Guide to
Formative Assessment Rubrics

Victorian Curriculum F–10

Exposure Draft
for Trialing and Feedback

VICTORIAN CURRICULUM
AND ASSESSMENT AUTHORITY

VICTORIA
State Government

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Contents

Introduction

Student learning and assessment

Student learning is produced, shaped and affected by four connected components. Each component plays a distinct role in the process of student learning and is interconnected with all of the others. The four components are:

1. Curriculum; defines **what** it is that students should learn, and the associated progression or continuum of learning
2. Pedagogy; describes **how** students will be taught and supported to learn
3. Assessment; identifies **how well** a student has (or has not) learnt specified content (knowledge and skills included in the curriculum), and
4. Reporting; explains to the student, parents/carers and teacher **where** a student is on a learning continuum at the end of a specified period of schooling, and where this places them in relation to their own learning goals and/or the learning of their peers.

The Victorian Curriculum F–10 is a set of progressions that define increasingly complex knowledge, skills and concepts grouped and defined by learning areas and capabilities. The Victorian Curriculum F–10 is therefore not set out according to nominal year levels that equate to particular school grades but to developmental levels that point to current levels of achievement and allow for appropriate planning for expected levels of achievement.

In this, the Victorian Curriculum F–10 design facilitates the increased focus in Victorian schools on the concept of the development of personalised learning programs for all students, where the curriculum delivery is planned in relation to the actual learning level of each student rather than their assumed level of learning. This is consistent with Vygotsky's now widely-cited concept of the 'zone of proximal development', recently re-expressed by Masters:

> *It is well understood at the level of the classroom that successful learning is more likely when individual learners are given learning opportunities appropriate to their current levels of achievement and learning needs*
>
> – Masters, as quoted in *Victorian Curriculum F–10: Revised curriculum planning and reporting guidelines*, VCAA, December 2015

Purpose

The primary purpose of this Guide to Formative Assessment Rubrics (the Guide) is to provide advice to teachers about how to develop formative assessment rubrics, to decide what students know and can do, and to identify what students are ready to learn next. Specifically, the Guide provides advice about:

- determining learning intentions/goals using the curriculum
- design of formative assessment rubrics
- using information from formative assessments rubrics to plan teaching and learning.

This Guide does not attempt to give detailed information about student agency, feedback, moderation processes, evidence based pedagogical approaches or reporting.

Structure

The Guide includes four parts:

Part 1: The process of describing a learning continuum

Part 2: Developing a formative assessment rubric

Part 3: Collecting, interpreting and using evidence to plan for teaching and learning

Part 4: Formative assessment in practice.

Terminology

Key terms are defined as they appear in the text and have been included in a glossary.

What is formative assessment?

Formative assessment is any assessment that is used to improve teaching and learning. Formative assessment benefits from a rigorous approach in which each step of the assessment process is carefully thought through.

Assessment is a three-step process in which evidence is collected, interpreted and used. By definition, the final step of formative assessment requires a use that improves teaching and learning

For the best results, formative assessment involves teachers working together to interrogate the curriculum continuum and use their professional expertise to describe the steps in a learning continuum.

Once this planning work is completed and there is explicit information about what progress looks like, teachers can draw on this material to set and describe the learning expectations for all students in the class, recognising the importance of tailoring these expectations to individual needs.

Key messages
• The Victorian Curriculum F–10 is written as a continuum and this structure supports formative assessment.
• Formative assessment enables teachers to collect evidence about what a student can currently do and plan to progress student learning.
• Formative assessment helps teachers identify learning goals/intentions for each student.
• A formative assessment rubric assists students and teachers to have a consistent understanding about the next steps in learning.
• Formative assessment is integral part of the teaching and learning cycle.

Teachers also use this learning continuum to determine the best evidence based pedagogy to teach the content (knowledge and skills) and progress student learning.

This planning also ensures that teachers can give students timely and detailed feedback to support progress.

This Guide outlines how to collect, interpret and use evidence of student learning to plan teaching and learning. Adopting the practices outlined in this guide will help teachers to decide what students know and can do and will assist them to identify what students are ready to learn next.

Picture of practice

Emma, a teacher at a primary school, uses rubrics as a formative assessment tool in her Year 6 writing class. After developing a rubric prior to commencement of a persuasive writing unit, Emma's students initially used it to self-assess their writing ability and develop learning goals. This involved most students working with a partner to confirm judgements about their persuasive writing ability, while Emma worked with some students individually. During the planning, writing and editing stages of their work, students referred to the rubric both as a reminder of task requirements, and to target essential writing features and improvements. Students also used the rubric as a tool for peer feedback. By using the rubric peers were able to target their feedback to specific task requirements and goals the students had created for themselves. This feedback was recorded using the rubrics. Throughout the writing process Emma used the rubric during conferencing as an agenda to keep discussions focused and oriented towards student learning. Emma also used the recorded peer and self-assessments as a basis for discussions about progress during the unit as well as future goals.

