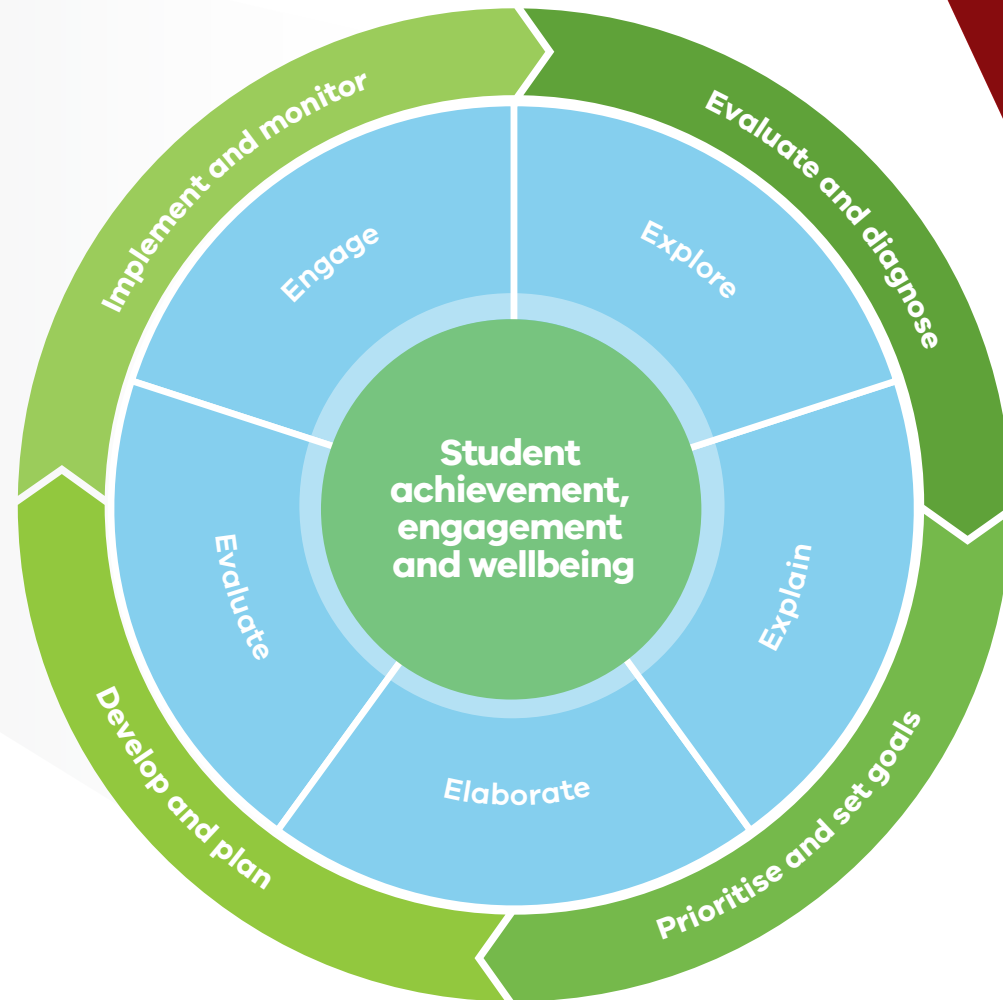
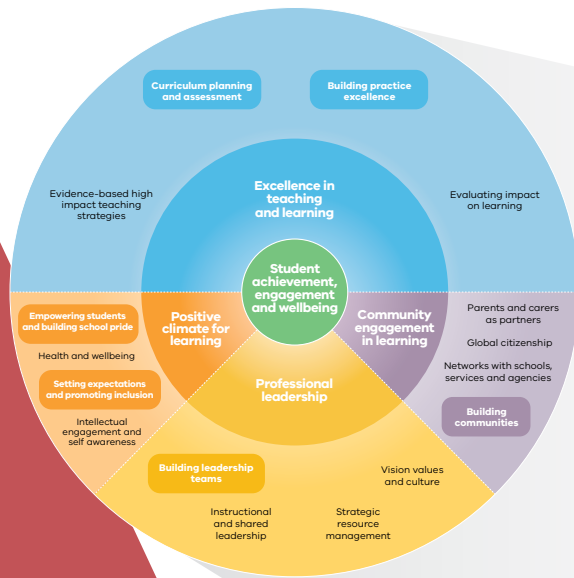


THE PEDAGOGICAL MODEL





Education
and Training

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Acknowledgments

The Department of Education and Training (the Department) acknowledges the expertise and commitment of teachers and school leaders in Victorian government schools who work to build teaching and learning excellence every day. We would like to thank school principals, teachers and departmental colleagues for their valuable contribution to developing this resource.

The Pedagogical Model is designed to support delivery of the Victorian Curriculum F-10 and the Victorian Early Years Learning and Development Framework. It draws from the current evidence base, including the following frameworks and initiatives:

- Framework for Improving Student Outcomes
- Australian Professional Standards for Teachers
- Literacy and Numeracy Strategy
- Practice Principles for Excellence in Teaching and Learning
- High Impact Teaching Strategies (HITS)
- Professional Learning Communities
- School Differentiation Model (School Strategic Plan, Annual Implementation Plan, Performance and Development Approach)
- New Pedagogies for Deep Learning Community of Practice.

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Providing feedback

This resource is the result of generous collaboration among Victorian government school teachers and departmental colleagues. We intend to update the resource over time, and your contribution will help us make it more useful for teachers. Please send your comments and ideas to: professional.practice@edumail.vic.gov.au



Secretary's Message

I am very pleased to provide you with the Pedagogical Model.

Teachers have a critical role in shaping the lives of their students. I am fortunate to have the opportunity to regularly witness the evidence-based practices of teachers in our schools. It is inspiring to see teachers preparing our young people for a future being reshaped by economic and social forces.

The Victorian Government is committed to providing every student with opportunities to achieve excellence in reading, maths, science, critical and creative thinking, and the arts. Our ambitious Education State targets focus our efforts on promoting excellence across the curriculum, on the health and wellbeing of students, and on breaking the link between disadvantage and student outcomes.

Our schools deliver this excellence through a focus on high quality teaching and learning. This is supported by the Victorian Teaching and Learning Model which includes the Pedagogical Model presented here. The Pedagogical Model builds on the previous e⁵ model and has been developed to align with FISO, the latest and best evidence for what works and teacher feedback.

Victorian teachers and school leaders are responding to the extraordinary learning challenges and opportunities facing children and young people. In response to these demands, the teaching profession itself is changing. Teachers are spending more time working together. They devote collaborative time to evaluating and improving their practice and they draw on pedagogical resources to create deeper learning experiences for students.

To support and complement the efforts of our teachers and school leaders, we have developed the Victorian Teaching and Learning Model which has four interrelated elements. It gives us a Vision for Learning, the Practice Principles for Excellence in Teaching and Learning, the Pedagogical Model and High Impact Teaching Strategies (HITS). Together, they form an evidence-based answer to the question every improvement-focused conversation in schools is about: 'What is highly effective teaching and learning?'

Each of the resources in the Victorian Teaching and Learning Model builds on the improvement priorities of the Framework for Improving Student Outcomes (FISO) and aligns with the Literacy and Numeracy Strategy Phase 2: Achieving Excellence and Equity in Literacy and Numeracy. Together they reinforce our shared vision and language for school improvement. The

Pedagogical Model embeds that vision and language in the classroom, where teachers create opportunities for students to reach their full potential, regardless of their background or circumstance.

Teachers and school leaders have told us they want resources that expand their conversations about effective teaching and learning. The Pedagogical Model follows their lead, it is adaptive and flexible, not prescriptive and linear, and it encourages teachers to move back and forth between the five domains as they respond to their students' learning needs. The Pedagogical Model maps the five domains to the relevant Practice Principles and HITS, and creates opportunities for deep learning experiences.

Thank you for your leadership, passion and expertise in helping to drive outcomes for all Victorian students. The Illustrations of Practice in this document present a small selection of the many wonderful things happening in Victorian government schools. I invite you to engage with the Pedagogical Model in your teams and in your own reflections, as we continue our shared improvement journey.

Gill Callister

Secretary

Why the Pedagogical Model?

In collaboration with Victorian teachers and school leaders, the Pedagogical Model has been designed to reflect the current evidence base and departmental initiatives, including FISO and the Performance and Development approach.

While FISO focuses on school improvement, the new Pedagogical Model underpins teacher practice improvement, recognising the vital role teachers play in improving student outcomes.

The Pedagogical Model, as a part of the Victorian Teaching and Learning Model (p. 7), supports schools to build teacher excellence and instructional leadership. Combined with the Vision for Learning, Practice Principles for Excellence in Teaching and Learning (Practice Principles) and High Impact Teaching Strategies (HITS), the Pedagogical Model will stimulate discussions about current teaching practices in schools, help schools to build a high performance learning culture, and ultimately improve student achievement and engagement. By providing common language and guidance on improving the quality and consistency of teaching practice, the Pedagogical Model enables school leaders, teachers and students to foster shared leadership so that everybody contributes to co-designed and connected learning.

The Pedagogical Model defines what high quality teaching looks like. It is not a prescription for practice. It is a flexible model that can be readily modified for different school settings and learning areas. We encourage schools to take the lead in adapting the Pedagogical Model to their own school contexts so that it deepens their continuing endeavour to improve learning outcomes through a concerted focus on students' needs, interests and abilities. Schools can use the Pedagogical Model immediately or can benchmark their current pedagogical models for efficacy and consistency.

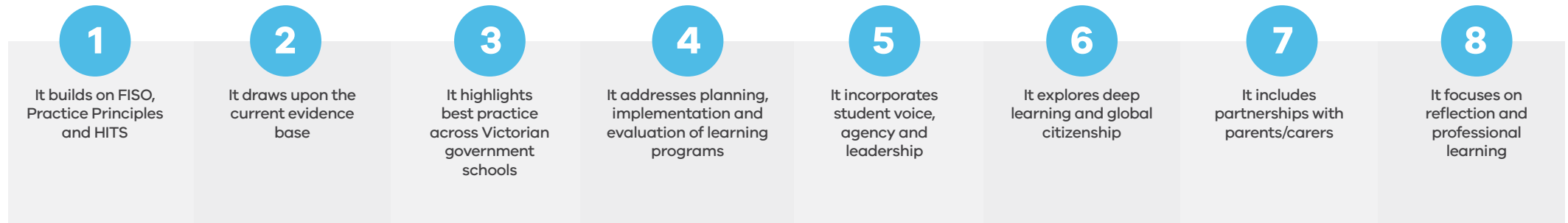
The Pedagogical Model is...

- ✓ embedded in the Victorian Teaching and Learning Model that incorporates the Vision for Learning, Practice Principles and HITS
- ✓ focused on teacher practice as the main contributor to improved student learning outcomes
- ✓ improvement-focused to assist teachers with their professional learning, including designing their PD goals
- ✓ adaptive and can be modified to fit specific school and subject contexts
- ✓ flexible, so teachers can move in and out of different domains, depending on the context
- ✓ evolving and will be expanded through showcasing best practice across Victorian government schools

The Pedagogical Model is not...

- ✗ a stand-alone resource
- ✗ a recipe for solving all problems in teaching and learning
- ✗ a tool for evaluating teacher performance
- ✗ a prescriptive model
- ✗ a linear model
- ✗ a static model

What is new about the Pedagogical Model?

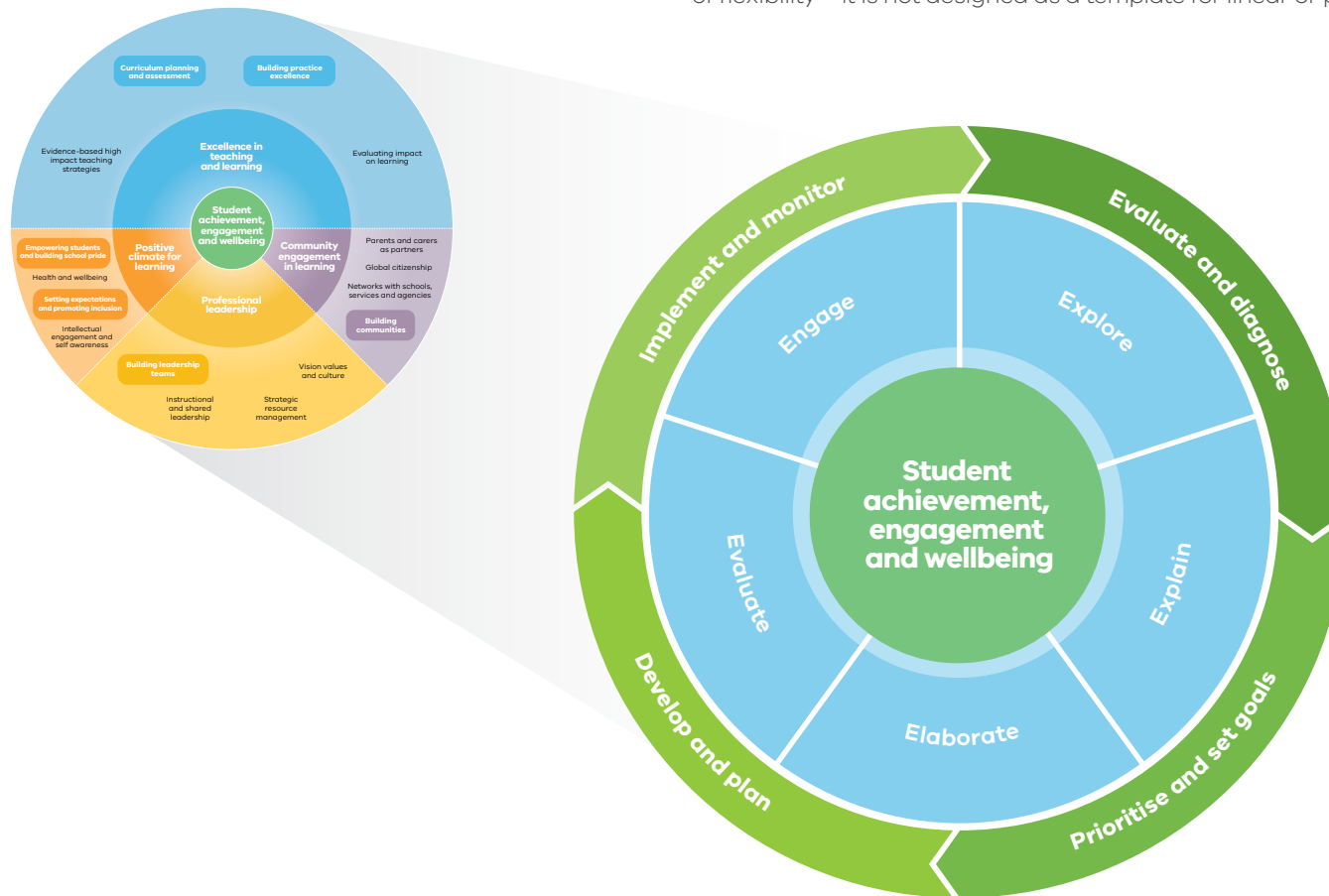




What is the Pedagogical Model?

