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Evaluating for continuous improvement

The Australian Education Research Organisation (AERO) has produced a series of practice guides to help school leaders develop and apply quality strategic plans. This guide is the fourth and final in the series and focuses on **evaluating the processes and outcomes in the strategic plan**. View all guides in this series on the **AERO website.**

These practice guides relate to the _Australian Professional Standard for Principals_ Professional Practices:

- Leading improvement, innovation and change
- Leading the management of the school.

Evaluation is central to strategic planning as it allows you to review what is and isn't working on the school improvement journey. There are 2 types of evaluation you should consider:

- **Process evaluation** examines whether practices have been applied in the way they were planned.

- **Outcome evaluation** examines whether practices are having the desired effect on student learning.

Process and outcome evaluation both play key roles at different stages of a strategic plan's life cycle.

This guide recommends practical steps for evaluating processes for improving practices, as well as the effect of these practices on student learning.

We recommend reading this guide after you have read the third guide in this series, *Selecting practices to deliver improvement*.

1. Evaluate the process

To evaluate whether a practice is being applied in the way it was planned, you'll need to collect evidence of **outputs**. Outputs are the products that result from the improvement process. They can be measured easily – for example, the number of staff that attended a professional learning session or the number of students that participated in a universal screening assessment.

How to use process evaluation

Process evaluation doesn't need to be complex. One simple approach is to introduce a traffic light system that assigns colour ratings based on whether practices are delivered to schedule and in the way they were planned. For example:

- A green rating means the outputs expected for a particular practice have been produced or are on track to be produced.

- An amber rating means the outputs expected for a particular practice require attention to remain on track.

- A red rating means the outputs expected for a particular practice aren't on track.

This will require you to identify in advance the outputs that should result when practices are applied in the way they were planned.

Example traffic light rating system for process evaluation

Table 1 provides an example of how a simple traffic light rating system could be used to evaluate the process for achieving a goal and target.

- Goal: To increase the proportion of Year 6 students performing above the achievement standard for algebra.

- Target: A 20% increase in the proportion of Year 6 students performing above the achievement standard for algebra by Term 4 2024.

Table 1: Example traffic light rating system for process evaluation

Action	When	Expected output	Output status (traffic light rating)	Process evaluation notes
Design and facilitate a 3-part professional learning workshop series for all teachers, based on setting clear and measurable learning objectives and success criteria.	Term 1, Week 2 to 4	All teachers attend each professional learning workshop.	🟠	By the end of Week 4, 81% of teachers have completed this professional learning series. Catch-up sessions are required for part-time staff who weren't working on days workshops were held.
Establish professional learning communities based on setting clear and measurable learning objectives and success criteria.	Term 1, Week 5 to 9	All teachers participate in a professional learning community.	🟢	By the end of Week 9, 100% of teachers have participated in a professional learning community. Flexibility in weekly professional learning community meeting times enabled part-time staff to still participate fully.
Mathematics learning area teachers: • document learning objectives and success criteria for each lesson focused on algebra[1] • refer to learning objectives and success criteria throughout the lesson, particularly when achieved.	Term 1, Week 5 to 9	Learning objectives and success criteria are documented and referred to in all lessons.	🔴	Curriculum materials for algebra now contain learning objectives and success criteria for every lesson. Observations of algebra lessons in each year level indicate learning objectives and success criteria aren't yet consistently referred to throughout lessons.

🟢 = completed or on track   🟠 = require attention to remain on track   🔴 = not on track

The actions listed in this example are not exhaustive of everything a school may need to consider to achieve the related goal.

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1   Based on Version 9 of the Australian Curriculum.

When to use process evaluation

Process evaluation is useful in the early stages of delivery. At this stage, it can:

- provide early indications that a practice is being applied as intended

- assess the appropriateness of delivery steps

- provide early warnings for problems that may occur during delivery.

For practices with delivery periods that run over an extended period (such as in multi-year plans), process evaluation also assists with ongoing efficiency of intended actions.

Key considerations

Process evaluation is not a measure of student learning. It's possible for an improvement process to be delivered as intended and produce the anticipated outputs to schedule without improving student learning. For this reason, you must couple process evaluation with outcome evaluation.

2. Evaluate the outcome on student learning

To evaluate whether a practice is having the desired effect on student learning, you'll need to collect evidence of **outcomes**. Outcomes are captured in student learning data and should consider both achievement and growth. Key data sources that capture evidence of student learning are identified in the first guide in this series, *Setting goals and targets for student learning*.

How to use outcome evaluation

Before you can evaluate the effect of a practice on student learning, you'll need to ensure you've specified the student learning outcomes you're trying to achieve.