Part 1: The process for describing a learning continuum

What is a learning continuum and why is it needed?

When planning a teaching and learning program, it helps to know the typical developmental steps students go through in their learning. This is known as a 'learning continuum'.

By describing learning as a series of steps, teachers can:

> **Terminology: Learning continuum**
>
> A progression of knowledge and skills derived from the curriculum. These can be developed by teachers and may be a selection of parts of a curriculum continuum or may add more detail to continua described by the curriculum.

- collect evidence of learning because the steps indicate what to look for

- interpret the evidence collected against the steps to identify what students are ready to learn

- use the information to design teaching and learning that helps students progress along the continuum.

A learning continuum can be developed in two ways:

- solely using the Victorian Curriculum F-10 content descriptions and achievement standards

- using the Victorian Curriculum F-10 in combination with teacher expertise to describe more granular steps between standards or related to complex knowledge and/or skills.

When undertaking formative assessment, it is important to use a learning continuum that breaks learning down into steps that are the right granularity to support lesson-to-lesson decisions or activity-to-activity decisions and supports student learning progressions.

Using the Victorian Curriculum F–10 as the learning continuum

The Victorian Curriculum F–10 is structured as a curriculum continuum, describing the key knowledge and skills that every student should learn during their first eleven years of schooling. The Victorian Curriculum F–10 sets out a single, coherent and comprehensive set of content descriptions and associated achievement standards to enable teachers to plan, monitor, and assess the learning achievement of every student.

> **Terminology:**
>
> **Curriculum continuum**
>
> A progression of knowledge and skills organised into learning areas and capabilities. The Victorian Curriculum contains curriculum continua.
>
> **Content descriptions**
>
> Specific and discrete information identifying what teachers are expected to teach and students are expected to learn.
>
> **Achievement standards**
>
> Statements that describe what students are typically able to understand and do, and are the basis for reporting student achievement.

The Victorian Curriculum F–10 is structured as a continuum across levels of learning achievement not years of schooling. This enables the development of targeted learning programs for all students, where the curriculum is used to plan in relation to the actual learning level of each student rather than their assumed level of learning based on age.

Each learning area includes content descriptions explaining what is to be taught and achievement standards describing what students are able to understand and do. The

achievement standards are provided in 11 levels for English and Mathematics or in five or six bands for all the other learning areas and capabilities. Refer to Appendix 1 for an outline of the structure of the Victorian Curriculum F–10 and the location of the achievement standards.

Sometimes, the steps described in the curriculum continuum are the right granularity to inform teaching and learning and they can be used directly as a learning continuum.

Example 1: Using the Victorian Curriculum as a learning continuum

Example 1 demonstrates a situation where the steps between content descriptions and the specific statements from the achievement standards provide sufficient detail to enable a teacher to set clear learning goals and intentions for students. This means that it is easy to see how a student would move from one step to another.

English Curriculum: Speaking and Listening mode

Organising element	Curriculum span: Level 3 to Level 5		
Sub-strand: Language for interaction	Step 1 (Level 3)	Step 2 (Level 4)	Step 3 (Level 5)
	Understand that successful cooperation with others depends on shared use of social conventions, <u>including turn-taking patterns</u>, and forms of address that vary according to the degree of formality in social situations (VCELA271)	Understand that social interactions influence the way people <u>engage with ideas and respond to others </u>(VCELA304)	Understand how to move beyond making bare assertions and <u>take account of differing perspectives and points of view </u>(VCELA335)
Achievement standard extract	Students listen to others' views and respond appropriately using interaction skills.	Students can collaborate, listen for key points in discussions and use the information … They understand how to express an opinion based on information in a text.	Students listen and ask questions to clarify content. They use language features to show how ideas can be extended. They develop and explain a point of view about a text selecting information, ideas and images from a range of resources… taking into account other perspectives.

Adding professional expertise to develop a more granular learning continuum

Teachers may need to use a more fine-grained continuum than is provided by the curriculum. This additional detail supports teacher decision-making, on a lesson-to-lesson or activity-to-activity basis. The need for more granular information can occur when teaching complex skills or knowledge. More detail is helpful for both the teacher and the students as it articulates progression in smaller achievable steps. This also supports teachers and students to identify the current level of achievement and this enables targeted and effective teaching to be provided.

Teachers can develop a learning continuum with more granularity by writing their own descriptions of the typical steps in learning. This can be done:

- from experience
- by collaborating with other teachers
- by adapting a developmental taxonomy such as Structure of the Observed Learning Outcome (SOLO)
- by examining student work samples and identifying the steps demonstrated.

> **Terminology: Developmental taxonomy**
>
> A research derived classification that describes developmental stages in generic skills and knowledge. For example: Bloom's taxonomy, SOLO.