The Pedagogical Model describes what effective teachers do in their classrooms to engage students in intellectually challenging work. It provides an overview of the learning cycle and breaks it down into five domains or phases of instruction: Engage, Explore, Explain, Elaborate and Evaluate.

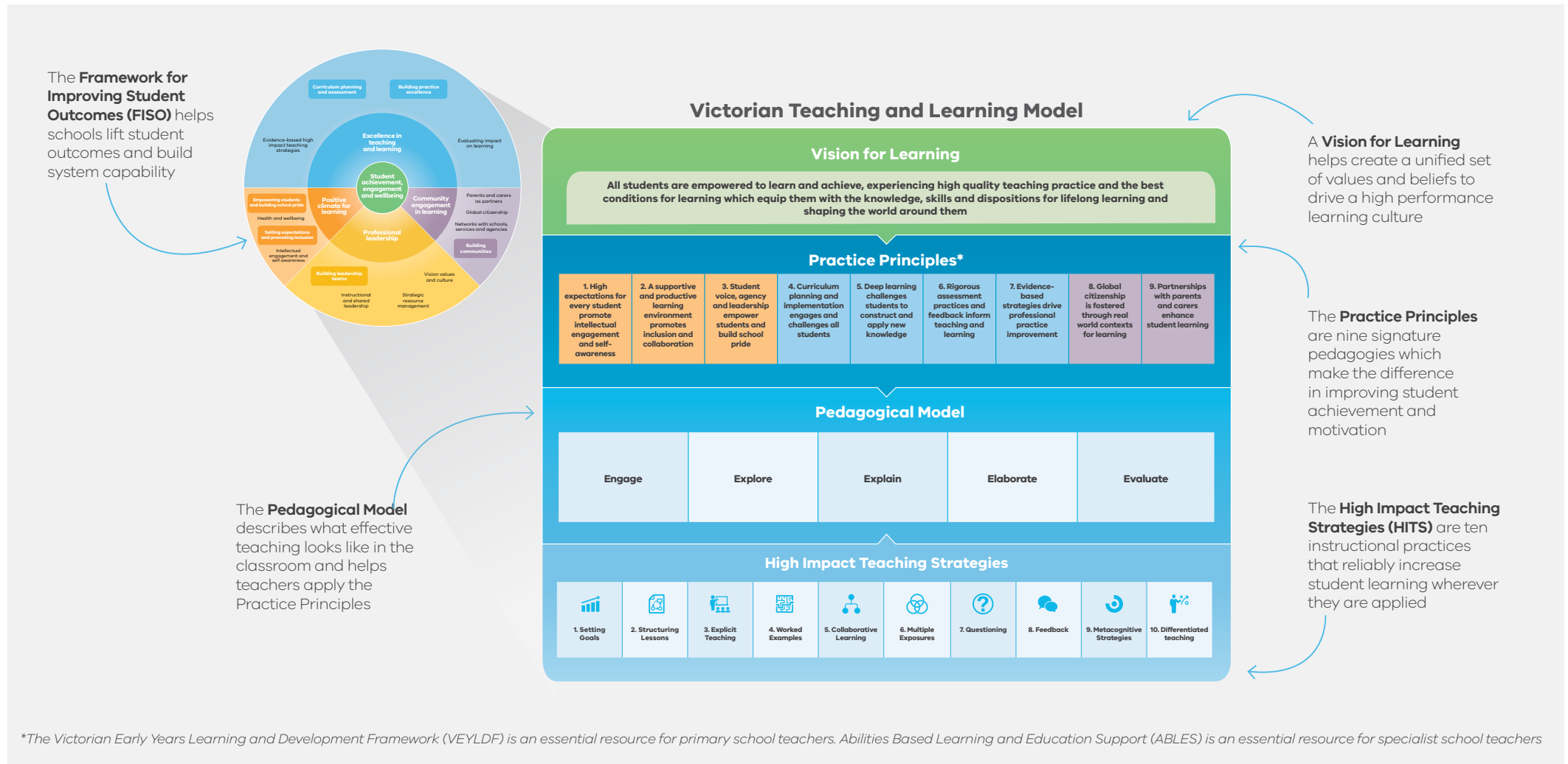
The Pedagogical Model domains are elements of one complete model of teaching rather than separate, self-contained components. In some lessons, students will move through all five domains. In other lessons, teachers will naturally switch between domains in response to student needs and learning program requirements. The Pedagogical Model respects this kind of flexibility – it is not designed as a template for linear or prescriptive lesson plans.



How does the Pedagogical Model fit into the Victorian Teaching and Learning Model?

The Victorian Teaching and Learning Model brings FISO into the classroom, creating a line of sight between the whole-school improvement approach and classroom practice. It assists principals, school leaders, teachers, students and parents/carers to work together in strong, effective learning communities that create and sustain better outcomes for students. The Victorian Teaching and Learning Model allows teachers and school leaders to focus on high impact improvement initiatives and to drive those initiatives through evidence-based decisions about their teaching and student learning.

The Victorian Teaching and Learning Model consists of four components: the Vision for Learning, Practice Principles, Pedagogical Model, and HITS. These components have a common foundation: the FISO Improvement Model, the FISO Continua of Practice and the FISO Improvement Cycle. Each component articulates how FISO is enacted in teaching and learning.



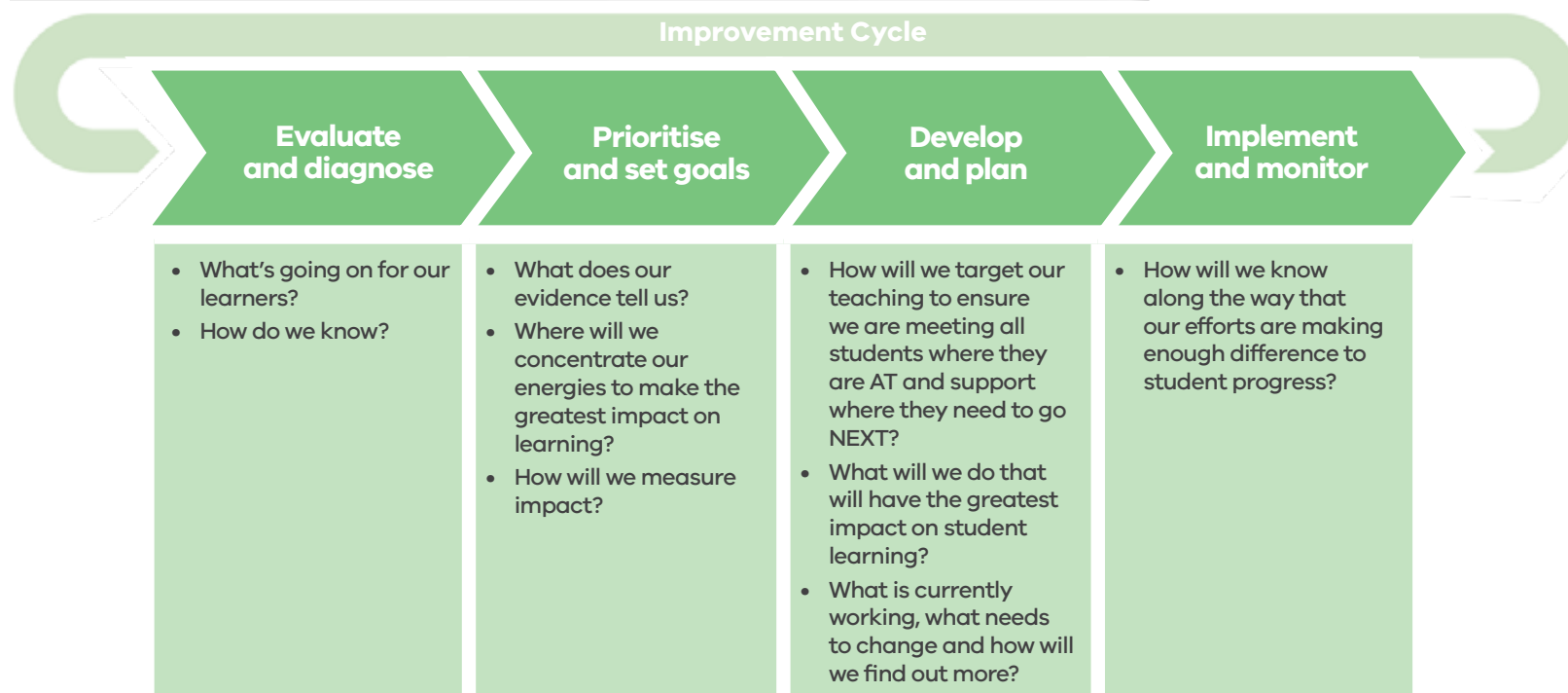


How is the FISO Improvement Cycle embedded in the Pedagogical Model?

The Pedagogical Model is focused on enacting the FISO priority area of Excellence in Teaching and Learning. When implemented together with the Practice Principles, the Pedagogical Model enables teachers to maintain a line of sight between their own professional development and school-wide improvement based on FISO. This linkage helps teachers set Performance and Development goals to address their professional learning needs and align them with broader school improvement goals specified in School Strategic Plans and Annual Implementation Plans.

The FISO Improvement Cycle is central to all pedagogical resources. It is particularly important for implementing the Pedagogical Model and consequently is embedded in the model. After unpacking the Practice Principles and engaging in reflection activities regarding current teaching practices across the school, teachers are encouraged to use the FISO Improvement Cycle and the Pedagogical Model to evaluate and diagnose issues, prioritise and set goals, develop and plan learning programs, and implement and monitor instruction. Exploring the interconnections between the FISO Improvement Cycle and the Pedagogical Model empowers teachers to see themselves as learners, to reflect on their practice, and to engage in professional learning.

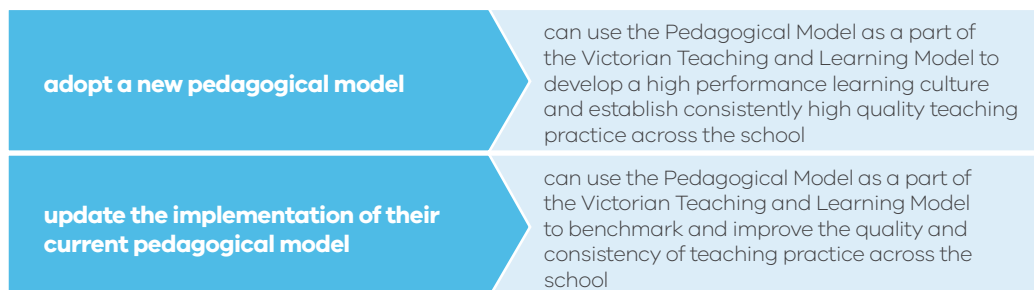
Focus areas for using the FISO Improvement Cycle to support teaching and learning



Who is the Pedagogical Model for?

The Pedagogical Model opens discussions, invites observation and feedback, and encourages teachers to continually improve their practice. The teaching approach is expressed in the five Pedagogical Model domains with direct connections to the Practice Principles and HITS. In addition, the Pedagogical Model refers to ideas, values and evidence about teaching and learning.

Schools that are looking to:



School leaders

Principals, Assistant Principals, Learning Specialists, Leading Teachers, Literacy Leaders and Professional Learning Community (PLC) Instructional Leaders can use the Pedagogical Model to support teachers in their professional development. It enables them to guide teachers' reflections on their current teaching practices, to assist teachers in evaluating their performance against each domain's Continuum of practice and to specify areas for improvement. School leaders can drive school-wide improvement by using the Pedagogical Model and other DET resources to refresh and deepen teachers' pedagogical knowledge.

Prior to engaging with the Pedagogical Model, schools should undertake a reflection on their school-wide practice using the following Practice Principles and self-reflection tools:

- **Practice Principle 1:** High expectations for every student promote intellectual engagement and self-awareness
- **Practice Principle 4:** Curriculum planning and implementation engages and challenges students
- **Practice Principle 6:** Rigorous assessment practices and feedback inform teaching and learning.

