 3 to 6 teachers first before teachers in all year levels)
- **identifying and providing training** for staff champions who are committed to supporting, promoting and driving implementation
- **upskilling others** to lead professional learning cycles.

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

Appendix A: Adapted implementation strategies

The School Implementation Strategies, Translating ERIC Resources (SISTER) project highlights 75 implementation strategies that schools can draw on during implementation. A selection of strategies and definitions are presented in Table 2. These have been adapted to reflect terms and concepts used in Australian schools.

Table 2: Adapted implementation strategies and school-friendly definitions

Strategy	Definition
Build knowledge.	Inform and/or teach different stakeholder groups about the evidence-based teaching practice. Groups can include teachers, principals, administrators, community, families, and other stakeholders.
Capture and share local knowledge.	Learn directly from other schools about how they successfully implemented a new evidence-based teaching practice and share it with other schools.
Change local policies and guidance.	Develop or align guidance and policies to support the practice (e.g. align guidance about how teachers should plan units/lessons to local scope and sequence documents).
Change the school environment.	Assess the current environment and alter or change aspects of it to best support the implementation of the evidence-based teaching practice (e.g. classroom layouts, master scheduling, repurposing space).
Communicate commitment to the change.	School leaders communicate that implementing and maintaining a focus on the evidence-based practice is a priority. Where relevant, they explain what low-impact initiatives will be deprioritised, and how the evidence-based teaching practice aligns with priorities or direction from the system/department.
Conduct local needs assessment.	Collect and analyse data related to the need for new, or strengthening of existing, evidence-based teaching practices.
Consider readiness.	Consider various aspects of the school context to determine the degree to which the school and staff are ready to implement.
Deliver professional learning cycles.	Plan for and deliver professional learning cycles on the evidence-based teaching practice that include knowledge-building sessions, planning support, modelling, coaching and group reflective conversations.
Develop an implementation plan.	Develop a clear implementation plan that outlines the school's specific goals and how to achieve them. Use and update the plan regularly to guide the implementation process.
Develop and share resources.	Develop or use existing resources to support teachers to use the evidence- based teaching practice with fidelity. Resources can include manuals, guidelines, playbooks, toolkits, lesson/unit plans, pedagogical models, videos etc.
Develop systems and tools to monitor implementation outcomes.	Set up and use systems, tools and procedures to support monitoring implementation outcomes that are used to inform adjustments.

Strategy	Definition
Foster connections between staff and between schools.	Identify and strengthen existing relationships and networks within and outside the school to expand connections and promote information sharing, collaborative problem solving, and form a shared vision and goal related to implementing the evidence-based teaching practice.
Hold consensus discussions.	Include teachers, staff and other local stakeholders in discussions that address whether the identified challenge is a priority. Determine whether the selected evidence-based teaching practices to address the challenge are appropriate.
Identify and build capability of leaders to understand and lead implementation.	Detail the expertise needed to effectively lead others to adopt and use the evidence-based teaching practice. Identify current leaders with this expertise and/or recruit new leaders, regularly building leadership capability to lead implementation.
Identify and prepare champions.	Identify and upskill staff who are committed to supporting, promoting and driving implementation.
Make professional learning dynamic and effective.	Plan and deliver professional learning that is evidence-based, promotes learning and supports practice change.
Model in classrooms.	Have expert teachers (e.g. instructional coaches) model the evidence-based teaching practice in classrooms for staff to observe the core elements. Use video where in-person modelling is not feasible.
Organise staff implementation meetings.	Develop and support teachers who are implementing the evidence-based teaching practice to meet and reflect on the implementation effort, share lessons learned and support one another's learning.
Prioritise time for teachers to use the evidence-based teaching practice.	Make it easier to implement the evidence-based teaching practice by prioritising time for staff to engage with key implementation strategies and free them from less effective and less important activities.
Problem-solving.	Work together as an implementation team and with others to proactively solve problems and provide support in a helpful, solutions-focused manner.
Provide ongoing coaching.	Use skilled instructional coaches (school-based or external) to observe teachers using core elements of the evidence-based teaching practice, provide specific feedback and co-construct a practice goal.
Promote staff buy-in.	Engage staff in activities and discussions to increase buy-in and motivation to use the evidence-based teaching practice.
Resource implementation efforts.	Access new or reprioritise existing funding, resourcing, and/or leadership time to support implementation efforts.
Review and provide feedback.	Collect and summarise data about effective use of the evidence-based teaching practice over time. Monitor, evaluate, and support teachers to use the practice as intended.

