Formative Assessment – Interpret and use evidence

[Victorian Curriculum and Assessment Authority. The logo for the Victoria State Government. Formative Assessment – Interpret and use evidence.]

NARRATOR: Hi, I'm Narelle. I'll be presenting this video about how to interpret and use evidence.

[A flow chart with three stages: Plan, Assess, Review. The Plan stage lists "describe a learning continuum," "develop a formative assessment rubric," and "design a task," unpacking parts 1 and 2 of the Guide to Formative Assessment Rubrics of the Victorian Curriculum, F to 10. The Assess stage lists "collect evidence," "moderate," and "interpret and uses evidence," unpacking part 3 of the guide. The Review stage lists "improve rubrics," "refine learning continuum," and "refine task," which is part of review and refine for best practice.]

NARRATOR: This is the third video within the Assess section of the formative assessment videos. This video relates to part three of the Victorian Curriculum and Assessment Authority Guide to Formative Assessment Rubrics. When it is time to interpret and use evidence, you should have already moderated the evidence collected using your task and the administration guidelines matched to a learning continuum and a rubric. The purpose of this video is to illustrate how to interpret evidence to determine which part of a learning continuum students are ready to learn.

This video also discusses two different ways to use the evidence collected so that learning intentions can be targeted to support learning. The first way is to provide feedback to students, and the second is to help teachers to plan activities and tasks to scaffold student learning. Once evidence is collected and recorded, teachers need to make instructional decisions by interpreting the evidence. The purpose of interpreting evidence is to target teaching to student readiness to learn. That is the point at which scaffolding is required and teaching will have the most effect. This point is also known as Vygotsky's Zone of Proximal Development, or ZPD for short. This is done in an evidence-based manner using a learning continuum and a rubric.

[An example rubric design, with a learning continuum along the top and four subsequent phases. Each phase corresponds to a set of quality criteria. Additionally, below the continuum is a column for organising elements, matched up with columns labelled "Action" and “Insufficient evidence”. All four phases and their respective criteria are highlighted.]

NARRATOR: Here is a learning continuum and rubric for Digital Technologies that has been developed using the Guide To Formative Assessment Rubrics. With the evidence collected and recorded, teachers need to make a decision about what each student has achieved against the phases in the learning continuum. This is so targeted teaching and learning can be planned - a fundamental element of formative assessment.

[Several criteria under the four phases are shaded.]

NARRATOR: Here is an example of how a teacher has marked up a rubric to show what the student has achieved and which phase of the learning continuum it places a student within. The teacher used the rubric to record the judgments about the student's ability to use digital technologies for data collection and interpretation. The green shading indicates that the teacher has made an on-balance judgment that the student has achieved those skills. This evidence can inform teaching decisions directly, however, it also helps to interpret the data to identify where the student is on the learning continuum. Often, knowing where your students are on the learning continuum is more helpful to inform teaching decisions because it acts as a summary and it often has a greater scope than the actions and criteria that were chosen for the rubric. To locate the student on the learning continuum, you need to look at the pattern within the rubric. The pattern can be seen more easily if all the cells to the left of the assessed cell are shaded.

[On the top row, phases one and two are highlighted green, phase three is highlighted yellow, and phase four is highlighted red. Below, all the criteria under phases one and two are shaded, while only one criterion under phase three is shaded.]

NARRATOR: Looking at this pattern, the teacher has determined that phase one and two, which is shown in the green outline, is what the student has already achieved. That is the zone of actual development. Skills or knowledge within phases one and two do not need targeted teaching, but may need practice. The teacher has determined that phase three, which is shown in the orange outline, is the phase where the student is ready to learn. That is their zone of proximal development. This is because the student has achieved some of these criteria but not all. Skills or knowledge within this phase need scaffolding. The phase that is outlined using red contains the skills that the student is not ready to learn. Teaching should not be targeting the skills or knowledge within this phase yet.

[The first three criteria are shaded in the rows corresponding to actions one, three and four. In the row for action two, the box for Insufficient Evidence is shaded.]