'With a united and coherent emphasis on curriculum... instruction, and assessment, pedagogical synergy is created.'

Ontario Institute for Studies in Education, University of Ontario (2006)

Teachers

The Pedagogical Model places student learning at the centre of planning and implementation. It supports teachers to design engaging and challenging learning experiences through planned integration of curriculum, pedagogy and assessment.

Teachers build professional skills and knowledge around curriculum, pedagogy and assessment to continuously enhance their practice and improve student learning. Developing expertise across those essential interrelated components builds practice excellence.

The Victorian Curriculum F-10 defines the learning progressions that guide student learning growth. It is the role of teachers and school leaders to create engaging learning and teaching programs, drawing on their knowledge of local context, effective pedagogy and rigorous assessment, to ensure that students progress along this continuum.

PLCs provide excellent opportunities for teachers to use the Pedagogical Model in many contexts: to review their learning programs, to guide self- and group-reflection, to set professional development goals, and to plan and implement the specific steps that achieve those goals.

Using the Pedagogical Model, teachers can collaborate to consider the following elements as part of their planning, classroom practice and reflection:

| Preparing for the classroom | | Reflecting on your practice | |
|-----------------------------|------------------------------------|-----------------------------|---|
| ✓ | Student learning needs | ✓ | Assess student learning progress and provide feedback |
| ✓ | Pedagogical knowledge | ✓ | Moderate student work with colleagues |
| ✓ | Content knowledge | ✓ | Use various types of evidence of student learning to inform the next planning cycle |
| ✓ | Pedagogical content knowledge | ✓ | Undertake a reflection on your teaching practice using Diagnostic Tools for Practice Principles |
| ✓ | Victorian Curriculum F-10 / VEYLDF | | |
| ✓ | Practice Principles | | |
| ✓ | HITS | | |

| Curriculum | Pedagogy | Assessment |
|---|--|---|
| defines what students should learn, and the associated progression or continuum of learning | describes how students will be taught and supported to learn | describes student progression in learning |

*Adapted from Victorian Curriculum F-10: Revised curriculum planning and reporting guidelines



How does the Pedagogical Model align with other DET resources and initiatives?

Excellence in teaching and learning

Excellence in classroom practice in literacy and numeracy

Pedagogical Model

Practice Principles for Excellence in Teaching and Learning

High Impact Teaching Strategies

Literacy Teaching Toolkit: Birth–Level 6

At a Glance: Literacy and Numeracy Teaching Resources

To be released:

Academic vocabulary resource for secondary school teachers

Mathematics Teaching Toolkit: Birth–Level 10

Koorie English online teaching resources

Literacy Teaching Toolkit: Levels 7–10

Differentiating student learning needs

Insight Assessment Platform

Formative Assessment Guide

Annotated student work samples in reading and viewing

Literacy Data, Assessment and Practice online course

To be released:

Enhanced English Online Interview process and supporting resources for teachers

Annotated student work samples in writing, speaking, listening and numeracy

Literacy teaching resources and guidance for teaching students with learning difficulties (including dyslexia)

Koorie English professional learning

Digital Assessment Library

Numeracy teaching resources and guidance for teaching students with learning difficulties (including dyscalculia)



Professional leadership

Building instructional leadership in literacy and numeracy

Workshops for primary school Literacy Leaders

To be released:

Leading Effective Professional Learning Communities: Guidance

Bastow Leading Literacy for Networks program

Workshops for primary and secondary Numeracy Leaders

Workshops for secondary school Literacy Leaders

Embedding a whole-school focus on literacy and numeracy

To be released:

Catalogue of Programmatic Supports

Guidance for secondary schools to lift literacy and numeracy outcomes

Positive climate for learning

Empowering students in their learning

Amplify: Empowering students through voice, agency and leadership (draft for consultation)

Community engagement in learning

Engaging families as partners in literacy and numeracy

Literacy and Numeracy Tips to Help Your Child Every Day: A guide for parents of children aged 0-12

To be released:

'Prep Bag' books and family literacy and numeracy guidance

The Pedagogical Model domains explained

This resource unpacks the five domains of the Pedagogical Model as a separate section, allowing teachers to focus their efforts and engage deeply with each domain. In practice, the domains do not exist in isolation. Teachers will switch between domains in response to student needs and learning program requirements.

Continua of practice illustrate varying levels of teacher practice for each domain, expressed through descriptions of proficiency. Descriptions specify increasing levels of sophistication and complexity of teachers' actions *before, during* and *after* the classroom implementation, as they are crucial to developing, implementing and improving learning programs. Teachers can use the Continua to reflect on their practice, make judgements about specific areas of teaching and set targets to move to the next level of proficiency. The Continua are closely aligned with the AITSL Classroom Practice Continuum, Australian Professional Standards for Teachers and Practice Principles.

Resources list key learning materials that teachers can use to increase their knowledge and build skills in each domain.

Success indicators describe behaviours that teachers and students may exhibit in relation to each domain. Examples provide a quick check for teachers and do not cover all domain aspects.

Illustrations of practice showcase best practice in each domain. Examples come from Victorian government school settings and include whole-school priority focus areas such as literacy and numeracy. These teaching stories demonstrate teachers' thinking process and specific actions taken to help students achieve intended outcomes.

Sample performance and development goals offer teachers examples of strategically set goals at different levels of the Continua. The goals follow the SMART format outlined in the Goal Setting Guide for Teachers (DET, 2017). They show how the goals may differ at various levels of proficiency and in different domains. Sample goals emphasise the importance of collaborating with colleagues, students and parents/carers, and using different types of evidence when evaluating the effectiveness of teaching and learning. Teachers are encouraged to refer to their School Strategic Plans and Annual Implementation Plans when developing individual goals in alignment with the whole-school improvement strategies.

Engage

Teachers know their students well and engage them in building supportive, inclusive and stimulating learning environments. Teachers motivate and empower students to manage their own learning and develop agency.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|--|--|--|---|
| <ul style="list-style-type: none"> Teachers build safe learning environments that support students' wellbeing Teachers set learning goals that explain what students need to understand and what they must be able to do Teachers communicate high expectations and promote effort and hard work Teachers consider students' backgrounds, interests and prior knowledge Teachers demonstrate knowledge of contemporary resources to enrich teaching and learning programs and to enhance student engagement Teachers engage with individual students and respond to their academic, social and emotional needs Teachers communicate with parents/carers and seek their knowledge and feedback | <ul style="list-style-type: none"> Teachers collaboratively develop and implement protocols to build a respectful, trusting learning environment in which students feel confident to contribute Teachers set explicit, challenging and achievable learning goals for all students Teachers develop and maintain a culture of high expectations and empower students to present their own ideas Teachers consider students' backgrounds, interests and prior knowledge to create authentic and meaningful learning opportunities Teachers provide opportunities for students to initiate and assist in planning school events Teachers build connectedness with parents/carers and the broader community to strengthen social ties, care and support for students | <ul style="list-style-type: none"> Teachers co-design behaviour protocols with students to maintain a productive and safe learning environment Teachers share ideas about how to involve students in curriculum planning, engage students in selecting tools and resources and negotiate learning goals Teachers collaborate with colleagues and students to develop and maintain a culture of high expectations for all students by setting appropriate and challenging learning goals Teachers model and share with colleagues strategies for maintaining an energised and focused learning environment Teachers develop and share strategies to build students' capacity to participate in whole-school decision-making Teachers support their colleagues to collect, analyse and share feedback from students and parents/carers to inform future planning | <ul style="list-style-type: none"> Teachers model and demonstrate how to collaboratively develop shared norms and responsibilities for reinforcing protocols with students Teachers lead colleagues to evaluate the appropriateness of learning goals to improve student achievement and engagement Teachers work with colleagues to select a range of tools to receive regular student feedback on classroom climate Teachers lead processes to evaluate the effectiveness of strategies to raise student engagement Teachers initiate, lead and evaluate processes to build students' capacity to participate in whole-school decision-making To strengthen social ties, care and support for students, teachers lead processes to monitor and evaluate connectedness with parents/carers and the broader community |

Resources

- AITSL video Supporting participation (primary school) <https://go.gov.au/aitsl/australian-professional-standards-for-teachers/illustrations-of-practice/065571c4-0000-4000-8000-000000000000>
- AITSL video Engaging parents and carers (primary school) <https://go.gov.au/aitsl/australian-professional-standards-for-teachers/illustrations-of-practice/065571c4-0000-4000-8000-000000000000>
- Are You Making a Difference? (uAAD7) Website: Engaging young people in leading and learning <http://afarenewworld.org/makingadifference/>
- Martin, A. (2013). From will to skill: The psychology of motivation, instruction and learning in today's classroom. #Psych, 3(56).
- Marzano, R.J., & Pickering, D.J. (2010). The highly engaged classroom. Centennial, CO: Marzano Research.
- Tully, L. (2011). Engaging fathers. #Psych, 3(60).
- What Works: The Work Program. Website provides materials to build awareness, form partnerships and work systematically to improve outcomes for Australian indigenous students. <http://www.whatworks.edu.au/direction.do?end=homePage>

This domain is demonstrated when students:

- feel valued and supported in the classroom as evidenced by their active participation in discussions
- actively engage in the learning process in the classroom and beyond
- feel comfortable and confident to provide feedback to the teacher regarding their learning experiences

This domain is demonstrated when the teacher:

- seeks information and feedback from students and parents/carers to create meaningful learning experiences for students
- links relevant material to students' prior skills and knowledge
- conveys high expectations for students through setting challenging but achievable goals, and supporting students in learning
- is consistent in reinforcing rules and protocols

Illustration of practice

SECONDARY – SCIENCE

At a large regional secondary school, five Year 7 Science teachers collaboratively identified the need to improve student **engagement** and stimulate student interest and curiosity in class. Teachers collaborated to develop a unit of work using the Rubik Goldberg Challenge activity, introducing students to forces. Teachers minimised 'chalk and talk' and focused on student investigation, **exploration** and collaboration. Implementing the unit required building on students' interests and asking students to work in different learning spaces. At the beginning of the project, teachers **explicitly taught** students about collaboration – what it looks like and how it works.

Students worked in groups to create a machine using a chain reaction. To **evaluate students' prior knowledge**, teachers asked students to complete surveys before starting their work. Survey items related to students' expectations for the task and collaboration. Teachers engaged students to develop an assessment rubric and refine the criteria based on the design brief. The success criteria for the unit included: 1) construction of the machine; 2) accuracy of the machine when measuring time; 3) student collaboration; and 4) demonstrated understanding of the forces involved. In teams, students self-assessed against the first three task components. Teachers assessed the fourth component. To capture evidence of student learning, teachers used written tasks, took photos and filmed activities throughout the unit.

The project culminated in a competition day, with students showcasing their Rubik Goldberg machines. **Evaluation** of the unit indicated that students were **engaged** and gained a deep understanding of the concept of forces. This exercise helped students and teachers become better collaborators and build a sense of community in the school. Students took ownership of the project and **elaborated** on their ideas in a supportive environment. Teachers gained valuable insights into students' thinking and learning processes. The project outcomes demonstrated the importance of explicitly teaching both collaboration skills and subject content, and scaffolding the learning to support students as they moved from surface learning to deep learning.

Sample performance and development goals

| PROFICIENT | LEAD |
|--|--|
| <p>By the end of this planning cycle, I want to have increased motivation among disengaged students in my class.</p> <p>To achieve this goal, I will use the FISO Improvement Cycle to plan my inquiry, identify possible causes of disengagement, design strategies for increasing motivation and gather and interpret relevant data.</p> <p>To learn how to do this, I will use the FISO Improvement Cycle, Practice Principles and HTS to reflect on my current teaching and further my knowledge about student engagement. I will talk to students about their experiences in class to gather initial data on the reasons behind disengagement. I will work in a PLC to develop three strategies to increase student participation in class. I will test each strategy using the FISO Improvement Cycle, comparing notes with colleagues and adjusting my approach as needed.</p> <p>I will know I have achieved my goal when:</p> <ul style="list-style-type: none"> my learning program clearly outlines new strategies developed through this project I continuously work with students and colleagues to adjust my approach and engage students student attendance rates and achievement increase peer observation, my observation, and student survey and interview data indicate improved student engagement in learning | <p>By the end of this planning cycle, I want to help other teachers improve their skills in using different types of data to assess student engagement in learning.</p> <p>To achieve this goal, I will facilitate discussions with colleagues to reflect on current practices of assessing student engagement.</p> <p>To learn how to do this, I will review research literature on the topic and use Practice Principles and HTS to develop teaching resources. To learn how to do this, I will review research literature on the topic and use Practice Principles and HTS to develop teaching resources. Based on the identified areas for improvement, I will develop a short presentation and a list of resources to help my colleagues use the FISO Improvement Cycle when evaluating practice. I will seek my colleagues to conduct available data, identify engagement issues, design strategies to remedy issues, and plan to collect new data.</p> <p>I will know I have achieved my goal when:</p> <ul style="list-style-type: none"> teachers collaborate to improve student engagement in learning teachers' learning programs clearly outline new engagement strategies student achievement increases peer observation, teacher self-reflection, and student survey and interview data indicate improved student engagement in learning |





