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Explainer

Monitoring implementation outcomes

August 2024 | Updated March 2025

Implementation outcomes help schools see how their implementation of an evidence-based practice is tracking. Closely monitoring these outcomes provides insights about what's working well and what could be changed to strengthen implementation. Collecting data is part of monitoring outcomes, but schools should also make the most of the existing data they already collect.

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 (overview)

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.

Monitoring implementation outcomes 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
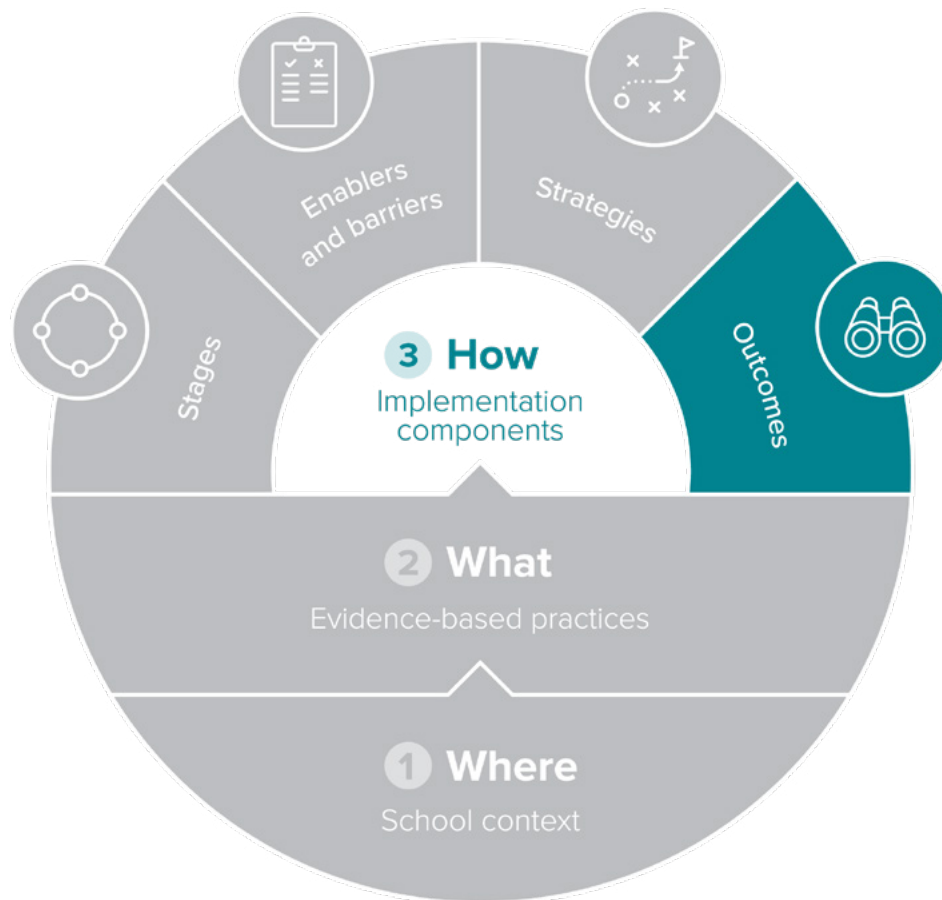
Key points

- Implementation outcomes provide a framework for schools to track how implementation is going, so they can make adjustments as needed.
- While there are 8 outcomes associated with implementation, schools should focus on monitoring those that are most relevant and realistic for their context.
- Different implementation outcomes can be monitored at different stages of implementation.
- Collecting data to assist with monitoring implementation outcomes should leverage what a school is already doing. It doesn't need to be time-consuming or burdensome.

Understanding implementation outcomes

Implementation outcomes are the *result* of implementing an evidence-based practice (Proctor et al., 2011). They're used to track how implementation is going and can provide information schools can use to understand what's working well, and what might need to change to improve implementation. Monitoring these outcomes allows schools to adapt current implementation activities to meet their needs, and to strengthen implementation in the future (Schultes, 2023).

Implementation outcomes are different from effectiveness outcomes, which focus on the impact on student learning, but they do work together – strong implementation outcomes are a good indicator of future impact on student learning outcomes. While improving student learning outcomes is the ultimate goal of implementation, monitoring *implementation* outcomes is a valuable exercise to understand what factors might affect the likelihood of achieving that goal.

The importance of monitoring implementation outcomes

Any change, including implementation, can be strengthened by purposeful and well-planned monitoring and evaluation (Kusek & Rist, 2004). It's through monitoring and evaluation of key measures that the process of change can be tailored to increase the likelihood of success.