NARRATOR: Here is an example of how a teacher has marked up a rubric with a pattern that requires further investigation. It would be highly unusual for a student to have highly developed skills in all areas except one. Patterns like this make it difficult to determine the phase for a student and teachers should check the evidence collected or collect additional evidence through informal means if necessary.

[All quality criteria under the first three phases are shaded, while phase four is highlighted in yellow.]

If there is a sharp change in the pattern and the student transitions straight from being able to achieve all the criteria in one level to not being able to achieve any criteria in the next phase, we make the assumption that the next phase is where the student is ready to learn. In the case shown on the slide, the first three phases are in the student zone of actual development, while the fourth phase is the student zone of proximal development.

Feedback is important for learning. How teachers provide feedback to students might depend on the age of the students, the context for teaching and the teaching practices within the school. Generally, if teachers choose to give feedback, using the rubrics associated with the learning continuum provides a framework for feedback to be better understood by students. The rubrics show students what they have already achieved, what they are ready to learn next, and where they are heading.

Formative assessment using rubrics supports feedback to focus on progress. When rubrics are written so they are clear for students, the criteria themselves may suggest strategies to students that they can use to improve their own performance. Teachers can also add specific strategies they would recommend to students within the feedback. Learning intentions are brief statements that explicitly describe what students should know, understand and be able to do as a result of the learning and teaching. The phases of the learning continuum can help teachers identify learning intentions. A learning intention may cover the whole description of the phase or just a part.

Where students have recently achieved a phase, the learning intention may be focused on them automating the skills and knowledge. These are skills or knowledge just within the zone of actual development. Where the phase is identified as what the students are ready to learn, or their zone of proximal development, the learning intention is to learn this skill and knowledge. Learning activities to help students automate skills and knowledge should require students to practise the skill or knowledge without scaffolding. Ideally, these activities include frequent feedback in the moment. Learning activities to help students learn a skill or knowledge require scaffolding. This can be provided by the teacher, a more knowledgeable other who is not the teacher, or a non-human agent, like a graphic organiser or computer.

[On the top row, phases one and two are highlighted green, phase three is highlighted yellow, and phase four is highlighted red. Below, all the criteria under phases one and two are shaded, while only one criterion under phase three is shaded.]

NARRATOR: In the example shown in this slide, the student has been assessed as achieving phases one and two, being ready to learn phase three and not yet ready for phase four. Ideally, this student would have the opportunity to practise the recently achieved phase two and be scaffolded in phase three. When a phase has been identified as ready to learn, the student has not yet consolidated any of the skills and knowledge within that phase, leading to inconsistent performances. Students can sometimes demonstrate skills and knowledge within their zone of proximal development, but on other occasions they cannot demonstrate these same things. This means that the student requires scaffolding in all aspects of the phase, even those they have correctly demonstrated in the formative assessment task.

In the example shown, the student requires scaffolding of all the aspects of phase three, irrespective of whether they have achieved parts of them in the formative assessment task or not. Typically, the phase also encompasses more than just the actions that were included in the rubric. This is because it would be overwhelming to assess every single possible action. Teaching to the phase description helps to develop all the associated skills and knowledge and prepare students for the possibility of future assessments, which might assess different actions from within the phase.

When teachers have identified groups of students at different phases of learning, they can identify learning intentions and plan learning activities related to each phase. It would be overwhelming to write individual learning intentions and scaffolds for each student. However, using the learning continuum and grouping students with similar points of readiness can make evidence-based teaching easier. Managing different groups doing different activities within the classroom can be tricky. It helps the lesson to run smoothly if the teacher plans to only work with one group at a time, while the other groups are working on unscaffolded practice or activities using non-teacher scaffolds.

You are now ready to interpret your students' performances using a learning continuum. This will enable you to provide feedback to students and plan teaching and learning activities that will scaffold students at their point of readiness to learn.

[More information available at vcaa.vic.gov.au. Authorised and published by the Victorian Curriculum and Assessment Authority.]