Typically, teachers may want to write their own learning continua for the following reasons:

- To clarify the development steps within one content description or a small extract from the achievement standard within the curriculum. Refer to Example 2 below.

- To span the gap between adjacent curriculum levels and/or bands. Refer to Example 3 below.

- To combine several content descriptions to focus on a particular situation or context.

> **TIP** While a teacher working alone can describe learning continua, the best continua usually come from teachers working collaboratively to write statements for each step. Moderating student work samples can assist in identifying and describing the steps.

Example 2: Using professional expertise to develop a learning continuum within a curriculum level

Example 2 describes a learning continuum that articulates the steps within one content description and one statement extracted from the achievement standard from the Victorian Curriculum.

This level of granularity supports teachers to know what they are looking for as evidence of learning and this supports teachers to target their teaching to the needs of each student. This learning continuum supports students to know what comes next.

Using formative assessment based on this learning continuum assist teachers and students to progress learning.

Mathematics: Measurement and Geometry

> *Only one **content description** within 'Using units of measurement' refers to using scaled instruments, so the teacher and her colleagues have described the typical steps in learning that they observe their students going through.*
>
> *Many students may not reach the top level described, but the teachers include it to ensure that they stretch their most proficient students.*

Organising element	Curriculum Span: Level 4 plus extension			
	Level 4			Extension
Sub-strand: Using units of measurement	**Content Description:** Use scaled instruments to measure and compare lengths, masses, capacities and temperatures (VCMMG165) **Achievement Standard extract:** Students use scaled instruments to measure length, angle, area, mass, capacity and temperature of shapes and objects. ...			
Learning Continuum (granular)	Step 1	Step 2	Step 3	Step 4
	Students at this step measure using scaled instruments (e.g., ruler for length, measuring jug for volume)	Students at this step consider amounts being measured (e.g., metre rule versus tape measure)	Students at this step use techniques to improve the accuracy of their measurements	Students at this step minimise uncertainties due to measurement

Example 3: Using professional expertise to develop a learning continuum to span the gap between adjacent curriculum levels

Example 3 focuses on texts in group discussions across three levels of the English curriculum. The span does not have to correlate with the number of steps that teachers identify to support this learning.

English: Speaking and Listening mode

Organising element	Curriculum Span: Level 3–Level 5		
	Level 3	Level 4	Level 5
Achievement standard extracts focusing on texts in group discussions	Students listen to others' views and respond appropriately using interaction skills… asking questions.	Students can collaborate, listen for key points in discussions and use the information… to create coherence and add detail to their texts… contribute actively to class and group discussions, varying language according to context	Students listen and ask questions to clarify content… develop and explain a point of view … selecting information, ideas and images from a range of resources…taking into account other perspectives.
Learning Continuum (granular)	Step 1	Step 2	Step 3	Step 4
	Students at this step participate in discussion about text.	Students at this step make relevant contributions to discussion by drawing on textual knowledge.	Students at this step recognise participants' and text's ideas in conversation.	Students at this step reflect on and integrate the contributions of others when formulating ideas.

Using the learning continuum to develop a formative assessment rubric

Developing a learning continuum is the first part of developing a rubric to support high quality formative assessment. It helps teachers to know the typical steps students go through in their learning, as this supports them to target their teaching.

As outlined, the development of the learning continuum can be drawn from the curriculum and professional expertise. Teachers will need to make judgments about the level of granularity they will require to support lesson–to–lesson decisions or activity–to–activity decisions and enable teaching and learning plans to be developed to support progress in student learning.

The learning continuum is now taken and placed above the matrix that will become the formative assessment rubric. This is outlined in the next part of this Guide.

Part 2: Developing a formative assessment rubric

Sometimes the learning continuum focuses on complex learning which is made up of many different parts. In this situation, a rubric is helpful as it breaks up complex learning into smaller steps for teachers and students to use.

The rubric that is described in this section is specifically designed for formative assessment as it is focussed on articulating the fine grain steps and teases apart what is being taught and learnt.

The three main aims in developing a rubric are to

- Describe increasing sophistication as a student's learning progresses
- Support consistent assessments
- Communicate to intended users

To achieve these three aims the processes and tips for developing a high quality formative assessment rubric are outlined in this part of the Guide.

> **Terminology: Rubric**
>
> An arrangement (usually in grid formation) of quality criteria according to actions that classifies the development of competence in a complex set of skills and/or knowledge.

What makes up the rubric structure and how does this assist in describing increasing sophistication?

A rubric splits a complex learning continuum, as described in Part 1, into a series of more specific continua describing increasing sophistication.

Three examples are provided.

- Example 4: An annotated blank rubric with each column/row described.

- Example 5: An explanation of the relationship between Learning Continuum Steps and the Quality Criteria.

- Example 6: A completed rubric.