Outcomes are similar to targets in that they both describe a desired level of measurable change in student learning. However, outcomes capture more micro and incremental changes in learning that will ultimately contribute to a more macro target.

Examples of the difference between a target and an outcome

Take the example target from the first guide of this series:

> A 20% increase in the proportion of Year 6 students performing above the achievement standard for algebra, by Term 4 2024

A more micro outcome that, if achieved, will contribute to this overall target, could be:

> A 20% increase in the proportion of Year 6 students performing above the achievement standard for **finding unknown values in numerical equations involving multiplication and division using the properties of numbers and operations**,[2] by Term 2 2024.

When to use outcome evaluation

Outcome evaluation should occur when sufficient time has passed for staff to have reasonably adjusted to a new practice and for the changes in practice to influence student learning.

This will differ from practice to practice, based on the amount of time staff need to learn how to use a practice effectively.

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2   Australian Curriculum (Version 9) content descriptor AC9M5A02.

Key considerations

It's important to be realistic about the time required for a change in practice to translate into a change in student learning. Developing incremental and sequenced outcomes that show a gradual and realistic change in student learning can help with this.

At times – namely, earlier in the use of a practice – it may be more appropriate for outcomes to describe a measurable change in a proxy that precedes a change in student learning. Proxies can include teacher beliefs, knowledge or skills, or student beliefs (sometimes referred to as attitudes) or engagement.

Data sources that capture evidence of proxies are identified in the first guide of this series (these are referred to as 'supplementary' data sources).

If you choose to include proxies that don't relate directly to student learning, do so sparingly, and ensure there is a robust evidence-based theory that describes how the proxy you've identified is a precursor to student learning. For example, if you select a proxy focused on changes in staff collective efficacy (measured through a staff perception survey), you need to have a high degree of familiarity with and confidence in the evidence base that shows that an increase in staff collective efficacy influences an increase in student outcomes.

Further, you should use this evidence base to inform when it's reasonable to stop relying on the proxy as an indicator of change, and start directly measuring changes in student learning. This is important because even when you have a high degree of familiarity and confidence in the evidence base that describes how the proxy you have identified is a precursor to student learning, changes in a proxy don't guarantee that changes in student learning will follow. Once the minimum amount of time has passed for changes in learning to be observable, you'll need to stop measuring the proxy, and start measuring student learning outcomes.

Evaluation as a shared learning opportunity

Participation in evaluation activities helps staff collectively understand how their practice influences student learning and contributes towards their school achieving its goals.

Before you enact a plan, it can be helpful to set up a team responsible for evaluating continuous improvement. This could include a mix of school leaders, teachers and education support staff, and should involve those accountable for delivery within the plan.

The evaluation team should set a schedule of meetings over the course of the year based on when evidence is available to measure outputs and student learning outcomes. Findings that emerge from evaluation conversations should be communicated back to all staff and, if appropriate, the wider school community.

Protocols should be established for what to do when outputs are evaluated as not on track, requiring attention to remain on track, or not fully met. This should include determining why a practice has not been applied in the way it was intended or did not have the anticipated effect on student learning. Focus should then be directed towards actions for getting back on track. Genuine and direct professional conversations grounded in data and evidence facilitate this process.

All staff responsible for delivering improvements within the strategic plan should have a clear understanding of how and when evaluation activities will occur, even if they don't participate directly in the evaluation team.

3. Evaluating progress toward planned goals and targets

In addition to conducting process and outcome evaluation during a strategic plan's life cycle, it's also critical to set aside sufficient time after completing the plan to summatively evaluate whether you have reached targets and achieved the associated goals.

If enough progress hasn't been made towards goals, it's important to identify why, so that this can inform future decisions related to strategic planning. When targets have been met, it's equally important to understand what contributed to this success. Which practices had the greatest impact, and why? How can this inform the next strategic plan? Findings from process and outcome evaluation during a strategic plan's life cycle will provide insights you can draw on when reflecting on these important questions.

Summary considerations for evaluating for continuous improvement

- Do staff have a shared understanding of what will be evaluated and why?

- Are you clear on what outputs will result from actions taken to deliver improvements?

- Have you sequenced outcomes, and factored in the time required for a change in practice to translate into a change in student learning?

- How often is the designated evaluation team meeting to evaluate progress towards desired outputs and outcomes? Are the right people attending these meetings? Are they scheduled at the right intervals?

- Have you established protocols on what to do when outputs or outcomes aren't met, to help the delivery process get back on track?

- If you achieve an outcome, are you confident that you will reach the associated target, and by doing so, achieve the goal?

Finally, don't forget to recognise the work everyone in the school has done by celebrating your success!

To provide feedback on this guide or view further information, including full references and additional resources, visit AERO's website.