Ongoing monitoring is particularly important in complex adaptive systems like schools, where interdependencies and unforeseeable effects and outcomes complicate implementation (Petrie & Peters, 2018).

Specifying implementation outcomes

Implementation research has identified 8 outcomes for monitoring successful implementation: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, reach, and sustainability (Proctor et al., 2011). These are defined in Table 1.

Table 1: Definitions for implementation outcomes

Outcome	Definition for schools
Acceptability	The perception among stakeholders (e.g., teachers, students, families, community) that a given evidence-based practice is agreeable, palatable or satisfactory.
Adoption	The intention, initial decision or action to try an evidence-based practice.
Appropriateness	The perceived fit, relevance or compatibility of the evidence-based practice for a specific school (including staff, students, families and community).
Feasibility	The extent to which the evidence-based practice can be successfully used or carried out within a given school.
Fidelity	The degree to which an intervention or practice is implemented as intended, especially in terms of: • adherence to the description of the practice • dose • quality of use of the practice.
Implementation cost	The extent of the cost of implementation based on the particular evidence-based practice, the implementation strategy and school context.

Outcome	Definition for schools
Reach	The integration of an evidence-based practice within a school and its students.
Sustainability	The extent to which the evidence-based practice is maintained and embedded within a school's ongoing operations.

Source: Adapted from 'Table 1' in Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda by Enola Proctor, Hiie Silmere, Ramesh Raghavan, Peter Hovmand, Greg Aarons, Alicia Bunger, Richard Griffey and Melissa Hensley (2011), licensed under a CC BY-NC 2.0 licence.

What to monitor

It's not realistic to closely monitor all 8 implementation outcomes (Table 1), so schools will need to select the outcomes that are most relevant and realistic for the evidence-based practice they're implementing and their school context. Research indicates that fidelity is the most often measured implementation outcome and, when present, is strongly related to the intended outcomes of the evidence-based practice (Proctor et al., 2011; Massar et al., 2019).

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

Selecting implementation outcomes to monitor is a balance, and schools can reflect on how outcomes intersect with the other implementation components: stages, enablers and barriers and strategies.

Implementation outcomes can be monitored at different points during implementation:

- In the early stages of implementation (i.e., Explore and Prepare), outcomes are used to monitor whether teachers are likely to use a new evidence-based practice (i.e., feasibility, acceptability, appropriateness) (Proctor et al., 2011).
- In the later stages of implementation (i.e., Deliver and Sustain), implementation outcomes can be used to monitor whether the evidence-based practice is being applied and used in teaching as intended (e.g., fidelity, reach).

Implementation outcomes will also align with the enablers and barriers. The enablers and barriers a school experiences reflect implementation outcomes and provide an indication of what to address to keep implementation on track. For example, if the following barriers have been identified in a school (via a survey or discussion with teachers), it may indicate the implementation outcome of *feasibility* needs addressing:

- Some teachers believe the evidence-based practice is not simple to use in the classroom.
- Some teachers are concerned the school doesn't have the resources (for example, time, classroom resources and classroom layout) available to successfully implement this evidence-based practice.

Ideally, implementation outcomes are also intertwined with the implementation strategies schools use. Different strategies will be aligned with different implementation outcomes, and tracking outcomes can provide an indication of how well a strategy (or combination of strategies) is working. These will also be linked with enablers and barriers. For example, to address the barriers around feasibility introduced in this section, a school may use implementation strategies such as:

- promoting staff buy-in by discussing the alignment of the practice with the school's goals, and sharing the support structures available to teachers to help them with learning and using the practice

- professional learning to simplify core elements of the evidence-based practice, and distributing guidance resources to support shared understanding of the practice

- modelling in classrooms by an expert teacher so staff can see the practice in action in their setting.

Collecting data to track implementation outcomes

The action of measuring implementation outcomes can increase the impact of the practice. However, this can be challenging as there is a lack of validated tools for monitoring how implementation is tracking (Schultes, 2023). Monitoring implementation outcomes can draw on existing forms of data schools already collect or can be gathered in planned activities like learning walks, interviews and surveys (Evidence for Learning, 2019). Knowing what to collect will depend on the implementation outcome and what's expected for successful implementation.

Schools might reflect on questions to guide monitoring and inform the data they collect. For example, if the outcomes a school is monitoring are acceptability, feasibility, fidelity and sustainability, they might consider:

- **Acceptability**
  - How will we know the evidence-based practice is valued by teachers?
  - How will we support teachers in understanding the practice and its relevance for our school?
  - How will changes in staff's attitudes towards the practice be measured, and tracked over time?