> *Tip A good way to check if the rubric has described increasing sophistication is to think of a teaching/learning activity to help students move from one step to the next*

When writing formative assessment rubrics it is best to focus first on making sure it describes increasing sophistication. Sophistication relates to how well something is done, not how often an action is done correctly or how far through a process a student got. Each cell within a row describes a better way to perform the action. For this reason, each cell can be called a *quality criterion.* Each quality criterion describes something a student can do, say, make or write, which aligns to a step in the learning continuum being assessed. Together, the quality criteria make up the fine grained, very focused, learning continuum. For this reason, taxonomies, like SOLO, are helpful for writing quality criteria.

Example 4: Blank formative assessment rubric (annotated)

Learning Continuum *(described in Part 1)*

Step 1	Step 2	Step 3	Step 4

Organising element	Action	Insufficient Evidence	Quality criteria			
		Insufficient Evidence				
		Insufficient Evidence				
		Insufficient Evidence				
		Insufficient Evidence				

Annotation

The first column in the rubric is the 'organising elements'. The description for the organising element could include the strand or sub-strand from the curriculum, or headings that signal the concepts or through-lines that are being targeted. An organising element may cover one row or several rows depending on complexity.
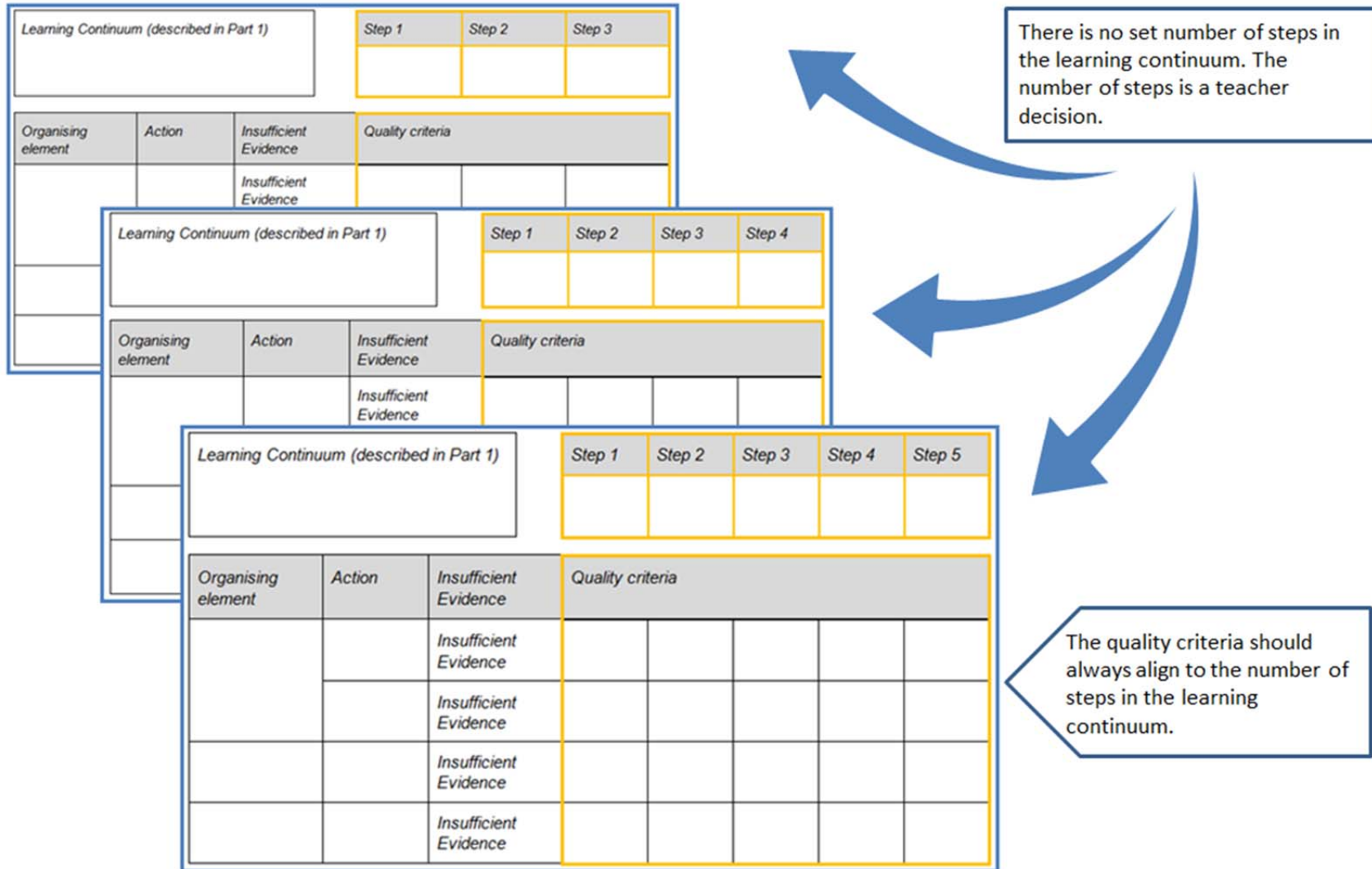
The second column is related to 'actions'. Each action takes up one row in the overall rubric, as shaded. The tighter the focus of each action, the easier it is for teachers to use because it is quicker to make many small decisions than it is to make fewer large decisions. Each row of the rubric is labelled with an action rather than a general heading to help convey what is being assessed. This can be seen in the first row of Example 5, where the label is 'Participates in conversation' rather than 'Participation'.

