

Developing curriculum knowledge and setting goals

Formative assessment in Science



This document provides a suggested outline for facilitating a group session where teachers can use the formative assessment in science video to reflect on their own practice. It could also provide guidance for activities for self-directed reflection.

These activities aim to:

- build knowledge of formative assessment (particularly developing curriculum knowledge and setting goals) and of AERO's guidance in this area
- assist in developing teaching strategies involving formative assessment
- encourage teachers to embed formative assessment in their practice.

The content included in this group facilitation guide refers to the following standards:

- **Australian Professional Standards for Teachers Focus Area 6.2** This resource is related to 'Focus Area 6.2 Engage in professional learning and improve practice'.
- **Australian Professional Standards for Principals Professional Practice 2** This resource is related to 'Professional Practice 2 Developing self and others' in the Australian Professional Standards for Principals.



[Watch Formative assessment in Science](#)

Facilitator preparation

The following is an example checklist to help you prepare for the session.

- ✔ **Review the materials**
 - Read AERO’s [Tried and Tested Formative assessment practice guide](#).
 - Watch the [formative assessment in science video](#), noting down key points that would be valuable for your team and any aspects you think might need clarification.

 - ✔ **Plan the session**
 - Make sure to give your team sufficient notice about the session so they have time to do the pre-work.
 - Consider how the session can specifically assist your school and your students.
 - Think about what you want participants to be able to do as a result of this learning session. For instance, be able to identify what it is they want their students to know and do as a result of the sequence of lessons, or understand how they might collect evidence that students have progressed in their learning.

 - ✔ **Consider how change will be promoted in your school**
 - What access do teachers have to national, state and school curriculum documents?
 - How are concepts of a teaching sequence shared between team members?
 - What resources are available to teachers to build their subject knowledge?

 - ✔ **Prepare to facilitate**
 - Read through this resource and highlight the key elements and the questions you plan to ask.
 - ‘Road-test’ the session with one of your colleagues to clarify any aspects of formative assessment that you are unsure about and to make sure you are confident with each step.
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Attendee preparation

The following is an example checklist of pre-session work to set participants before they attend.

- ✔ Read AERO’s [Formative assessment Tried and Tested guide](#).
- ✔ Identify some examples of learning intentions you have used in your classroom.

Asking participants to identify one aspect they would like to learn more about will help you to focus the efforts of the session. Is the session going to primarily discuss formative assessment as a concept? Or perhaps how a teacher can identify at what stages they will want to assess student understanding of curriculum content during a lesson? Or even how a teacher can gather information, so they know that students are progressing through the knowledge and skills required in the learning sequence?

Formative assessment session agenda

The following table outlines a possible agenda for a 45 minute group session.

| Timing | Agenda item | Notes |
|---------|--|--|
| 5 mins | Welcome and Acknowledgement of Country | |
| 5 mins | <p>Review key aspects of AERO's Formative assessment Tried and Tested guide, with a focus on curriculum knowledge and setting goals</p> <ul style="list-style-type: none"> Clarify the common progression of learning in the unit you are teaching, with reference to the curriculum or syllabus. Determine what you want students to know and be able to do as a result of the unit and set goals around what they should know. Research the misconceptions students commonly hold about this progression of learning. | The purpose of this section is to revise elements of the Tried and Tested guides and to emphasise the key points of learning for the team before watching the video. |
| 10 mins | <p>Think about your own teaching practice</p> <ul style="list-style-type: none"> How do you use formative assessment in your practice now? <p>Focus on strengths</p> <ul style="list-style-type: none"> What do you think we do well? What aspects of formative assessment are you not so sure about? Are there parts of it that you use less in your current instruction? <p>Think, pair, share</p> | Formative assessment is a complex teaching practice that is often misunderstood. At this point it is worth checking with your team about what they might need to discuss, as this will help focus the session. |
| 5 mins | Formative assessment in science video viewing | You may wish to pause at certain points of the video to reiterate a point or idea. |
| 15 mins | <p>Video consideration</p> <ul style="list-style-type: none"> What is something that you learnt from watching this teacher discuss how they build and use curriculum knowledge in order to implement formative assessment in their lessons? Was there anything in the video that you found surprising? Which aspects of formative assessment do you want to know more about? Do we have a common view about how a learning progression is best taught? Do we know how to craft a good learning intention that is clear and measurable? | This is an opportunity to discuss some key questions from the video. Encourage your team to be specific about teaching strategies rather than talking generally about formative assessment. |

| Timing | Agenda item | Notes |
|--------|--|-------|
| | <p>Video consideration cont.</p> <ul style="list-style-type: none"> • Are we clear about what information about student learning is important to know at different stages in the lesson? Do we allocate more time to parts of the course that are more difficult to understand? • What resources do we currently have to build our understanding of some of the content we need to teach? | |
| 5 mins | <p>Feedback</p> <ul style="list-style-type: none"> • What support would help you to develop your formative assessment? | |

Post-session review

This could be in the form of another meeting, online session, peer coaching session or some other format agreed by the group.

- Reconvene the team after several weeks to review key aspects of formative assessment and to share experiences. Questions to ask could include:
 - What changes to practice have been relatively simple?
 - What parts have been challenging for you?
 - How can the school assist you to implement formative assessment in your classroom?

Meeting reflection

It is important for you to reflect on the session and the progress of your team. The following questions can help you think about the outcomes and next steps for improving the quality and consistency of your formative assessment practice.

- Were there differences in expertise between members of the group?
- Are there members of the team who you felt left the meeting still a little unsure of what building curriculum knowledge in practice looks like? What could you do to follow up and provide support?
- What parts of the session worked well for the group?
- What aspects were less successful?