Domains overview

| Engage | Explore | Explain | Elaborate | Evaluate |
|--|---|---|---|---|
| <p>Teachers know their students well and engage them in building supportive, inclusive and stimulating learning environments. Teachers motivate and empower students to manage their own learning and develop agency.</p> | <p>Teachers present challenging tasks to support students in generating and investigating questions, gathering relevant information and developing ideas. They help students expand their perspectives and preconceptions, understand learning tasks and prepare to navigate their own learning.</p> | <p>Teachers explicitly teach relevant knowledge, concepts and skills in multiple ways to connect new and existing knowledge. They monitor student progress in learning and provide structured opportunities for practising new skills and developing agency.</p> | <p>Teachers challenge students to move from surface to deep learning, building student ability to transfer and generalise their learning. They support students to be reflective, questioning and self-monitoring learners.</p> | <p>Teachers use multiple forms of assessment and feedback to help students improve their learning and develop agency. They monitor student progress and analyse data to draw conclusions about the effectiveness of their teaching practices, identify areas for improvement and address student individual needs.</p> |
| <p>Practice Principles - Actions</p> | <p>Practice Principles - Actions</p> | <p>Practice Principles - Actions</p> | <p>Practice Principles - Actions</p> | <p>Practice Principles - Actions</p> |
| <p>1.1 Teachers convey high expectations of learning, effort and engagement for all students 2.1 Teachers build quality relationships that enhance student engagement, self-confidence and growth as a learner 2.2 Teachers ensure all students' cultural backgrounds, needs and abilities are recognised and addressed in the learning program</p> | <p>1.1 Teachers convey high expectations of learning, effort and engagement for all students 1.2 Teachers co-design aspirational goals with students 1.3 Teachers scaffold and differentiate learning to enable students to achieve their goals 2.3 Teachers develop student capacity to collaborate 2.4 Teachers maintain an energised and focused learning environment</p> | <p>1.1 Teachers convey high expectations of learning, effort and engagement for all students 1.3 Teachers scaffold and differentiate learning to enable students to achieve their goals 3.2 Teachers provide opportunities for students to exercise agency in their own learning 4.1 Teachers place student needs at the centre of program planning and delivery</p> | <p>1.1 Teachers convey high expectations of learning, effort and engagement for all students 2.3 Teachers develop student capacity to collaborate 2.4 Teachers maintain an energised and focused learning environment 3.1 Teachers empower students to have a democratic voice in the running of the communities in which they learn</p> | <p>1.1 Teachers convey high expectations of learning, effort and engagement for all students 1.4 Teachers build student capacity to monitor and evaluate their own progress and achievement 3.2 Teachers provide opportunities for students to exercise agency in their own learning 4.1 Teachers place students' needs at the centre of program planning and delivery</p> |

2.4 Teachers maintain an energised and focused learning environment
3.1 Teachers empower students to have a democratic voice in the running of the communities in which they learn
3.3 Teachers provide leadership opportunities
3.4 Teachers build school pride and connectedness
4.1 Teachers place student needs at the centre of program planning and delivery
8.4 Teachers and students collaborate in learning partnerships in and beyond the school
9.1 Teachers establish open and sustained communications with parents/carers
9.3 Teachers facilitate parental/carer involvement in education within the classroom, school and beyond

3.1 Teachers empower students to have a democratic voice in the running of the communities in which they learn
3.2 Teachers provide opportunities for students to exercise agency in their own learning
3.3 Teachers provide leadership opportunities
4.1 Teachers place students' needs at the centre of program planning and delivery
5.3 Teachers support students to be reflective, questioning and self-monitoring learners
6.3 Teachers provide regular feedback to students on their progress against individual learning goals and curriculum standards
8.2 Teachers model and facilitate use of digital tools and resources to access, use and share learning
8.3 Teachers and students co-design learning that connects to real world contexts
9.3 Teachers facilitate parental/carer involvement in education within the classroom, school and beyond

4.2 Teachers collaboratively design and implement a scope and sequence of learning
5.1 Teachers design learning programs to explicitly build deep levels of thinking and application
9.3 Teachers facilitate parental/carer involvement in education within the classroom, school and beyond

3.2 Teachers provide opportunities for students to exercise agency in their own learning
3.3 Teachers provide leadership opportunities
4.1 Teachers place student needs at the centre of program planning and delivery
4.2 Teachers collaboratively design and implement a scope and sequence of learning
5.1 Teachers design learning programs to explicitly build deep levels of thinking and application
5.2 Teachers support students to explore the construction of knowledge
5.3 Teachers support students to be reflective, questioning and self-monitoring learners
6.3 Teachers provide regular feedback to students on their progress against individual learning goals and curriculum standards
7.3 Teachers draw on current research and use an inquiry improvement cycle
7.4 Teaches challenge and support each other to improve practice
8.1 Teachers support students to explore their role as global citizens
8.2 Teachers model and facilitate use of digital tools and resources to access, use and share learning
8.3 Teachers and students co-design learning that connects to real world contexts
9.3 Teachers facilitate parental/carer involvement in education within the classroom, school and beyond

4.3 Teachers regularly review and update learning programs in line with school curriculum plans
5.3 Teachers support students to be reflective, questioning and self-monitoring learners
6.1 Teachers design authentic, fit for purpose assessments to reflect the learning program and objectives
6.2 Teachers moderate student assessment and use data to diagnose student learning needs and plan for learning
6.3 Teachers provide regular feedback to students on their progress against individual learning goals and curriculum standards
6.4 Teachers analyse student achievement data to improve their practice
7.1 Teachers evaluate the impact of teaching on learning by analysing multiple sources of data
7.2 Teachers identify and target areas for professional learning
7.3 Teachers draw on current research and use an inquiry improvement cycle
7.4 Teachers challenge and support each other to improve practice
9.1 Teachers establish open and sustained communications with parents/carers
9.2 Teachers seek and use parents'/carers' knowledge and feedback
9.3 Teachers facilitate parent/carer involvement in education within the classroom, school and beyond

HITS

- 1** Setting goals
- 2** Structuring lessons
- 7** Questioning
- 10** Differentiation

HITS

- 1** Setting goals
- 5** Collaborative learning
- 7** Questioning
- 8** Feedback
- 9** Metacognition
- 10** Differentiation

HITS

- 3** Explicit teaching
- 4** Worked examples
- 5** Collaborative learning
- 6** Multiple exposures
- 10** Differentiation

HITS

- 4** Worked examples
- 5** Collaborative learning
- 6** Multiple exposures
- 8** Feedback
- 9** Metacognition

HITS

- 1** Setting goals
- 8** Feedback
- 9** Metacognition

Engage



Teachers know their students well and engage them in building supportive, inclusive and stimulating learning environments. Teachers motivate and empower students to manage their own learning and develop agency.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|--|--|---|---|
| <ul style="list-style-type: none"> Teachers build safe learning environments that support students' wellbeing Teachers set learning goals that explain what students need to understand and what they must be able to do Teachers communicate high expectations and promote effort and hard work Teachers consider students' backgrounds, interests and prior knowledge Teachers demonstrate knowledge of contemporary resources to enrich teaching and learning programs and to enhance student engagement Teachers engage with individual students and respond to their academic, social and emotional needs Teachers communicate with parents/carers and seek their knowledge and feedback | <ul style="list-style-type: none"> Teachers collaboratively develop and implement protocols to build a respectful, trusting learning environment in which students feel confident to contribute Teachers set explicit, challenging and achievable learning goals for all students Teachers develop and maintain a culture of high expectations and empower students to present their own ideas Teachers consider students' backgrounds, interests and prior knowledge to create authentic and meaningful learning opportunities Teachers provide opportunities for students to initiate and assist in planning school events Teachers build connectedness with parents/carers and the broader community to strengthen social ties, care and support for students | <ul style="list-style-type: none"> Teachers co-design behaviour protocols with students to maintain a productive and safe learning environment Teachers share ideas about how to involve students in curriculum planning, engage students in selecting tools and resources, and negotiate learning goals Teachers collaborate with colleagues and students to develop and maintain a culture of high expectations for all students by setting appropriate and challenging learning goals Teachers model and share strategies for maintaining an energised and focused learning environment Teachers develop and share strategies to build students' capacity to participate in whole-school decision-making Teachers support their colleagues to collect, analyse and share feedback from students and parents/carers to inform future planning | <ul style="list-style-type: none"> Teachers model and demonstrate how to collaboratively develop shared norms and responsibilities for reinforcing protocols with students Teachers lead colleagues to evaluate the appropriateness of learning goals to improve student achievement and engagement Teachers work with colleagues to select a range of tools to receive regular student feedback on classroom climate Teachers lead processes to evaluate the effectiveness of strategies to raise student engagement Teachers initiate, lead and evaluate processes to build students' capacity to participate in whole-school decision-making To strengthen social ties, care and support for students, teachers lead processes to monitor and evaluate connectedness with parents/carers and the broader community |

Resources

- AITSL video: Supporting participation. <https://legacy.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00066>
- AITSL video: Engaging parents and carers. <https://legacy.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00129>
- Are You Making a Difference? (ruMAD?) Website. Engaging young people in leading and learning. <http://afairerworld.org/makingadifference/>
- Martin, A. (2013). From will to skill: The psychology of motivation, instruction and learning in today's classroom. *InPsych*, 35(6).
- Marzano, R.J., & Pickering, D.J. (2010). *The highly engaged classroom*. Centennial, CO: Marzano Research.
- Tully, L. (2017) Engaging fathers. *InPsych*, 39(6).
- What Works. The Work Program. Website provides materials to build awareness, form partnerships and work systematically to improve outcomes for Australian Indigenous students. <http://www.whatworks.edu.au/dbAction.do?cmd=homePage>

This domain is demonstrated when students:

- feel valued and supported in the classroom as evidenced by their active participation in discussions
- actively engage in the learning process in the classroom and beyond
- feel comfortable and confident to provide feedback to the teacher regarding their learning experiences

This domain is demonstrated when the teacher:

- seeks information and feedback from students and parents/carers to create meaningful learning experiences for students
- links the new material to students' prior skills and knowledge
- conveys high expectations for students through setting challenging but achievable goals and supporting students in learning
- is consistent in reinforcing rules and protocols

Illustration of practice

SECONDARY – SCIENCE

At a large regional secondary school, five Year 7 Science teachers collaboratively identified the need to improve student **engagement** and stimulate student interest and curiosity in class. Teachers collaborated to develop a unit of work using the Rube Goldberg Challenge activity, introducing students to forces. Teachers minimised 'chalk and talk' and focused on student investigation, **exploration** and collaboration. Implementing the unit required building on students' interests and asking students to work in different learning spaces. At the beginning of the project, teachers **explicitly taught** students about collaboration – what it looks like and how it works.

Students worked in groups to create a machine using a chain reaction. To **evaluate students' prior knowledge**, teachers asked students to complete surveys before starting their work. Survey items related to students' expectations for the task and collaboration. Teachers engaged students to develop an assessment rubric and refine the criteria based on the design brief. The success criteria for the unit included: 1) construction of the machine; 2) accuracy of the machine when measuring time; 3) student collaboration; and 4) demonstrated understanding of the forces involved. In teams, students self-assessed against the first three task components. Teachers assessed the fourth component. To capture evidence of student learning, teachers used written tasks, took photos and filmed activities throughout the unit.

The project culminated in a competition day, with students showcasing their Rube Goldberg machines. **Evaluation** of the unit indicated that students were **engaged** and gained a deep understanding of the concept of forces. This exercise helped students and teachers become better collaborators and build a sense of community in the school. Students took ownership of the project and **elaborated** on their ideas in a supportive environment. Teachers gained valuable insights into students' thinking and planning processes. The project outcomes demonstrated the importance of explicitly teaching both collaboration skills and subject content, and scaffolding the learning to support students as they moved from surface learning to deep learning.

Sample performance and development goals

PROFICIENT

By the end of this planning cycle, I want to have increased motivation among disengaged students in my class.

To achieve this goal, I will use the FISO Improvement Cycle to plan my inquiry, identify possible causes of disengagement, design strategies for increasing motivation, and gather and interpret relevant data.

To learn how to do this, I will use the FISO Improvement Cycle, Practice Principles and HITS to reflect on my current teaching and further my knowledge about student engagement. I will talk to students about their experiences in class to gather initial data on the reasons behind disengagement. I will work in a PLC to develop three strategies to increase student participation in class. I will test each strategy using the FISO Improvement Cycle, comparing notes with colleagues and adjusting my approach as needed.

I will know I have achieved my goal when:

- my learning program clearly outlines new strategies developed through this project
- I continuously work with students and colleagues to adjust my approach and engage students
- student attendance rates and achievement increase
- peer observation, my observation, and student survey and interview data indicate improved student engagement in learning.

LEAD

By the end of this planning cycle, I want to have helped other teachers improve their skills in using different types of data to assess student engagement in learning.

To achieve this goal, I will facilitate discussions with colleagues to reflect on current practices of assessing student engagement.

To learn how to do this, I will review research literature on the topic and use Practice Principles and HITS to develop teaching resources. Based on the identified areas for improvement, I will develop a short presentation and a list of resources to help my colleagues use the FISO Improvement Cycle when evaluating practice. I will lead my colleagues to collectively analyse available data, identify engagement issues, design strategies to remedy issues, and plan to collect new data.

I will know I have achieved my goal when:

- teachers collaborate to improve student engagement in learning
- teachers' learning programs clearly outline new engagement strategies
- student achievement increases
- peer observation, teacher self-reflection, and student survey and interview data indicate improved student engagement in learning.