> **Terminology: Action**
>
> A categorisation of what a student can do, say, make or write in demonstration of a particular knowledge and/or skill.

The third column is headed 'insufficient evidence'. This column is required in the rubric as it caters for students who are not yet at the lowest level of performance in this rubric, or who do not display an action during the task.

The remaining four rows include 'quality criteria'. The quality criteria describe the increasing sophistication and what a student can do, say, make or write which aligns to the learning continuum, described in Part 1: The process for describing a learning continuum. Each column of quality criteria assesses one step in the learning continuum.

Example 5: Annotated explanation of the relationship between Learning Continuum Steps and the Quality Criteria

There is no set number of steps in the learning continuum. The number of steps is a teacher decision.

The quality criteria should always align to the number of steps in the learning continuum.

Example 6: Completed formative assessment rubric

Learning Continuum (described in Part 1)

Step 1	Step 2	Step 3	Step 4
Students participate in discussion about text.	*Students make relevant contributions to discussion by drawing on textual knowledge.*	*Students recognise participants' and text's ideas in conversation.*	*Students reflect on and integrate the contributions of others when formulating ideas.*

	Organising element	*Action*	*Insufficient Evidence*	*Quality criteria*			
	Uses language to interact with others	Participates in conversation	*Insufficient Evidence*	*Listens to conversation*	*Contributes to conversation*	*Asks questions to clarify ideas of others*	*Connects ideas of others*
		Uses social conventions	*Insufficient Evidence*	*Takes turns in conversation*	*Responds to others' points of view*	*Takes account of differing points of view*	*Builds on points of view of others*
	Responds to literature	Discusses ideas about text	*Insufficient Evidence*	*Shares information about the text*	*Expresses point of view about text*	*Justifies point of view about text*	*Reflects on other viewpoints about text*

Refinements to support consistent assessment

Once the rubric describes increasing sophistication, it can be refined further to facilitate consistent assessment. To do this, remove adverbs and adjectives and focus on verbs to describe the differences between steps. Sometimes, it is not possible to describe a quality criterion for an action matched to each Step within a learning continuum. In those cases, it is fine to leave a cell blank. This can be seen in Example 7: A rubric with gaps.

Restricting each quality criterion to just one central idea supports consistent assessment because it avoids the situation where you are unsure how to assess a student who achieves one part of the criterion and not the other part. If you are tempted to place more than one idea in a criterion, think about whether you need to add another action to cater for the additional ideas.

Communicating to intended users

The final aim of a rubric is that it will communicate to all the intended users. It can be used for teachers and students. Students can use it for peer and/or self–assessment. Sometimes parents are users of assessment rubrics too, especially for young students. The language used needs to be transparent for all users. If specific terms related to the subject matter are used, they should be those that are taught and used within the classroom. If parents are to use the rubric, terms can be included in an accompanying glossary. As well as being written in language that can be understood, formative assessment matrices also convey important messages about what is valued in a classroom. To send the message that all learning is valued, all quality criteria should be positively framed.

Drawing on Example 6: Completed formative assessment rubric, a student who has previously been rated at 'Insufficient evidence' for Uses social conventions and who achieves 'Takes turns in conversation' for the first time is much more likely to feel positive about their learning than if the criterion was expressed negatively as 'Ignores others' points of view'! Anything a student cannot yet achieve should be included in the higher criteria, so it is seen as aspirational.

Terminology: Quality criteria

The quality criteria describe the increasing sophistication and what a student can do, say, make or write which aligns to the learning continuum.

TIP It is a good idea to write no more than four quality criteria for each action. This helps make sure there is a clear difference between each criterion, which makes assessment quicker and easier.

TIP Once the rubric has been developed by the teachers, talk it over with the students. Giving students an opportunity to clarify and understand the next steps in their learning will support them to set goals and progress.

Tip If you can't think of how to express a criterion positively, think about how you would congratulate a student who has finally achieved the criterion after working long and hard on it. Those words of congratulations often indicate what is positive without focusing on what has not yet been learned.

Example 7: A rubric with gaps

Notice the empty cells in this rubric. They help make clear the distinctions between quality criteria.