- **Feasibility**
  - To what degree does our school have the time and resources to dedicate to implementing this evidence-based practice?
  - What might need to change to ensure teachers are supported by systems and structures during this period of change (i.e., timetabling, release time, resource availability, access to coaching, etc.)?
  - How will we check what staff think may need to change?

- **Fidelity**
  - What will the evidence-based practice look like in classrooms in our school?
  - How will teachers be supported with this?
  - How will we know the practice is happening consistently?

- **Sustainability**
  - What school documents and processes will the evidence-based practice be reflected in?
  - How will staff know about these, and how will we support them in enacting these policies and processes?

Implementation outcomes in practice

Monitoring implementation outcomes is one of the 4 components of a deliberate and structured approach 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 Learning Partner project.

The AERO Learning Partner project

The implementation outcomes monitored in the Learning Partner project are acceptability, feasibility, fidelity and sustainability. These 4 outcomes are built into each school's implementation plan and regularly discussed at meetings with the leadership team and AERO Implementation Consultant, for example:

- when looking at the activities in the current (or future) implementation stage, and aligning how these activities may support implementation outcomes

- when analysing the school's enablers and barriers data to see how these reflect implementation outcomes

- when planning for and engaging with implementation strategies, and determining how the strategy builds knowledge and capability and will support specific implementation outcomes.

School data collection on implementation outcomes for the Learning Partner project has been aligned with activities already taking place, outlined in Table 2.

Table 2: Outcomes and data collected to monitor implementation progress in the Learning Partner project

Implementation outcome and definition	Example data and information collected to monitor implementation outcome
• **Acceptability:** The perception that an evidence-based practice is agreeable or satisfactory.	• Survey responses from an initial knowledge check of explicit instruction (from a survey created and conducted by AERO) • Enablers and barriers data and notes from discussions • Observations during professional learning sessions on explicit instruction, and conversations following modelling • Responses to reflection prompts in term reports.
• **Feasibility:** The extent to which an evidence-based practice can be successfully carried out in a given area.	• Readiness for change discussions during the Explore and Prepare stages • Enablers and barriers data and notes from discussions • Observations from professional learning sessions on explicit instruction • Notes from group reflective conversations.

Implementation outcome and definition	Example data and information collected to monitor implementation outcome
• **Fidelity:** The degree to which an evidence-based practice is implemented as intended.	• Formative notes from learning walks and informal observations • Feedback using practice-specific coaching proformas that clearly scaffold core elements of practice • Notes from group reflective conversations • Reviewing lesson planning • Rubric of explicit instruction used to guide practice.
• **Sustainability:** The extent to which an evidence-based practice is maintained or embedded within a school's ongoing operations.	• Teachers' lesson plans • Observations from learning walks • Reflections from staff induction • Responses from staff surveys • School pedagogical approach reflects the evidence-based practice. • School systems, policies and processes have the evidence-based practice embedded.

Monitoring the implementation outcome of *acceptability* at Chelsea Heights Primary School

Chelsea Heights Primary School is located 30 km south of Melbourne. It's a government school with 430 students and 30 teaching staff. The school has an Index of Community Socio-educational Advantage (ICSEA) of 1,050 and 15% of students have a language background other than English. Chelsea Heights is a Learning Partner school.

In the 2023 Learning Partner project, Chelsea Heights focused on implementing explicit instruction in mathematics for Years 3 to 6. The school was in a significant period of change when they joined the project. A new principal had been appointed and a new pedagogical model that included explicit instruction was being introduced.

Early in Term 2, survey responses collated from staff about implementation enablers and barriers indicated the implementation outcome of acceptability of explicit instruction could be strengthened. Although teachers acknowledged explicit instruction had a strong evidence base, it wasn't viewed as a practice they needed to include or enhance in their teaching. The leadership team and AERO Implementation Consultant then reviewed implementation strategies with a plan to increase acceptability, and chose to:

• model explicit instruction lessons across different classes

• provide more support during shared planning from the Implementation Consultant to show how lessons could reflect explicit instruction (e.g., drafting learning objectives, chunking and sequencing content, developing guided and independent practice tasks)

- include rehearsal of explicit instruction routines and practices during planning time (e.g., rehearsing teaching techniques, trialling a lesson sequence during team planning)
- develop a school-wide scope and sequence for mathematics
- identify teachers who were champions of the practice
- communicate that the change was going to be sustained and an ongoing part of teaching and learning at the school.