Explore



Teachers present challenging tasks to support students in generating and investigating questions, gathering relevant information and developing ideas. They help students expand their perspectives and preconceptions, understand learning tasks and prepare to navigate their own learning.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|--|--|---|--|
| <ul style="list-style-type: none"> Teachers demonstrate knowledge and understanding of strategies to identify students' prior knowledge Teachers establish routines and provide a schedule to support time management Teachers demonstrate knowledge of a variety of teaching strategies and resources to accommodate the range of abilities and interests Teachers implement strategies for using ICT to expand learning opportunities for students Teachers use guiding questions to assist students to select relevant information Teachers ask students to explain their understanding of key concepts and ideas to identify misconceptions Teachers support specific groups of students (ATSI students, students learning English as an Additional Language, and students with additional needs) with appropriate resources to tailor, support and modify learning goals | <ul style="list-style-type: none"> Teachers ensure the learning program is relevant to students' needs, interests and abilities. Teachers plan and deliver structured lessons, monitor learning, adapt routines and adjust time allocated to maximise student learning opportunities and understanding Teachers use a range of teaching strategies that leverage and develop different skills and abilities Teachers assist students to choose appropriate resources and processes to collect information for their learning program Teachers use effective teaching strategies to integrate ICT into learning programs in ways that make selected content relevant and meaningful Teachers use a range of question types to engage students and stimulate further investigation Teachers support students to identify and explore real world issues and problems | <ul style="list-style-type: none"> Teachers model and share strategies for reinforcing routines, scaffolding new learning, and using smooth transitions to optimise time on task and classroom climate Teachers prompt students to select tools and strategies appropriate for documenting and evaluating the information they have collected Teachers explain reasons for using particular strategies to help students organise information and encourage students to reflect on which strategies are most effective for them Teachers model high-level knowledge and skills and work with colleagues to use current ICT in ways that improve their practice and make content relevant and meaningful Teachers share strategies that encourage students to share their learning, teach, question and challenge each other Teachers support colleagues to integrate learning areas and capabilities, and support students to identify learning connections across a range of contexts Teachers empower students to make decisions based on the knowledge of how they learn | <ul style="list-style-type: none"> Teachers initiate and lead colleagues to implement strategies that support students to exercise authentic agency, question and form conclusions about the value of their learning Teachers model and share strategies that challenge misconceptions through using specific tasks and questions to extend student thinking Teachers lead and support colleagues to select and use ICT with effective teaching strategies to expand learning opportunities and content knowledge for all students Teachers initiate and lead processes that enable students to negotiate assessment methods and criteria matched to their learning goals Teachers use evidence to monitor and evaluate the impact of different lesson structures Teachers initiate and lead processes where teachers and students collaborate in learning partnerships in and beyond the school |

Resources

- Alber, R. (2014). *6 Scaffolding strategies to use with your students*. Edutopia, George Lucas Educational Foundation. <https://www.edutopia.org/blog/scaffolding-lessons-six-strategies-rebecca-alber>
- Chin, C., & Osborne, J. (2008). Students' questions: A potential resource for teaching and learning science. *Journal Studies in Science Education*, 44(1). <http://www.tandfonline.com/doi/full/10.1080/03057260701828101>
- Eberly Centre Teaching Excellence & Educational Innovation. (2016). *How to Assess Students' Prior Knowledge*. Carnegie Mellon University.
- McCarthy, J. (2015). *Fostering student questions: Strategies for inquiry-based learning*. Edutopia, George Lucas Educational Foundation.
- Vincent, T. (2014). *Investigating Authentic Questions*. Blog post. <https://learninginhand.com/blog/investigating>
- Yale Centre for Teaching and Learning. *Building upon students' prior knowledge and skills*. <https://ctl.yale.edu/StudentsPriorKnowledge>
- Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning*. Thousand Oaks, California: Corwin.

This domain is demonstrated when students:

- can articulate their learning goals and success criteria
- know the lesson routine and confidently negotiate the sequence of steps and activities
- feel confident to ask questions and explore ideas

This domain is demonstrated when the teacher:

- articulates clear lesson structures
- makes explicit connections between learning goals, activities and assessment tasks
- supports all students to achieve their learning goals
- assesses students' prior knowledge and challenges misconceptions
- differentiates and scaffolds learning to build students' knowledge and skills, and assists students to expand their perspectives

Sample performance and development goals

GRADUATE

By the end of this planning cycle, I want to have developed a variety of strategies to assess students' prior learning and to have used this knowledge to set skill-appropriate learning goals for students.

To achieve this goal, I will need to learn more about strategies to assess students' prior learning and translate that information into setting new learning goals.

To learn how to do this, I will collaborate with my mentor and engage with Practice Principles 1, 4 and 6, focusing on co-designing curriculum, aspirational goals and assessments with students based on their abilities and interests. I will work through HITS 1 (Setting Goals) and resources for the Explore domain listed in the Pedagogical Model resource.

I will know I have achieved my goal when:

- my planning documents outline the steps I will take to review previous lessons, assess students' current knowledge and skills, signpost new content, and explain learning activities
- feedback from students, received via surveys and interviews, indicates they understand learning goals and feel engaged in developing these goals
- feedback received from peer observations indicates improved student engagement in learning tasks
- student learning outcomes in my class improve.

Illustration of practice

PRIMARY – HUMANITIES, ENGLISH

At a primary school, Grade 5–6 teachers wanted to further develop students' **independence** in learning. To achieve their goal, teachers designed a unit that allowed students to **explore** real world issues, to generate and **investigate** questions, gather relevant information and **develop** ideas. The unit focused on the concept of consumer choices and their impact on local and global communities. The chocolate industry was the target of investigation. Starting with students' **current knowledge** and interests, teachers and students worked together to establish **learning goals** and develop detailed **assessment rubrics**.

During the exploration stage, students worked in groups and conducted online research to investigate similarities and differences between fair trade and free trade practices in chocolate production, and the impacts of these practices. Teachers provided ongoing **feedback** to students, supporting them to define issues, compare and contrast information, and **elaborate** and **evaluate** their findings.

Students chose companies that were not practising free trade or were not active enough in the fair trade movement. They wrote to those companies, endeavouring to convince them to improve their practices. Teachers used the Structure of the Observed Learning Outcome (SOLO) map to **evaluate** students' learning progress as they moved from gathering facts to **generating ideas**, reflecting on their learning and creating arguments.

Students improved their skills in **independent investigation** through online research, class discussions, group work, simulations and visits from guest speakers. Student feedback indicated that working on a real-life problem increased their **engagement** and motivation on task. The **collaborative** set up of the unit helped students manage their own learning process as they worked toward set goals, and improved their **communication** and **critical thinking skills**. Students valued the support they received from peers and believed working in teams enhanced the learning process.

LEAD

By the end of this planning cycle, I want to have helped colleagues in our PLC to improve student ability to explore ideas, examine biases, question each other's points of view, and share their learning.

To achieve this goal, I will lead colleagues through a collaborative project that supports teachers to create an authentic task focused on real-world problems, incorporating opportunities to examine multiple points of view.

To learn how to do this, I will review HITS 5 and 6 (Collaborative Learning, Multiple Exposures), and work with teachers to identify opportunities for differentiating instruction and using ICT in their classrooms. Throughout the project, I will observe classrooms, provide tailored feedback to teachers, and support them to observe each other's work.

I will know I have achieved my goal when:

- teachers in the PLC have collaborated regularly to develop and deliver learning programs
- student feedback indicates that students feel confident to ask questions, hypothesise and speculate
- student learning outcomes improve across classrooms
- feedback received from peer observations indicates that students speak freely in classrooms, explore ideas, examine biases, question each other's points of view, and share their learning
- teachers in the PLC report increased confidence in leading students on complex collaborative projects.

Explain



Teachers explicitly teach relevant knowledge, concepts and skills in multiple ways to connect new and existing knowledge. They monitor student progress in learning and provide structured opportunities for practising new skills and developing agency.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|---|---|--|---|
| <ul style="list-style-type: none"> Teachers demonstrate knowledge and understanding across Learning Areas of developmental learning programs based on the Victorian Curriculum Capabilities Teachers explicitly teach new knowledge and skills Teachers explain links between new content and existing knowledge Teachers develop learning programs that support students to connect their learning with real-world contexts Teachers demonstrate knowledge and understanding of worked examples to introduce new knowledge and skills Teachers provide opportunities for students to develop explanations of the content and practise new skills and processes Teachers monitor students' understanding and adapt their teaching strategies when required Teachers support students to share and reflect on their ideas and structure activities in small groups | <ul style="list-style-type: none"> Teachers collaboratively design learning programs that integrate the Victorian Curriculum Content Descriptions, and Achievement Standards for Learning Areas and Capabilities Teachers explain relationships between ideas and help students connect new and existing knowledge Teachers determine students' current levels of understanding and introduce new content accordingly Teachers regularly use worked examples to introduce new knowledge and skills, and to scaffold student learning Teachers draw out students' misconceptions and frame questions to challenge students' ideas Teachers continuously monitor students' learning and adapt routines to maximise student learning opportunities and understanding | <ul style="list-style-type: none"> Teachers support colleagues to develop sequenced learning programs that are scaffolded to promote student independence in learning Teachers structure learning sequences to provide multiple opportunities for students to consolidate new knowledge and practise new skills Teachers support colleagues to monitor students' progress and adjust instruction to meet individual student needs Teachers model effective practice and support colleagues to develop individual learning strategies and assessment rubrics in collaboration with students Teachers explain reasons for using particular strategies and encourage students to reflect on which strategies are most effective for them Teachers support colleagues to develop and implement protocols for group work that build student understanding of how effective groups operate | <ul style="list-style-type: none"> Teachers lead work in PLCs to design learning programs that integrate the Victorian Curriculum Content Descriptions, and Achievement Standards for Learning Areas and Capabilities Teachers lead initiatives to engage students in deconstructing learning tasks and assessment criteria, enabling them to assess their current knowledge, gain deeper understanding of new content, and monitor learning progress Teachers lead colleagues to design learning programs with multiple entry points, progression tracks and aspirational, individualised learning goals Teachers lead colleagues to determine students' level of understanding, and select and introduce content at individual point of need in response to student explanations Teachers initiate strategies and lead colleagues to consistently structure learning around differentiated group tasks that require students to work collaboratively |

Resources

- AITSL video: Explicit instruction. <http://www.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00299>
- AITSL video: Well-sequenced mathematics teaching. <http://www.aitsl.edu.au/australian-professional-standards-for-teachers/illustrations-of-practice/detail?id=IOP00339>
- AITSL video: Why do objects sink or float? <https://www.aitsl.edu.au/tools-resources/resource/why-do-objects-sink-or-float-illustration-of-practice>
- Fisher, D., & Frey, N. (2014). *Checking for understanding: Formative assessment techniques for your classroom*, (2nd ed.). ASCD, Virginia, USA.
- Safer, N., & Fleischman, S. (2005). How schools improve. *Educational Leadership*, 62(5), 81-83.
- Getting the Big Idea: Concept-Based Teaching and Learning. Transforming Learning Environments through Global and STEM Education. (2013). <https://worldview.unc.edu/files/2013/07/Getting-the-Big-Idea-Handout.pdf>
- Transforming Learning Environments through Global and STEM Education. (2013). *Getting the big idea: Concept-based teaching and learning*. Handout. Chapel Hill: University of North Carolina.

This domain is demonstrated when students:

- are engaged and on task because the worked example is pitched at the right level of challenge
- can move with confidence from worked examples to independent practice
- understand the process required to complete the task

This domain is demonstrated when the teacher:

- designs learning programs that are developmental and scaffolded to meet students' needs
- explains what students need to know and be able to do by the end of the lesson or unit
- uses worked examples to show students how to do something
- explains reasons for using particular strategies and encourages students to reflect on which strategies are most effective for them
- encourages all students to actively participate in class discussions
- gives students multiple opportunities to interact with and support each other in learning
- regularly monitors student understanding and adapts instruction to meet students' needs

Sample performance and development goals

GRADUATE

By the beginning of Term 1, I want to have created a draft English language learning program (Year 5), using the Victorian Curriculum F-10 and incorporating fit-for-purpose formative and summative assessments.

To achieve this goal, I will work with content and pedagogical resources such as the Victorian Curriculum F-10, Victorian Teaching and Learning Model, and Literacy and Numeracy Toolkit.

To learn how to do this I will work with my mentor to help me design units of work that build on students' expected knowledge at the beginning of Year 5. I will review the Victorian Curriculum Content Descriptions and Achievement Standards for English. I will work with Practice Principles 4 and 6 to ensure my thinking aligns with the expectations for excellence in teaching and learning. I will use my school's established lesson planning templates to plan my lessons and units, and will use the Pedagogical Model resource to enrich my learning program. I will work on HITS 8 (Feedback) to improve my skills in providing feedback to students through formative and summative assessments.

I will know I have achieved my goal when:

- my learning program documentation is completed and follows the approved format
- scope and sequence in my learning program is aligned with content of the Victorian Curriculum F-10
- assessment plans are clearly articulated in my learning program
- my learning program builds on Practice Principles and incorporates ideas from HITS and Pedagogical Model.

Illustration of practice

MIDDLE/LATER YEARS - SPECIAL DEVELOPMENTAL SCHOOL

Leaders and teachers at a Special Developmental School create a **caring, safe and inclusive environment** that focuses on increasing student independence and confidence. To provide students with a variety of **structured opportunities to practise new skills**, a teacher of eight students, aged 13 to 17 years, decided to extend the existing industry activities and establish a café.

The café program connected to the curriculum through **applied** learning situations. At first, the teacher and educational support person **explicitly taught** and demonstrated behaviours while students watched and followed instructions. The teacher set clear expectations for student work and helped students **connect new and existing knowledge**. Students prepared food, waited on tables and cleaned up. Gradually, students gained more **independence** and progressed to new learning tasks of increased difficulty. When new students came into the group, the returning students trained them and **shared** their own thoughts and experiences. Teachers **monitored** learning process and provided tailored support based on students' specific needs. By the end of the first year, the students had become competent at using a coffee machine, sandwich press, milkshake machine, toaster and oven.