Mathematics: Use scaled instruments to measure and compare lengths, masses, capacities and temperatures (VCMMG165)

Learning Continuum (described in Part 1)	Step 1	Step 2	Step 3	Step 4
	Students measure using scaled instruments (e.g., ruler for length, measuring jug for volume)	Students consider amounts being measured when selecting a measurement tool (e.g. metre ruler versus tape measure)	Students use techniques to improve the accuracy of their measurements	Students at this step minimise uncertainties due to measurement

Organising element	Action	Insufficient Evidence	Quality criteria			
Using units of measurement sub-strand	Reads scales	Insufficient Evidence	Identifies nearest whole number on scale	Deduces measurement using unlabelled multiple scale	Deduces measurement using unlabelled fraction scale	Estimates between subdivisions marked on scales
	Selects measurement tool	Insufficient Evidence	Selects tool matched to property to be measured (e.g., ruler for length, measuring jug for volume)	Matches tool to amount to be measured (e.g., metre rule, tape measure		Uses precision of measurement required to select tool
	Applies concept of zero	Insufficient Evidence	Starts measurement with zero amount of the quantity		Adjusts zero point to measure changes in amounts	
	Estimates quantity	Insufficient Evidence	Makes estimate when prompted		Uses estimate to check measurement	

Part 3: Collecting and interpreting evidence and subsequent planning

Collecting evidence of student learning

Once the learning continuum is described, plans can be made for collecting evidence of student learning to work out which Step/s students have achieved and which they are ready to learn. Many methods can be used. These include:

- Performances
- Presentations
- Responses to questions

- Self-assessment
- Assignments
- Products
- Observations

- Work samples
- Peer assessment
- Assessment conversations

The key is to make sure that the method will elicit evidence matched to the learning continuum in question. An advantage of using a rubric or continuum to frame the assessment is that it is easy to adapt this to a wide range of assessment types. It also increases opportunities for students to have input into how they are assessed.

Recording the evidence using the continuum or rubric helps ensure interpretations are evidence-based and not swayed by previous judgements.

Tip *If a student's pattern of progression is irregular, more assessment evidence may need to be collected. Sometimes performance is influenced by outside factors (tiredness, attention, method of assessment, etc.)*

Interpreting evidence of student learning

Collected evidence can be compared against the learning continuum or rubric to decide which steps a student:

- has achieved
- is ready to learn
- is not yet ready for.

The evidence is interpreted by considering each step within the learning continuum and considering whether the student has:

- undertaken and completed an activity with or without assistance,
- demonstrated the knowledge and/or skill in a range of situations or in different contexts,
- covered all parts of the learning continuum in the rubric or are there areas that need further attention.

Terminology:
Achieved

The step of a learning continuum at which a student can independently and consistently demonstrate skills and knowledge. Alternative term: Zone of Actual Development

Ready to learn

The Step of a learning continuum at which a student requires scaffolding to acquire skills and knowledge. Alternative term: Zone of Proximal Development

Not yet ready to learn

The Step of a learning continuum for which a student does not have the required foundational knowledge or skills. Acquisition of these skills is required before teaching of this Step should be attempted.

Students have achieved a step when they can demonstrate the majority of the knowledge and/or skills independently and most of the time.

Students are ready to learn a step when they can demonstrate

Typically, students within a class will be spread across different steps of learning. If students are present at the highest step described by the learning continuum, a higher step will need to be added to stretch those students.

Tip If many students have an irregular pattern of progression, it is likely that the learning continuum or rubric is problematic and requires revision. This does not mean the whole rubric needs revision it may simply the quality criterion for one action.

Using formative assessment to plan for teaching and learning

The steps within a learning continuum can be used to identify learning intentions and classroom activities for students. This supports teachers to target their teaching. Students will usually spend some time working on the steps they are ready to learn and also spend time consolidating steps they have achieved recently.

This is an opportunity to work with the students, to set and clarify the learning intentions, and explore the range of activities that will used to progress learning.

Giving feedback to the students is essential. Feedback should be timely, in a form that encourages effort, supports the students to see where they are coming from and the strategies they can use to progress further. The formative assessment rubric supports teachers to give feedback. It also supports teachers to plan the activities/tasks to progress student learning, ensuring their learning is scaffolded, whilst setting high expectations for all students.

Part 4: Formative assessment rubrics in practice

Worked Example: Literacy

Setting the scene

Jason and his team of primary teachers plan to teach a Year 4 literature unit with an emphasis on Speaking and Listening skills. In looking at the relevant Victorian Curriculum section they recognise that within each of their classes there are abilities that range across several levels.

Part 1 and 2: The process of describing a learning continuum and developing a formative assessment rubric

The team's first job is to develop a learning continuum that is based on Levels 3–5 of the curriculum and integrates aspects of the Speaking and Listening 'language' and 'literature' elements. The development of the continuum takes into account the content descriptions and achievement standards of Levels 3–5 and works them together into a rubric. In writing the rubric, the team ensures that it describes steps of increased sophistication and that quality criteria are written in language students will understand. The rubric they produce is shown in Example 3.