Strategy	Definition
Tailor strategies.	Tailor implementation strategies to address priority barriers and leverage enablers.
Test with a small group first.	Start with small pilot projects and examples before beginning a school-wide implementation process.
Upskill others to lead professional learning cycles.	Work with teachers to help them support others to understand and use the evidence-based teaching practice.

Source: Adapted from <u>'A Refined Compilation of Implementation Strategies: Results from the Expert Recommendations for</u> Implementing Change (ERIC) Project' by B. J. Powell, T. J. Waltz, M. J. Chinman, L. J. Damschroder, J. L. Smith, M. M. Matthieu, E. K. Proctor, & J. Kirchner, licensed under <u>CC BY 4.0</u>; and <u>'Specifying and Reporting Implementation Strategies Used in a School-Based Prevention Efficacy Trial</u>' by S. A. Moore, K. T. Arnold, R. S. Beidas, & T. Mendelson, licensed under <u>CC BY-NC 4.0</u>.

References

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*, 4–23. https://doi.org/10.1007/s10488-010-0327-7

Collin, J., & Smith, E. (2021). *Effective professional development*. Education Endowment Foundation. <u>https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/effective-professional-development</u>

Cook, C. R., Lyon, A. R., Locke, J., Waltz, T., & Powell, B. J. (2019). Adapting a compilation of implementation strategies to advance school-based implementation research and practice. *Prevention Science*, *20*(6), 914–935. https://doi.org/10.1007/s11121-019-01017-1

Flottorp, S. A., Oxman, A. D., Krause, J., Musila, N. R., Wensing, M., Godycki-Cwirko, M., Baker, R., & Eccles, M. P. (2013). A checklist for identifying determinants of practice: A systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. *Implementation Science*, *8*, 35. <u>https://doi.org/10.1186/1748-5908-8-35</u>

Kirchner, J. E., Smith, J. L., Powell, B. J., Waltz, T. J., & Proctor, E. K. (2020). Getting a clinical innovation into practice: An introduction to implementation strategies. *Psychiatry Research*, *283*, 112467. <u>https://doi.org/10.1016/j.psychres.2019.06.042</u>

Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, *88*(4), 547–588. https://doi.org/10.3102/0034654318759268

Kretlow, A. G., & Bartholomew, C. C. (2010). Using coaching to improve the fidelity of evidencebased practices: A review of studies. *Teacher Education and Special Education*, *33*(4), 279–299. https://doi.org/10.1177/0888406410371643 Leeman, J., Birken, S. A., Powell, B. J., Rohweder, C., & Shea, C. M. (2017). Beyond "implementation strategies": Classifying the full range of strategies used in implementation science and practice. *Implementation Science*, *12*, 125. <u>https://doi.org/10.1186/s13012-017-0657-x</u>

Lyon, A. R., Cook, C. R., Locke, J., Davis, C., Powell, B. J., & Waltz, T. J. (2019). Importance and feasibility of an adapted set of implementation strategies in schools. *Journal of school psychology, 76*, 66–77. https://doi.org/10.1016/j.jsp.2019.07.014

Proctor, E. K., Powell, B. J., & McMillen, J. C. (2013). Implementation strategies: Recommendations for specifying and reporting. *Implementation Science*, *8*, 139. <u>https://doi.org/10.1186/1748-5908-8-139</u>

Waltz, T. J., Powell, B. J., Chinman, M. J., Smith, J. L., Matthieu, M. M., Proctor, E. K., Damschroder, L. J., & Kirchner, J. E. (2014). Expert recommendations for implementing change (ERIC): Protocol for a mixed methods study. *Implementation Science*, *9*, 39. <u>https://doi.org/10.1186/1748-5908-9-39</u>

Waltz, T. J., Powell, B. J., Fernández, M. E., Abadie, B., & Damschroder, L. J. (2019). Choosing implementation strategies to address contextual barriers: Diversity in recommendations and future directions. *Implementation Science*, *14*, 42. <u>https://doi.org/10.1186/s13012-019-0892-4</u>

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