Students are now fully running the café program. They raised enough money to purchase tables and chairs, and to become a self-funded program. Students expanded their services from offering lunches to their **parents, carers and other students** to catering for birthday parties. Through this program, students' **confidence, engagement** in learning and communication with each other has improved. Building on these **positive experiences**, students ventured to write and publish their own books. .

HIGHLY ACCOMPLISHED

By the end of this planning cycle, I want to have improved my skills in differentiating instruction and empowering students to contribute to the decisions about what and how they learn.

To achieve this goal, I will learn how to create authentic and meaningful learning opportunities for students that build on their needs, abilities and interests.

To learn how to do this, I will find out more about my students, their backgrounds, interests and needs. I will focus on Practice Principles 1, 2 and 9 which emphasise promoting student engagement in learning, creating supportive and collaborative learning environments, and enhancing student learning through collaboration with parents/carers. I will undertake Guided Teacher Self-Reflection Activities for Practice Principles 1, 2 and 9, use the Pedagogical Model resource and work with colleagues to investigate new ideas for differentiation in my classroom. I will work through the HITS 10 (Differentiated Teaching) to plan specific ways in which I can reach every student in my class.

I will know I have achieved my goal when:

- my learning program documentation clearly outlines plans for differentiated instruction, student participation in decision-making and ongoing monitoring of student learning
- student feedback collected through student surveys and interviews indicates that students feel engaged and empowered to influence what and how they learn in the classroom
- peer observation, teacher self-reflection, and student survey and interview data indicate that students' engagement, achievement and confidence in learning are improving.

Elaborate



Teachers challenge students to move from surface to deep learning, building student ability to transfer and generalise their learning. They support students to be reflective, questioning and self-monitoring learners.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|---|---|--|--|
| <ul style="list-style-type: none"> Teachers demonstrate knowledge and understanding of the Victorian Curriculum Capabilities across Learning Areas Teachers demonstrate knowledge and understanding of surface and deep learning Teachers develop students' critical, creative and higher order thinking skills Teachers demonstrate knowledge and understanding of effective questioning to engage students in higher order thinking Teachers allow students to share and reflect on their ideas with their peers Teachers monitor student understanding and provide appropriate feedback referenced against assessment criteria | <ul style="list-style-type: none"> Teachers enrich and deepen learning programs through integrating the Victorian Curriculum Capabilities across Learning Areas Teachers provide examples of concepts in similar contexts to assist students to apply their learning Teachers support students to form theories, find patterns and make connections in their learning Teachers design investigations of current issues that require students to compare and contrast different perspectives Teachers use questioning to probe student thinking and prompt them to justify their responses Teachers monitor student understanding, provide feedback and adapt instruction based on group needs | <ul style="list-style-type: none"> Teachers support colleagues to identify learning connections across a range of content areas and real-life contexts Teachers support colleagues to design learning programs that are intellectually challenging, developmental and scaffolded to meet students' needs Teachers support colleagues to develop conversation protocols that support all students to make meaningful contributions Teachers support colleagues to deliver challenging activities that involve student choice, discipline rich inquiry, problem solving and collaboration Teachers implement strategies that support students to share their learning, support and challenge each other Teachers monitor student progress, intervene to address individual needs and provide feedback to enable students to improve their learning | <ul style="list-style-type: none"> Teachers lead processes to monitor and evaluate the integration of the Victorian Curriculum Capabilities across Learning Areas Teachers lead colleagues to design, implement and monitor learning programs that explicitly build deep levels of thinking and application Teachers lead colleagues to support students to use evidence and challenge assumptions when extending their learning to new contexts Teachers lead initiatives to advance students' independence in learning and prepare them to undertake self-directed inquiry Teachers lead processes to empower students to take action to develop innovative solutions that address local and global issues Teachers lead processes that use formal and informal assessment, student feedback and teacher collaboration for evaluation and planning, ensuring all students are engaged, challenged and progressing in learning. |

Resources

- Alliance for Excellent Education. *Deeper Learning Toolkits*. <https://all4ed.org/deeper-learning-toolkits/>
- Are You Making a Difference? (ruMAD?) Website. Engaging young people in leading and learning. <http://afairerworld.org/makingadifference/>
- DeWitt, P. (2016). What Are the Best Strategies for Surface to Deep Learning? *Education Week*. http://blogs.edweek.org/edweek/finding_common_ground/2016/08/what_are_the_best_strategies_for%20surface_to_deep_learning.html
- Fullan, M. & Langworthy, M. (2014). Chapter 3: The new pedagogies – Deep learning tasks. In *A rich seam: How new pedagogies find deep learning*. London: Pearson.
- Global2. Information about social media and how to use it for good. Teachers and students in Victorian Government and Catholic schools are invited to set up their class and student spaces, create blogs and digital portfolios. <http://global2.vic.edu.au/>
- Global Education. Website rich in projects, information and teaching resources to assist schools in developing global citizenship. <http://www.globaleducation.edu.au/>
- iEARN. Website describes more than 100 active global projects. <https://iearn.org/collaboration>
- Marzano, R. J. (2017). Chapter 4: Conducting, practising and deepening lessons. *The new art and science of teaching*. Cheltenham, Victoria: Hawker Brownlow Education.
- The Australian Society for Evidence Based Teaching. Nurturing Deep Learning. Website. <http://www.evidencebasedteaching.org.au/crash-course-evidence-based-teaching/nurturing-deep-learning/>
- Vander Ark, T. (2017). Educating for Global Competence: 6 Reasons, 7 Competencies, 8 Strategies, 9 Innovations. Getting Smart. <http://www.gettingsmart.com/2017/09/educating-for-global-competence-6-reasons-7-competencies-8-strategies-9-innovations/>

This domain is demonstrated when students:

- consolidate their learning through opportunities that engage and re-engage them with new content over a period of time
- use feedback from teachers and peers to monitor and self-regulate their learning

This domain is demonstrated when the teacher:

- uses challenging activities that involve discipline rich inquiry, problem solving, collaboration and student choice
- designs open-ended learning experiences for students to investigate complex problems
- models and develops students' critical, creative and higher order thinking skills
- supports students to form theories, find patterns and make connections in their learning
- encourages students to share their learning and challenge each other
- avoids asking questions that are closed-ended, focused on information recall or have one 'right' answer
- provides students with targeted feedback that challenges students to reflect on and refine their understanding at various points in a learning sequence

Sample performance and development goals

PROFICIENT

By the end of this planning cycle, I want to have further developed my students' independent inquiry and metacognitive skills.

To achieve this goal, I will learn more about preparing students for conducting independent inquiry, using different learning strategies, reflecting on learning and assessing the final product.

To learn how to do this, I will collaborate with colleagues in a PLC, reviewing Practice Principles 1 and 5, HITS 9 (Metacognitive Strategies), and working through the resource section for the Elaborate domain in the Pedagogical Model resource. In a PLC, and in collaboration with students, I will develop a learning program that incorporates a variety of teaching strategies and assessments. I will incorporate ICT into the program to enhance the flexibility of the learning process.

I will know I have achieved my goal when:

- my learning programs specify steps that students will take to develop their independent inquiry and metacognitive skills
- co-designed assessment tasks (including self-assessment) list explicit criteria
- peer observations indicate that students are actively engaged in the learning process, able to regulate their own learning, and confident to seek and provide feedback to each other
- students self-assess accurately, using assessment rubrics
- students select appropriate learning strategies from a wide repertoire, articulate next steps in their learning, and reflect on other aspects of their learning process through reflection journal entries.

Illustration of practice

PRIMARY – WHOLE-SCHOOL APPROACH

Teachers at a primary school wanted to engage students in **deep learning** tasks to further develop their **metacognitive skills** and their **critical and creative thinking** capabilities. Teachers collaborated to reflect on current practices across the school and identified the need to further develop students' autonomy, self-reflection and self-regulation skills, as a whole-school priority.

Teachers collectively reviewed and reflected on the High Impact Teaching Strategies and the Victorian Curriculum Capability of **Critical and Creative Thinking**. They worked together and with students to develop learning programs that integrated a wide variety of learning activities and various forms of assessments to support students to acquire and **transfer** learning to real-life situations like Market Day activities. During the project, teachers monitored student learning and shared their reflections to continuously modify their teaching practice.

The physical space and flexible learning environment at the school encouraged varied, rich learning experiences. The co-designed learning programs fostered **student-driven, open-ended and stimulating** learning experiences through which students investigated complex problems, worked individually and in groups, and selected the means and media for creating their own learning artefacts to demonstrate learning progress. Students taught each other and their teachers at staff meetings. They actively participated in community advisory forums and led planning for whole-school events.

Student feedback and assessment data showed that the collaborative approach to planning and delivering learning programs helped develop a **shared language** among teachers and students. Student reflection activities helped build students' **critical and creative thinking**, and **metacognitive skills**, enabling students to provide each other with constructive feedback and progress learning. Teachers set the next challenge as improving consistency of **student-driven pedagogical practice** across the school.

LEAD

By the end of this planning cycle, I want to have helped teachers in my school advance students' independence in learning and prepare them to undertake self-directed inquiry.

To achieve this goal, I will work with colleagues who have similar aspirations in a PLC.

To learn how to do this, I will facilitate PLC meetings to reflect on current practice, work through Practice Principles 1 and 5, and the accompanying Guided Teacher Self-Reflection Activities. We will focus on HITS 9 (Metacognitive Strategies) and the resource section for the Elaborate domain in the Pedagogical Model resource to develop shared understanding of the issues. As a PLC, and in collaboration with students, we will develop learning programs that incorporate a variety of teaching strategies and assessments. Teachers will incorporate ICT into their learning programs to enhance the flexibility of the learning process.

I will know I have achieved my goal when:

- teachers in our PLC co-develop learning programs that incorporate detailed assessment rubrics, which students can use to navigate their own learning
- peer observations indicate that students are actively engaged in learning, able to regulate their own learning, and confident to seek and provide feedback to each other
- students self-assess accurately, using detailed co-designed assessment rubrics
- students select appropriate learning strategies from a wide repertoire, articulate next steps in their learning and reflect on the learning process in reflection journals
- teachers feel capable and empowered to design independent inquiry units in the future.

Evaluate



Teachers use multiple forms of assessment and feedback to help students improve their learning and develop agency. They monitor student progress and analyse data to draw conclusions about the effectiveness of their teaching practices, identify areas for improvement, and address student individual needs.

Continuum of practice

Each continuum level of teacher proficiency assumes proficiency at the previous level.

| GRADUATE | PROFICIENT | HIGHLY ACCOMPLISHED | LEAD |
|--|---|--|---|
| <ul style="list-style-type: none"> Teachers demonstrate understanding of assessment strategies that meet the Achievement Standards for Learning Areas and Capabilities Teachers use explicit assessment criteria to assess student progress referenced against curriculum standards and the learning goals Teachers continuously monitor student learning, integrating evidence from formal and informal assessments Teachers provide students with targeted feedback on achievement related to their learning goals and their needs Teachers communicate with parents/carers to provide regular updates on student progress Teachers use student achievement data to guide their own professional learning Teachers build new knowledge and skills through research, peer observation and coaching | <ul style="list-style-type: none"> Teachers ensure assessment strategies meet the Achievement Standards for Learning Areas and Capabilities Teachers design authentic, fit-for-purpose assessments based on the learning objectives and students' individual needs and abilities Teachers work with colleagues to develop assessment rubrics with explicit assessment criteria and make consistent judgements validated by moderation Teachers use multiple forms of formative assessment and provide feedback to students to help them reflect on the learning processes and the impact of effort on achievement, identify their strengths and areas for improvement, and form new learning goals Teachers analyse student data, reflect on the effectiveness of their own teaching and undertake appropriate professional learning | <ul style="list-style-type: none"> Teachers collaborate to plan learning programs, integrating multiple forms of fit-for-purpose formative and summative assessments Teachers demonstrate high-level knowledge and skills in monitoring student progress, providing feedback and adjusting instruction to support and extend all students Teachers support colleagues to build student capacity to develop and use assessment rubrics to monitor their own learning progress Teachers support colleagues to implement student self-assessment and peer assessment, giving students opportunities to review samples of work, identify evidence of learning, and exchange constructive feedback Teachers support colleagues to trial new practices and evaluate their effectiveness using feedback from students, colleagues and parents/carers | <ul style="list-style-type: none"> Teachers lead the development of multi-level learning programs, integrating multiple forms of fit-for-purpose formative and summative assessments Teachers lead colleagues to critically review and improve their assessment strategies Teachers lead colleagues to use feedback from students, colleagues and parents/carers to improve assessment strategies Teachers help colleagues to set aspirational goals that extend students beyond their current performance level Teachers lead a whole-school approach to developing evaluative practice, prioritising time and resources for teams to scrutinise their impact on students' progress Teachers lead processes to analyse a range of student data for strategic planning of teachers' individual and collective professional learning |

Resources

- AITSL resource: Reflect on your practice. <https://www.aitsl.edu.au/teach/improve-practice/reflect-on-practice>
- AITSL resource: Reframing feedback to improve teaching and learning. https://www.aitsl.edu.au/docs/default-source/research-evidence/spotlight/spotlight-feedback.pdf?sfvrsn=cb2eec3c_12
- AITSL video: Analysing data to improve student learning. <https://www.aitsl.edu.au/tools-resources/resource/analysing-data-to-improve-student-learning-illustration-of-practice>
- Education Services Australia. Assessment for learning. Strategies to enhance student self-assessment. http://www.assessmentforlearning.edu.au/professional_learning/student_self-assessment/student_strategies_enhance.html
- Goss, P., Hunter, J., Romanes, D. & Parsonage, H. (2015). *Targeted teaching: How better use of data can improve student learning*. Melbourne: Grattan Institute.
- Griffin, P. (2009). Assessment is for teaching. *Independence*, 34(2).
- Griffin, P., Murray, L., Care, E., Thomas, A. & Perri, P. (2010). Developmental assessment: Lifting literacy through professional learning teams. *Assessment in Education: Principles, Policy and Practice*, 17(4).
- Masters, G.N. (2013). Reforming educational assessment: Imperatives, principles and challenges. *Australian Education Review*, 57(3).
- Marzano R.J. (2017). Chapter 2: Using assessments. In *The new art and science of teaching*. Cheltenham, Australia: Hawker Brownlow Education.
- Mueller, J. (2016). Authentic assessment toolbox. <http://jfmuller.faculty.noctrl.edu/toolbox/whatisit.htm>

This domain is demonstrated when students:

- understand the connections between learning activities and assessment tasks
- understand the assessment criteria and what they need to do to progress their learning
- self-monitor their progress and provide evidence they believe demonstrates they have achieved their goals

This domain is demonstrated when the teacher:

- uses assessment tasks that allow students to demonstrate knowledge and skills at many levels
- supports further learning by providing regular feedback to students on their progress against individual learning goals and curriculum standards
- supports students to monitor their own learning and self-assess
- provides ongoing feedback to students about their performance through formative and summative assessments
- uses a range of evidence to monitor the effectiveness of learning programs in meeting student needs, and to establish challenging learning goals

Sample performance and development goals

GRADUATE

By the end of this planning cycle, I want to have improved my ability to provide feedback to students through formative and summative assessments.