Part 3: Collecting, interpreting and using evidence to plan for teaching and learning

After introducing the rubric to his students, Jason then collects evidence about each student's current achievement level by observing students during a group discussion activity. He decides to use the rubric as a framework for his observations, only recording a criterion as achieved if he has observed a student consistently demonstrating the skill. Because the class is large, he will not be able to observe all the students during one lesson, so he splits the class. Half the students do the discussion activity one day while the remainder complete an independent reading/viewing activity. In the following lesson, the students switch activities. During the two lessons, Jason is able to observe all the students and record their results against the rubric.

Interpreting evidence

Jason uses the results from the rubric to work out the step/s on the learning continuum that each student has achieved and identifies what they are ready to learn.

After working through these results together, Jason and his team can see that there are several groups of students with different needs. While all students are able to listen to and take turns in a conversation, and most can respond to and express points of view about a text, there is a group of students who are finding it difficult to share their thoughts about a text, placing them at Step 1 of the learning continuum.

The rubric for one of these students is shown below. The cells shaded in blue show the criteria achieved by the student and noted by Jason during his observations. Because some, but not all, of the Step 1 criteria have been achieved, the student is ready to learn Step 1 on the learning continuum (shown in green). Steps 2 to 4 are unshaded and represent what the student is not yet ready for.

Example 8: Worked example: Literacy

Learning Continuum (described in Part 1)	Step 1	Step 2	Step 3	Step 4
	Students participate in discussions about text.	*Students make relevant contributions to discussion by drawing on textual knowledge.*	*Students recognise participants' and text's ideas in conversation.*	*Students reflect on and integrate the contributions of others when formulating ideas.*

Organising element	Action	Insufficient Evidence	Quality criteria			
Uses language to interact with others	Participates in conversation	*Insufficient Evidence*	*Listens to conversation*	*Contributes to conversation*	*Asks questions to clarify ideas of others*	*Connects ideas of others*
	Uses social conventions	*Insufficient Evidence*	*Takes turns in conversation*	*Responds to others' points of view*	*Takes account of differing points of view*	*Builds on points of view of others*
Responds to literature	Discusses ideas about text	*Insufficient Evidence*	*Shares information about the text*	*Expresses point of view about text*	*Justifies point of view about text*	*Reflects on other viewpoints about text*

Part 4: Formative assessment in practice

Focusing on the students who are finding it difficult to share thoughts about a text, Jason and his team decide that the learning intention for this group will be to *express a point of view about text.* While the rest of the class completes other self-guided activities, Jason gathers this group on a weekly basis and together they read familiar stories. While they do so, Jason asks questions of the students and gradually is able to scaffold their ability to express points of view about the texts under discussion. After several weeks these students are reassessed in group discussion activities where their ability to express opinions has noticeably improved. This enables Jason to assess the students as having met their learning intentions and progressed on the learning continuum to having achieved Step 1. At this point new learning intentions, based on Step 2, can be developed using the rubric.

Worked Example: Numeracy

Setting the scene

Sarah is starting the measurement topic with her class. Initially, she wants to focus on how her students use scaled instruments (content descriptor VCMMG165 from Level 4 of the mathematics curriculum).

Part 1 and 2: The process of describing a learning continuum and developing a formative assessment rubric

Last year Sarah and her team developed a learning continuum and rubric for 'using scaled instruments' (shown in Example 4) and Sarah decides to reuse it. During the first lesson, she decides to start by using the learning continuum only, because all she needs at that stage is a broad idea of the starting points of her students. Once that is established, she will use the detail within the rubric to help plan subsequent teaching and learning.

Part 3: Collecting, interpreting and using evidence to plan for teaching and learning

Sarah plans the first lesson of the topic so that students rotate through a number of hands-on activities, each aligned to a step on the learning continuum. For example:

- Step 2 activity: Students measure the lengths of some objects ranging from very small objects to very large ones. They have access to a 15cm ruler with millimetre markings, a 30cm ruler with 5-millimetre markings, a meter ruler with 1-centimetre markings and a trundle wheel with 10-centimetre markings. Students record the length of each object and the instrument used.
- Step 3 activity: Students are asked to find the mass of large bags of rice, dried beans and chickpeas. The balance they are provided with has a maximum of less than each of the bags. Students record the method they use to determine the mass as well as the final mass of the contents of each bag.

Students record their answers for each activity on a worksheet that Sarah collects at the end of the lesson.

Interpreting evidence of learning
That afternoon, Sarah goes through the worksheets and decides the steps on the learning continuum that each student has achieved and is ready to learn, based on the frequency of correct answers associated with each Step.

When she gets to Jake's worksheet, she notices that while he has got all the answers correct for the Step 1 and 2 activities, he has got all the answers incorrect for the Step 3 activity with the bags. At first glance, this looks like Jake has achieved Steps 1 and 2 and is ready to learn Step 3. Looking closely, however, Sarah notices that Jake has used the expected method for the Step 3 activity and has split each large bag up, weighed the smaller amounts and then added them together to get the overall mass of each bag. She also notices that all his measurements are correct, but he has made mistakes with the addition. This means that Jake has also achieved Step 3 (shown in blue) and is ready to learn Step 4 (shown in green). Sarah also notes down Jake's problem with addition so she can address that another day.