Acceptability was monitored through learning walks, observations, discussions during professional learning and reflection sessions, anecdotal feedback from teachers, and reviewing team lesson planning. The leadership team and Implementation Consultant discussed their observations each week and made changes to the implementation support to increase the acceptability of explicit instruction. When the enablers and barriers activity was completed again in Term 3, it showed acceptability of the practice had strengthened and that this was now an enabler. In 2024, it's still being monitored to identify any changes over time, as the school moves into sustaining explicit instruction in maths.

Figure 2: Discussing how implementation outcomes are tracking, and the evidence for this, at Chelsea Heights Primary School
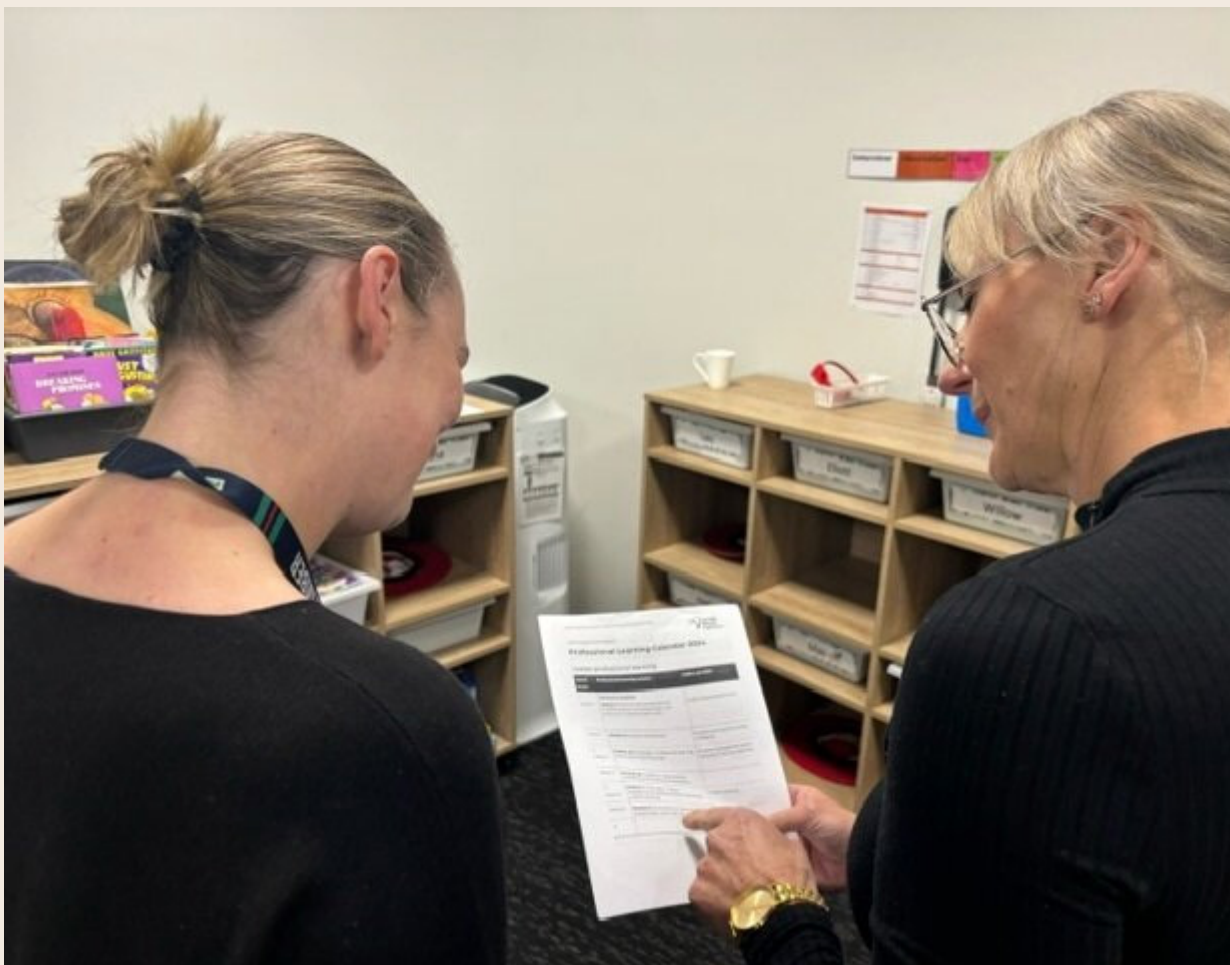
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