To achieve this goal, I will improve my knowledge and skills in providing different forms of feedback.

To learn how to do this, I will work with a mentor and engage in professional learning. I will review Practice Principles 6 and 7, and work through HITS 8 (Feedback). I will explore AITSL videos and resources on feedback at <https://www.aitsl.edu.au/teach/improve-practice/feedback>. I will ask my mentor to observe my class and work with me to improve my ability to provide students with precise, timely, specific, accurate and actionable feedback. I will seek feedback from my students, Teacher Mentor and colleagues on my ability to provide feedback and will use their insights to improve my teaching.

I will know I have achieved my goal when:

- formative and summative assessments are incorporated into my learning program
- my strategies for providing feedback are built on current evidence and feedback on my teaching
- my Teacher Mentor's feedback indicates improvement in the quality of feedback I provide to students
- students report (via surveys and interviews) increased confidence in developing and undertaking learning tasks
- students can identify areas for improvement and articulate next steps to further their learning
- student learning outcomes improve.

Illustration of practice

SECONDARY – DRAMA

Drama is a performance-based practical subject that makes it more difficult for teachers to objectively **evaluate** student performance. At a large metropolitan high school, drama teachers wanted to provide meaningful opportunities for **personalised and differentiated learning**, and improve student **self-assessment** and **teacher assessment** practices.

In collaboration, teachers revisited assessments that were developed to align with the Victorian Curriculum F-10 and mapped the key skills that needed to be assessed. Teachers worked with students to **update assessment rubrics**, discuss learning goals and develop **self-assessment** strategies. Students' **progress performances** were filmed in many lessons and uploaded to the class page on the school Virtual Learning Environment. Within the dedicated **reflection time** at the conclusion of each lesson, students accessed their videos and undertook a self-reflection exercise online, assessing their performance against the **assessment criteria** and identifying the **next steps** in learning.

Teachers reviewed students' performances and **self-assessments** after each lesson and used that information, in combination with their own assessment ratings, to **inform future learning** activities. For example, students who identified that they needed to work on characterisation or the use of stagecraft would commence the following lesson in a student-led mini workshop, utilising pre-arranged resources. Teachers rotated between groups, **monitoring** student learning and providing timely and constructive feedback.

Providing students with opportunities to self-assess and make decisions about their learning allowed students to use their time effectively to progress toward their **learning goals**. The ongoing partnership between teachers and students enhanced **formative and summative assessment** throughout the course. Students reported high **confidence** in learning, **satisfaction** with their progress and **engagement** with the course content.

LEAD

By the end of this planning cycle, I want to have improved the consistency of the assessment practices in our school, using moderation.

To achieve this goal, I will build teachers' knowledge and skills in moderation, investigate current use of moderation in our school, and lead a moderation process.

To learn how to do this, I will refresh my knowledge on moderation and review current evaluative practices at our school. I will engage with a PLC in this area of focus and conduct workshops to build my colleagues' knowledge and skills in moderation. I will lead teachers in our PLC by organising and carrying out initial moderation and follow-up moderation activities.

I will know I have achieved my goal when:

- teachers gain additional moderation knowledge and skills
- teachers collaborate to complete moderation processes
- follow-up moderation activity results indicate that teachers assess student work more consistently
- teachers report increased confidence in designing robust assessment rubrics for their classes.

Glossary

Abilities Based Learning and Education Support (ABLES)

Abilities Based Learning and Education Support (ABLES) is a curriculum assessment and reporting tool that: allows teachers to assess the readiness of students with disabilities to learn; generates reports that help to plan for personalised learning; provides guidance material and strategies to help teach students based on their individual learning needs, with links to the appropriate curriculum level and resources; and tracks student progress and achievement.

<http://www.education.vic.gov.au/school/teachers/learningneeds/Pages/ables.aspx>

Assessment tasks

Assessments may be grouped into many categories. They can be, for example, formal or informal, diagnostic, formative or summative, written or verbal, project-based or process-based. Assessment tasks can vary from informal questioning during a learning activity to formal written tests at the end of a learning program. Assessments of all types provide evidence for the teacher to make decisions, preferably in collaboration with the student, about the next steps in the learning program.

Authentic assessment tasks

Authentic assessment tasks require students to demonstrate their ability to apply their knowledge and skills to problems that are either replicas of, or analogous to, the kinds of problems experienced in real-world situations.

Collaborative/cooperative learning

Collaborative/cooperative learning is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task or create a product. Collaborative learning relies on students actively participating in negotiating roles, responsibilities and outcomes.

Curriculum standards

The Victorian Curriculum F-10 outlines curriculum standards which apply to students from Foundation to Year 10 in Victorian government schools.

<http://www.vcaa.vic.edu.au/Pages/foundation10/f10index.aspx>

Critical thinking

Critical thinking involves students learning to analyse or develop an argument based on the evidence, draw reasoned conclusions and propose solutions to problems.

Creative thinking skills

Creative thinking involves students learning to generate and apply new ideas in various contexts, seeing existing situations in a new way, identifying alternative explanations, and seeing or making new links that generate a positive outcome.

Deep learning

Deep learning occurs when students explore problems further by combining core academic content, higher-order thinking skills, and learning dispositions. When students are challenged to move from surface knowledge to deeper levels of understanding, they are more engaged and committed to extending and applying their learning.

Differentiated teaching

Differentiated teaching refers to methods and techniques teachers use to extend the knowledge and skills of every student in response to each student's starting point. The objective of differentiation is to lift the performance of all students, including those who are below and above year level expectations.

Domain

The Pedagogical Model domains describe five phases of instructional practice: Engage, Explore, Explain, Elaborate and Evaluate. Teachers will emphasise different domains at various times during lessons and units, and combine them in many configurations, depending on the demands of the class and students' needs.

Early Years Planning Cycle (EYPC)

The EYPC outlines the process early childhood professionals use in partnership with children, families and other professionals to question and analyse, act and reflect on evidence they have collected about children from birth to eight years.

Feedback

Feedback describes various types of communication about learning to a student or teacher. Effective feedback is specific and constructive. It identifies strengths in the work being examined, highlights important areas to be developed and offers strategies for developing them. Students can provide feedback to their teacher by reflecting on the learning process and content, identifying issues and offering ideas.

This feedback enables teachers to reflect on their practice and make changes to improve students' learning progress and achievement. Teachers can provide feedback to students informally by guiding students' work and answering questions to help them complete tasks, and formally by assigning marks, annotating student work and setting new learning goals with students.

Fit-for-purpose assessment

Fit-for-purpose assessment is designed to fit a specific purpose, and therefore can take many shapes. Assessment must be valid, reliable, transparent, flexible, authentic and manageable.

The Framework for Improving Student Outcomes (FISO)

FISO has been developed to help increase the focus on student learning in schools. The key elements of the framework are an Improvement Cycle for continuous improvement, an Improvement Model that incorporates four state-wide priorities, and Improvement Measures to enable us to measure our success.

<http://www.education.vic.gov.au/school/teachers/management/improvement/Pages/FISO.aspx>

Formative assessment

Formative assessment is ongoing assessment integrated with the teaching and learning process for the purpose of improving learning. It incorporates all assessments made by teachers, students and peers that provide information about learner progress and achievement. Teachers use it to inform learning program adjustments that better meet the learner's needs. Examples of formative assessment include moderation, feedback, hot-seat questioning, all-student response and question shells. Formative assessment focuses on evaluating where students are at, offers feedback to the student or the teacher, and guides lesson design and individual instruction.

Higher-order thinking

Higher-order thinking occurs when students combine facts and ideas, and synthesise, generalise, explain, hypothesise, make conclusions or interpret facts.

Learning goals

Learning goals are specific statements describing intended student attainment of essential concepts and skills. Learning goals are often used to distinguish between specific learning intentions and the overarching aims of a unit, subject or lesson.

Learning intention

Learning intention is a description of what students are expected to know, understand and do by the end of a lesson, unit of work or program. Learning intentions should be expressed in language students can understand. During the learning process, learning intentions are modified according to the learning achievement demonstrated by students. When developed in collaboration with the students, learning intentions help students take ownership of their learning.

Learning outcomes

Learning outcomes describe what students must know and be able to do to satisfactorily complete a task or a unit of work, as specified in the learning program.

Lower-order thinking

Lower-order thinking occurs when students receive or recite factual information and acquire knowledge through repetitive routines.

Metacognitive strategies

Metacognitive strategies empower students to think about their own thinking and learning. Awareness of the learning process enhances students' control over their own learning and enhances their capacity for self-regulation. Metacognitive activities may include planning how to approach learning tasks, evaluating progress and monitoring comprehension.

Modelling

Modelling is a method or strategy for learning that occurs as a function of observing, retaining and replicating patterns of language and behaviour observed in others.

Moderation

Moderation is a process whereby teachers develop a shared understanding of what achievement of the standard at a particular level looks like, and then compare individual teacher assessments to either confirm or adjust them. The aim is to ensure teacher assessments are consistent and comparable.

Ongoing assessment

Ongoing assessment is the integration of learning, performance, assessment and feedback in a cycle that promotes progress along the learning continuum. Frequent assessment and feedback to students improves motivation and engagement in learning, and enhances learning achievement.

Pedagogy

Pedagogy describes methods and principles of teaching.

Pedagogical model

Pedagogical models are derived from learning theories that enable implementation of specific teaching and learning strategies. The Pedagogical Model incorporates theoretical foundation in the form of the Practice Principles, and demonstrates how teachers can use specific teaching and learning strategies articulated in the HITS.

Peer feedback

Peer feedback involves students in the process of providing feedback on each other's work. Students discuss the extent to which each other's work meets the success criteria and learning outcomes established by the class at the start of the learning process.

Peer observation

Peer observation is a developmental learning opportunity for teachers. It focuses on individual teachers' needs and aims to support sharing of best practice and to build awareness about the impact of teaching. Integrating peer observation within existing structures, such as a School Strategic Plan, facilitates improved line of sight between personal and collective improvement goals. Guidance materials for conducting peer observation are available at <http://www.education.vic.gov.au/school/teachers/teachingresources/practice/Pages/peerobservation.aspx>

Practice Principles for Excellence in Teaching and Learning (Practice Principles)

The Practice Principles replace Principles of Learning and Teaching (PoLT). The Practice Principles articulate how teachers can deliver the curriculum to improve student motivation, engagement and learning outcomes. The Practice Principles are intended to guide teacher reflection and conversations about what they teach, the way they teach, and how they think about teaching.

Prior learning

Evidence of prior learning comprises the knowledge, skills and beliefs students bring to a learning task. Assessment provides teachers with evidence of prior learning and the information they need to set goals that offer each student the appropriate level of challenge.

Protocols

Protocols provide a structured process for interaction among participants. Classroom protocols must promote participation, ensure equity and build trust.

Real-world application

Real-world application refers to applying knowledge and skills, gained through school-based or individual study, in real-life contexts that extend beyond the classroom and school.

Rubric (assessment rubric)

A rubric describes the quality expected in a student's response to a task. It may be the success criteria or an elaboration of them. A rubric is made known to the students before they attempt a task. It is discussed and may be negotiated to ensure student understanding of task requirements and to encourage student ownership of their learning. A rubric provides the standard against which students can evaluate and reflect on their performance and either continue with their learning strategies or modify them to improve their performance. A rubric ensures assessment is transparent and fair.

Shared norms

Shared norms are the rules a group uses to define appropriate and inappropriate values, beliefs, attitudes and behaviours.

Scaffolding

Scaffolding refers to a variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

Self-assessment

Self-assessment happens when students assess their own progress against the learning criteria and success criteria. Self-assessment encourages the learner to take ownership of their learning; they evaluate their progress or achievement and make adjustments to their learning strategies to improve their learning.

SMART Goals

SMART goal setting creates verifiable trajectories towards a certain objective, with clear milestones and an estimation of the goal's attainability.