Example 9: Worked example: Numeracy

Curriculum Span: Level 4			
Step 1	Step 2	Step 3	Step 4
Students measure using scaled instruments (e.g., ruler for length, measuring jug for volume)	Students consider amounts being measured when selecting a measurement tool (e.g., meter ruler versus tape measure)	Students use techniques to improve the accuracy of their measurements	Students minimise uncertainties due to measurement

Part 4: Formative assessment in practice

Sarah structures the next week of lessons based on her formative assessment data for the class. In the first lesson, she groups students ready to learn Step 2 with students who have already achieved Step 2. These students have the following learning intentions, taken from the rubric:

- Students ready to learn Step 2: To learn to match the tool to amount to be measured
- Students who have achieved Step 2: To match the tool to amount to be measured quickly and accurately.

She gets them to work collaboratively on a task measuring volumes with different volume measuring tools. The grouping will give the students who are ready to learn Step 2 the opportunity to learn from the others and will give the students who have achieved Step 2 a chance to practice and automate the process. Students know the learning intention they are working on and what they will be expected to demonstrate at the end of the lesson to show that the goal has been achieved.

The students who are ready to learn Step 4 watch the video about how to improve the precision of measurements.

While this takes place, Sarah works with the students who are ready to learn Step 1, to support them to learn to select measuring tools matched to property to be measured (also taken from the rubric).

Glossary

Achieved: The step of a learning continuum at which a student can independently and consistently demonstrate skills and knowledge. *Alternative term: Zone of Actual Development, ZAD.*

Achievement standards: Statements that describe what students are typically able to understand and do, and are the basis for reporting student achievement. *(Taken from Victoria Curriculum F–10 website).*

Action: A categorisation of what a student can do, say, make or write in demonstration of a particular knowledge and/or skill.

Content description: Specific and discrete information identifying what teachers are expected to teach and students are expected to learn. *(Taken from Victoria Curriculum F–10 website).*

Curriculum continuum: A progression of knowledge and skills organised into learning areas and capabilities. The Victorian Curriculum F–10 contains curriculum continua.

Developmental taxonomy: A research derived classification that describes developmental stages in generic skills and knowledge. *For example: Bloom's taxonomy,* Structure of the Observed Learning Outcome *(SOLO).*

Learning continuum: A progression of knowledge and skills derived from the curriculum. These can be developed by teachers and may be a selection of parts of a curriculum continuum or may add more detail to continua described by the curriculum.

Learning intentions: A brief statement that explicitly describes what students should know, understand and be able to do as a result of the learning and teaching.

Not yet ready for: The Step of a learning continuum for which a student does not have the required foundational knowledge or skills. Acquisition of these skills is required before teaching of this level should be attempted.

Organising elements: Strands are key organising elements within each curriculum area. Sub-strands are supplementary organising elements within some curriculum areas. Modes and focus areas may also be used as organising elements.

Quality criteria: The quality criteria describe the increasing sophistication and what a student can do, say, make or write which aligns to the learning continuum.

Ready to learn: The Step of a learning continuum at which a student requires scaffolding to acquire skills and knowledge. *Alternative term: Zone of Proximal Development, ZPD.*

Rubric: An arrangement (usually in grid formation) of quality criteria according to actions that classifies the development of competence in a complex set of skills and/or knowledge.

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Appendix 1: Victorian Curriculum F–10 structure

Victorian Curriculum F–10		Towards Foundation Level (students with disabilities)				Foundation	Levels 1–2		Levels 3–4		Levels 5–6		Levels 7–8		Levels 9–10	
		Level A	Level B	Level C	Level D	Foundation										
English		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Mathematics		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
The Arts	Dance	Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Arts	Drama	Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Arts	Media Arts	Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Arts	Music	Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Arts	Visual Arts	Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Arts	Visual Communication Design												→	Standard	→	Standard
Critical and Creative Thinking		Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Ethical Capability						→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Health and Physical Education		Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Humanities	Civics and Citizenship								→	Standard	→	Standard	→	Standard	→	Standard
The Humanities	Economics and Business								→	Standard	→	Standard	→	Standard	→	Standard
The Humanities	Geography	Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
The Humanities	History	Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Intercultural Capability						→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Languages	F–10 Sequence					→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Languages	7–10 Sequence												→	Standard	→	Standard
Personal and Social Capability		Standard	Standard	Standard	Standard	Standard	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Science		Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Technologies	Design and Technologies	Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard
Technologies	Digital Technologies	Standard	Standard	Standard	Standard	→	→	Standard	→	Standard	→	Standard	→	Standard	→	Standard