



Insights to inform school practice

School Improvement Unit
Research Centre
Insights paper 3
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School reviews in Queensland provide powerful insights into school practice. With every state school and centre reviewed by the School Improvement Unit every four years, reviews are an opportunity to consider changes in practice over time and to identify areas for continuous improvement across the system.

The learning edge: challenging learning for every student, in every classroom, every day

Differentiated teaching empowers students by maximising their engagement in challenging learning. Students who are engaged and challenged at the appropriate level are able to make greater progress in developing their knowledge and skills, and better understand themselves as learners.

Differentiation is located at the pinnacle of the [School Improvement Hierarchy](#). Positioned above the ‘engine room’ of school improvement (see [Insights paper 2](#)), it is the sharp and narrow end of school practice. This is where further improvement can occur across the Queensland state school system.

This paper presents insights into differentiated teaching and learning practices based on an analysis of key improvement strategies from 292 reviews conducted in the first three terms of 2019.

Key findings from school reviews

Nearly half (48 per cent) of schools received key improvement strategies related to differentiation.

Of these schools, approximately a third (34 per cent) received key improvement strategies referring specifically to high-achieving students.

What is differentiated teaching and learning?

According to the *National School Improvement Tool*, ‘The school places a high priority on ensuring that, in their day-to-day teaching, classroom teachers identify and address the learning needs of individual students, including high-achieving students. Teachers are encouraged and supported to monitor closely the progress of individuals, identify learning difficulties and tailor classroom activities to levels of readiness and need.’

(ACER 2012, p. 14)

School reviews in Terms 1–3, 2019 – total 302

School types			
P–6	Secondary	P–9/10/12	Other*
194	50	32	26

Review types			
Full school	Priority support	Self-determined	Additional priority support
259	33	9	1

* Includes 13 special schools, seven outdoor and environmental education centres, two schools of distance education, one community school, one sport education centre, a specific purpose school and a TAFE.

Note: The analysis is based on the 292 review reports available at the time of writing.

The ‘learning edge’

An effective model to guide differentiated teaching and learning is the ‘Goldilocks principle’ of providing each student with the appropriate (or ‘just right’) level of challenge (Hattie & Clarke 2019, p. 29).

The model consists of three potential zones of readiness for student learning. The inner ring or ‘too easy zone’ is the comfort zone, where students receive too little challenge. The middle ring is where students are actively engaged and learning. The outer ring is the panic zone, where learning becomes overwhelming, unproductive and ‘too hard’.

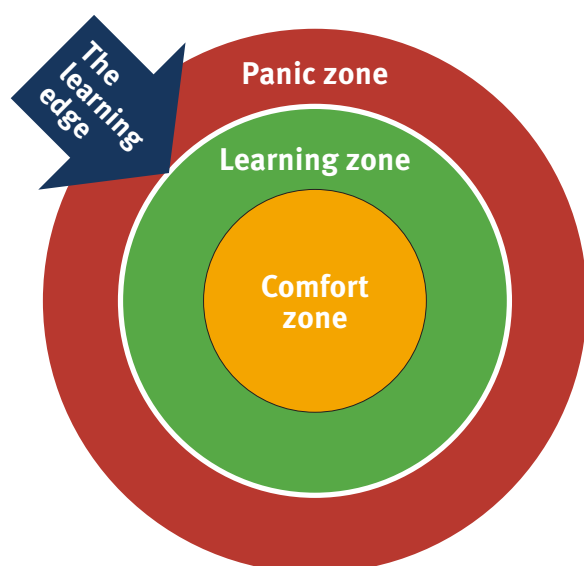
By meeting individual students at their ‘learning edge’ — where they are being stretched in their learning, without entering the ‘panic zone’ — teachers can provide them with the maximum level of challenge.



“ ... differentiation relates more to addressing students’ different phases of learning from novice to capable to proficient rather than merely providing different activities to different (groups of) students ”

(Hattie 2012, p. 109)

Figure 1: The learning zone, adapted from ‘The three zones’ in Hattie & Clarke, 2019



The **comfort zone** is ‘where the task is easy’. Students in this zone believe they have ‘all the resources to complete the task’.