S = Specific

M = Measurable

A = Attainable

R = Relevant, Rigorous, Realistic, and Results Focused

T = Timely and Trackable

Teaching Strategies

Teaching strategies can be used within various pedagogical models. Teaching strategies determine the approach a teacher uses to achieve learning objectives. Examples of teaching strategies may be found in High Impact Teaching Strategies, Literacy Teaching Toolkit, and English as an Additional Language (EAL) strategies.

Timely feedback

When students are acquiring new, complex knowledge or skills, real-time checks for understanding and tips can help them avoid developing misconceptions or incorrect practices.

Transfer

Transfer occurs when students are engaged in deliberately applying their knowledge and skills in varied contexts. Transfer helps students to make connections across subjects, and in out-of-school contexts.

Victorian Early Years Learning and Development Framework (2016)

The VEYLD (0-8 years) provides a common language to describe young children's learning and practice principles to guide early years professional practice. It supports early childhood professionals, including early years primary school teachers working with children and families.

Worked examples

A worked example is a demonstration of the steps required to complete a task or solve a problem. Worked examples demonstrate what success looks like and how to achieve success. Thus, worked examples support skill acquisition and can be used as a teaching tool.

Evidence base

American Institute for Research. (2017). *Study of deeper learning: Opportunities and outcomes*. Retrieved 9 October 2017 from: <https://www.air.org/>

Archer, A. L. & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching*. New York, USA: Guilford Press.

Archer, J., Cantrell, S., Holtzman, S., Joe, J., Tocci, C. & Wood, J. (2016). *Better feedback for better teaching: A practical guide to improving classroom observations*. Seattle: Bill & Melinda Gates Foundation.

Australian Institute for Teaching and School Leadership. (2011). *Australian Professional Standards for Teachers*. Retrieved 23 March 2018 from: <https://www.aitsl.edu.au/teach/standards>

Bennett, R.E. (2011). Formative assessment: A critical review. *Assessment in Education: Principles, Policy and Practice*, 18(1), 5-25.

Bill & Melinda Gates Foundation. (2013). *Ensuring fair and reliable measures of effective teaching: Culminating findings from the MET Project's three-year study*. Seattle: Bill and Melinda Gates Foundation.

Black, P. & William, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5-31.

Chin, C., & Osborne, J. (2008). Students' questions: A potential resource for teaching and learning science. *Journal Studies in Science Education*, 44(1). Retrieved 21 April 2018 from: <http://www.tandfonline.com/doi/full/10.1080/03057260701828101>

Coe, R., Aloisi, C., Higgins, S. & Major, L.E. (2014). *What makes great teaching? Review of the underpinning research*. London: The Sutton Trust.

Cook-Sather, A. (Ed.) (2009). *Learning from the student's perspective: A sourcebook for effective teaching*. Boulder, USA: Paradigm Publishers.

Craig, S. (2013). Questioning. In Hattie, J. & Anderman, E. (Eds.). *International guide to student achievement*. New York, USA: Routledge.

DEECD. *e⁵ Instructional Model*. (2010). Melbourne: Department of Education and Early Childhood Development, Victoria.

DET. (2007). *Principles of learning and teaching P-12*. Melbourne: Department of Education and Early Childhood Development, Victoria.

DET. (2011). *VEYLDF Evidence paper: High expectations for every child*. Melbourne: Department of Education and Training, Victoria.

DET. (2011). *VEYLDF Evidence paper: Partnerships with families*. Melbourne: Department of Education and Training, Victoria.

DET. (2011). *VEYLDF Evidence paper: Equity and diversity*. Melbourne: Department of Education and Training, Victoria.

DET and partners. (2016). *Tools to Enhance Assessment Literacy*. Melbourne: Department of Education and Training, Victoria.

DET. (2017). *FISO Continua of Practice for School Improvement*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/school/teachers/management/improvement/Pages/continua.aspx>

DET. (2017). *Goal setting guide for teachers*. Melbourne: Department of Education and Training, Victoria.

DET. (2017). *High impact teaching strategies: Excellence in teaching and learning*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/Documents/school/teachers/support/highimpactteachstrat.pdf>

DET. (2018). *Peer observation, feedback and reflection: A guide for principals and school leaders*. Melbourne: Department of Education and Training, Victoria. Available from: <http://www.education.vic.gov.au/school/teachers/teachingresources/practice/Pages/peerobservation.aspx>

DET. (2018). *Peer observation, feedback and reflection: A practical guide for teachers*. Melbourne: Department of Education and Training, Victoria. Available from: <http://www.education.vic.gov.au/school/teachers/teachingresources/practice/Pages/peerobservation.aspx>

DET. (2018). *Practice principles for excellence in teaching and learning*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/Documents/school/teachers/support/practiceprinciples.pdf>

DET. (2018). *Professional Practice Note 4: Peer observation, feedback and reflection*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/school/teachers/teachingresources/practice/peerobservation.aspx>

DET. *Supporting Students with Additional Learning Needs*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/school/teachers/learningneeds/Pages/default.aspx>

DET. *Abilities Based Learning and Education Support (ABLES)*. Melbourne: Department of Education and Training, Victoria. Retrieved 21 April 2018 from: <http://www.education.vic.gov.au/school/teachers/learningneeds/Pages/ables.aspx>

Dinham, S. (2008). *Feedback on feedback*. *The National Education Magazine*, 20(23).

Dinham, S. (2016). *Leading learning and teaching*. Melbourne: Australian Council for Educational Research.

Donker, A.S., de Boer, H., Kostons, D., Dignath van Ewijk, C.C. & van der Werf, M.P.C. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review*, 11, 1-26.

Education Endowment Foundation. (2015). *Teaching and Learning Toolkit – Australia*. Retrieved 22 September 2017 from: <http://evidenceforlearning.org.au/>

Edwards-Groves, C., Anstey, M. & Bull, G. (2014). *Classroom talk: Understanding dialogue, pedagogy and practice*. Primary English Teaching Association (PETAA).

Fisher, D., & Frey, N. (2014). *Checking for understanding: Formative assessment techniques for your classroom*, (2nd ed.). ASCD, Virginia, USA.

Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning*. Thousand Oaks, California: Corwin.

Fountas, I.C. & Pinnell, G.S. (2009). *When readers struggle: Teaching that works*. Portsmouth, NH: Heinemann.

Fullan, M. & Langworthy, M. (2014). *A rich seam: How new pedagogies find deep learning*. London: Pearson.

Fullan, M. & Quinn, J. (2016). *Coherence: The right drivers in action for schools, districts and systems*. Thousand Oaks, CA: Corwin Press.

Gillies, R.M. & Boyle, M. (2010). Teachers' reflections on cooperative learning: Issues of implementation. *Teaching and Teacher Education*, 26(4), 933-940.

Goss, P., Hunter, J., Romanes, D. & Parsonage, H. (2015). *Targeted teaching: How better use of data can improve student learning*. Melbourne: Grattan Institute. Retrieved 21 April 2018 from: <https://grattan.edu.au/report/targeted-teaching-how-better-use-of-data-can-improve-student-learning/>

- Goss, P. & Sonnemann, J. (2017). *Engaging students: Creating classrooms that improve learning*. Melbourne: Grattan Institute. Retrieved 21 April 2018 from: <https://grattan.edu.au/report/engaging-students-creating-classrooms-that-improve-learning/>
- Greenwood, C. & Parket, R. (2013). Academic benefits of peer tutoring: A meta-analytic review of single-case research. *School Psychology Review*, 42(1), 39–55.
- Griffin, P. (2009). Assessment is for teaching. *Independence*, 34(2).
- Griffin, P., Murray, L., Care, E., Thomas, A. & Perri, P. (2010). Developmental assessment: Lifting literacy through professional learning teams. *Assessment in Education: Principles, Policy and Practice*, 17(4).
- Griffin, P., Nichols, G., Murray, L. Vogl, A., & Barling, J. (2006). Effective use of assessment to improve meaning making in Years 3 and 4 students. *Learning Matters*, 11(2), 58–61.
- Griffin, P., Woods, K., Coles-Janes, B., & Roberts, E. (April 2010). Mining the gold: Assessing students by ability, not disability. *Teacher: The National Education Magazine*.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Milton Park, UK: Routledge.
- Hattie, J. (2012). *Visible learning for teachers: Maximising impact on learning*. Milton Park, UK: Routledge.
- Heldsinger, S. & Humphry, S. (2010). Using the method of pairwise comparison to obtain reliable teacher assessments. *The Australian Educational Researcher*, 37(2), 1-19.
- Hill, P. & Langworthy, M. (2014). *New pedagogies for deep learning whitepaper: A strategic approach to the assessment of deep learning*. Seattle, Washington: Collaborative Impact SPC.
- Igel, C.C. (2010). *The effect of cooperative learning instruction on K-12 student learning: A meta-analysis of quantitative studies from 1998-2009*. Ph.D. thesis presented to the Faculty of the Curry School of Education, University of Virginia. UMI No. AAT 3435906.
- Jenson, B., Sonnemann, J., Roberts-Hull, K. & Hunter, A. (2016). *Beyond PD: Teacher professional learning in high-performing systems: Australian edition*. Washington, DC: National Centre on Education and the Economy.
- Jeynes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, 47(4), 706-742.
- Joyce, B., Weil, M. & Calhoun, E. (2014). *Models of teaching* (9th ed.). Pearson.
- Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascaller, E. & Dochy, F. (2013). A meta-analysis of the effects of face-to-face co-operative learning: Do recent studies falsify or verify earlier findings? *Educational Research Review*, 10, 133-149.
- Kyriakides, L., Christoforou, C. & Charalambous, C. (2013). What matters for student learning outcomes: A meta-analysis of studies exploring factors of effective teaching. *Teaching and Teacher Education*, 36, 143-52.
- Lemov, D. (2015). *Teach like a champion 2.0: 62 techniques that put students on the path to college*. San Francisco, USA: Jossey-Bass.
- Lindsay, J. & Davis, V.A. (2016). *The global educator: Leveraging technology for collaborative learning and teaching*. Cheltenham, Australia: Hawker Brownlow Education.
- Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Alexandria, USA: ASCD.
- Marzano R.J. (2017). Communicating high expectations. In Marzano, R.J. *The new art and science of teaching*. Cheltenham, Australia: Hawker Brownlow Education.
- Marzano, R.J., & Pickering, D.J. (2010). *The highly engaged classroom*. Centennial, CO: Marzano Research.
- Martin, A. (2013). From will to skill: The psychology of motivation, instruction and learning in today's classroom. *InPsych*, 35(6).
- Mascall, B. & Rolheiser, C. (2006). Pedagogical synergy: Linking assessment, curriculum, and instruction. *Brock Education*, 16(1).
- Masters, G.N. (2013). Reforming educational assessment: Imperatives, principles and challenges. *Australian Education Review*, 57.
- Moss, C. & Brookhart, S. (2012). *Learning targets: Helping students aim for understanding in today's lesson*. Alexandria, USA: ASCD.
- Muijs, D., Kyriakides, L., vander Werf, G., Creemers, B., Timperley, H. & Earl, L. (2014). State of the art: Teacher effectiveness and professional learning. *School Effectiveness and School Improvement*, 25(2), 231-256.
- Nunnery, J.A., Chappell, S. & Arnold, P. (2013). A meta-analysis of a cooperative learning models effects on student achievement in mathematics. *Cypriot Journal of Education Sciences*, 8(1), 34-48.
- OECD. (2013). Synergies for better learning: An international perspective on evaluation and assessment. *OECD Reviews of Evaluation and Assessment in Education*. Paris. Retrieved 23 September 2017 from: http://www.oecd.org/edu/school/Synergies%20for%20Better%20Learning_Summary.pdf
- Otero, G. (2016). *Connecting school, family and the community: The power of positive relationships*. East Melbourne: Centre for Strategic Education Seminar series.
- Pirozzo, R. (2014). *Differentiating the curriculum: Supporting teachers to thrive in mixed ability classrooms*. Cheltenham, Australia: Hawker Brownlow.
- Quaglia, R. & Corso, M. (2014). *Student voice: The instrument of change*. London: SAGE Publications Ltd.
- Roorda, D., Koomen, H., Split, J. & Oort, F. (2011) The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493-529.
- Safer, N., & Fleischman, S. (2005). How schools improve. *Educational Leadership*, 62(5), 81-83.
- Shaddock, A., Packer, S. & Roy, A. (2015). *Schools for all children and young people: Report of the expert panel on students with complex needs and challenging behaviour*. Canberra: ACT Education and Training Directorate.
- Spiller, D. (2012). Assessment matters: Self-assessment and peer-assessment. Hamilton, NZ: Teaching and Development Unit, University of Waikato.
- Thapa, A., Cohen, J., Guffey, S. & Hughes-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357-385.
- Tomlinson, C. (2014). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, USA: ASCD.
- Toshalis, E. & Nakkula, J. (2012). *Motivation, engagement, and student voice*. Students at the Centre Series. Boston: Jobs for the Future.
- Tully, L. (2017). Engaging fathers. *InPsych*, 39(6).
- VCAA. Victorian Curriculum F-10. Melbourne: Victorian Curriculum and Assessment Authority. <http://victoriancurriculum.vcaa.vic.edu.au/>
- VCAA. (2013). Report on the Assessment for Learning and Development Project 2012. Melbourne: Victorian Curriculum and Assessment Authority. Retrieved 21 April 2017 from: <http://www.vcaa.vic.edu.au/documents/earlyyears/aldprojectreport2012.pdf>
- Willem, D. (2011). *Embedded formative assessment*. Cheltenham, Australia: Hawker Brownlow.



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