

PORTFOLIO ENTRY 1- BUILDING CONCEPTUAL UNDERSTANDING IN SCIENCE

DRAFT EVALUATION GUIDE

Key Criterion for Entry 1

Certification level: The entry provides clear evidence that the teacher has successfully engaged students in a sequence of activities that has deepened their knowledge and understanding of important concepts science, and their ability to apply and communicate them effectively. It shows that the teacher has set long-and short-term learning goals for student learning referenced to the Australian Curriculum: Science, that they established and managed learning activities effectively, probed student understanding of scientific concepts in meaningful contexts, addressed misconceptions and provided feedback that has deepened student understanding of relevant concepts.

This entry focuses mainly on Standards 1, 2, 3 and 5 in the APST.

Highly accomplished teachers:

- 1: Know students and how they learn
- 2: Know the content and how to teach it
- 3: Plan for and implement effective teaching and learning
- 5: Assess, provide feedback and report on student learning

However, the entry will also provide evidence in relation to Standards 4 and 6.

- 4: Create and maintain supportive and safe learning environments
- 6: Engage in professional learning

How will my entry be scored?

There are three stages in the scoring process. Stages 1 and 2 engage the assessors in analytic scoring to inform Stage 3, which engages them in holistic scoring.

Stage 1: Identify and record the evidence: In Stage 1 assessors read the whole entry carefully noting on an Assessment Record Form (ARF) what evidence they see relevant to each criterion and where they see it in the entry.

Stage 2 Evaluate the evidence for each Section: In Stage 2 assessors return to each Section in the ARF and make a judgement about the extent to which the evidence in that section is clear and convincing on a 4-point scale. (4 = to a major extent, 3 = to an acceptable extent, 2 = to a limited extent, 1 = little or no evidence.)

Stage 3: Overall judgement: In Stage 3 assessors step back and make a judgment about the portfolio entry as a whole in relation to the key criterion for that entry, looking for consistency and clear links between its Sections. The overall judgment is expressed as a score on the four point scale.

This assessment process reflects the fact that teaching in practice is necessarily a complex process, interweaving many attributes and skills. Ultimately, the focus of a performance assessment is the overall performance itself, not its component parts

Stage 1: Identify and record the evidence (Assessment Record Form)

(Note: Section 1 is not assessed)	NOTE AND RECORD EVIDENCE INDICATING THAT:	(Notes made here should indicate what and where the evidence is, not make judgments)	Evaluation (1 to 4 scale)
Section 2 Planning and implementation	1. The teacher has gained a clear understanding of the prior cognitive and skill level of his or her students in relation to the concepts they are to learn.		
	2. Based on this understanding, the teacher has selected clear goals for their learning and activities that are appropriate for meeting those goals and cater for individual differences in students.		
	3. The teacher has a deep understanding of the relevant science concepts and their contexts, and is able to communicate those concepts effectively to students and why they are important.		
	4. The teacher's plan makes meaningful connections between the relevant content descriptions in the <i>Science Understanding</i> strand of the curriculum and those in the <i>Science as Human Endeavour</i> and <i>Science Inquiry Skills</i> strands.		
	5. The teacher integrates a variety of assessment strategies in the planning of learning activities to probe students' understanding of concepts and their development of related communication skills, and to measure their progress in relation to identified goals.		
	6. The selected learning activities are clearly linked to the learning goals and call for high-level thinking about the relevant concepts.		
	7. The plan has drawn on research about effective science teaching and factors affecting student learning in science.		

	8. The teacher's plan has been implemented effectively using a variety of resources and strategies fit for purpose and by adapting strategies and activities to meet challenges that arise.		
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Section 3 Analysis	9. The teacher has employed a variety of assessment strategies in a timely way to identify both strengths and misconceptions affecting student and communicate their conceptual understanding, and provides constructive feedback to guide learning and subsequent teaching		
	10. The student work samples show clear development of student understanding of the science concepts being studied.		
	11. The teacher's analysis of the student work samples provides an accurate assessment of student's developing understanding and their annotations on that work provide students with useful feedback about their developing understanding.		
	12. The teacher provides students with opportunities to reflect on and evaluate their own learning and that of their peers		
Section 4 Evaluation and reflection	13. The teacher describes his or her practice accurately, analyses it critically, and reflects on it insightfully in terms of informing future practice?		

Stage 2: *Evaluate the evidence for each Section*

Return to each Section in the ARF and make a judgement about the extent to which the evidence in that section is clear and convincing on a 4-point scale. (4 = to a major extent, 3 = to an acceptable extent, 2 = to a limited extent, 1 = little or no evidence.)

Stage 3: Overall judgement

Step back and review the portfolio entry as a whole in relation to the key criterion for that entry, looking for coherence, consistency, and clear links between its Sections.

	Choose the level of performance
<p>More than meets the highly accomplished standard</p> <p>The entry provides <i>clear, consistent and convincing evidence</i> that the teacher has engaged students purposefully in activities that have deepened their science knowledge and conceptual understanding, and their ability to apply and communicate it effectively.</p>	

<p>Meets the highly accomplished standard</p> <p>The entry provides <i>clear evidence</i> that the teacher has engaged students purposefully in activities that have deepened their science knowledge and conceptual understanding, and their ability to apply and communicate it effectively.</p>	
<p>Meets some of the highly accomplished standard</p> <p>The entry provides <i>limited evidence</i> that the teacher has engaged students purposefully in activities that have deepened their science knowledge and conceptual understanding, and their ability to apply and communicate it effectively.</p>	
<p>Does not yet meet the highly accomplished standard</p> <p>The entry provides <i>little or no evidence</i> that the teacher has engaged students purposefully in activities that have deepened their science knowledge and conceptual understanding, and their ability to apply and communicate it effectively.</p>	