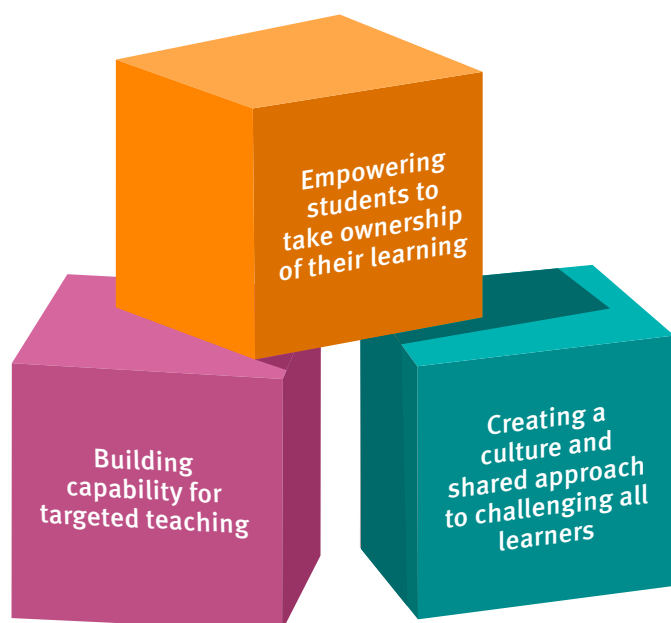
The **learning zone** is ‘where the task is just outside the student’s perceived abilities’. Students in this zone believe they have ‘some of the resources needed to complete the task’ and that they ‘can marshal the others’. They are ‘actively engaged in the activity’, experiencing success, ‘enjoyment’ and ‘challenge’.

The **panic zone** is ‘where the task produces fear and a fight or flight response’. Students in this zone do not believe they have ‘the resources needed to complete the task successfully’.

Quaglia & Corso, 2014

The building blocks of differentiation

The main recommendations on differentiation received by 2019 review schools have been about building capability for targeted teaching, creating a shared culture and approach to challenging all learners, and empowering students to take ownership of their learning. Together, these recommendations form ‘building blocks’ for differentiating teaching and learning. Developing capability and a shared approach to differentiation are foundations for empowering students to take ownership of their learning.



Building capability for targeted teaching

The most common recommendation received by review schools (62 per cent) referred to building the capability of teachers to differentiate for the full range of students in their classrooms. Areas for further professional learning include the curriculum and the use of data. Schools were advised to develop teachers’ ability to empower individual students. The main recommendations included:

- supporting teachers in differentiation planning to use a repertoire of teaching practices that address the diverse learning needs of students, including high-achieving students
- building teacher capability to read, interpret and use data to support a deeper understanding of student needs, gaps in learning, and class, cohort and school-wide trends, so as to tailor classroom and individual approaches to teaching and learning

- developing staff knowledge and understanding of student self-assessment, goal setting and feedback processes so as to engage students as assessment literate learners
- enhancing teachers’ depth of knowledge of the Australian Curriculum to enable learning adjustments and provide suitable challenges that meet the full range of students.

Creating a culture and shared approach to challenging all learners

Approximately a quarter (26 per cent) of the schools that received key improvement strategies about differentiation were advised to develop a whole-school approach to differentiating teaching and learning. Schools received recommendations to:

- build a shared understanding of inclusive education that engages, challenges and extends the full range of students
- collaboratively develop a whole-school differentiation model that embeds teaching, assessment and capability building to address the needs of all learners
- ensure whole-school frameworks and policies clarify staff roles, responsibilities and expected classroom practices to improve student learning.

Empowering students to take ownership of their learning

A smaller number of review schools (9 per cent) were ready to adopt strategies to empower students to take ownership of their own learning. In this respect, schools received recommendations about goal setting, providing feedback to students, and supporting students to understand the purpose and success criteria of learning tasks. This included:

- investigating and implementing school-wide processes to provide feedback to students, so they can be more reflective learners and identify the actions they are able to take in order to make further learning progress
- refining the school’s goal-setting practices to support students in developing and monitoring their own learning goals, and setting ambitious targets that extend and drive student learning outcomes
- deepening student understanding and knowledge of the learning intent of tasks, success criteria and the next steps in their learning.

To generate discussion ...

- How does our school demonstrate a strong belief in challenging learning and high achievement for all students?
- Are we meeting all students at their learning edge?
- What systematic data processes and conversations does our school have to regularly identify where students are at and monitor their progress?
- How can we lift each of our students towards higher achievement and measure their distance travelled?
- How can we collectively further develop our teaching skills and repertoire of practice to cater for high-achieving students?
- How do we progressively and explicitly build every student's motivation, metacognition and skills for self-regulation in their own learning?



Practical considerations for challenging learning

Create a culture and shared belief in challenging learning for all students

- Foster a positive culture and passion for learning which is fun, engaging and challenging.
- Build a strong motivation among staff to ensure that every student in every classroom is at their individual 'learning edge', including high-achieving students.
- Elevate differentiation as a priority of the school and a feature of every teacher's practice.
- Dedicate time for teachers to work regularly in teams, across year levels or faculty areas, to collectively consider students' progress and plan differentiated strategies, including case management.
- Embed formative assessment and quality feedback for students as routine practices across all classrooms.

Build collective capability for targeted teaching across the school

- Encourage and support teachers to closely monitor the progress of individual students and tailor classroom activities to levels of readiness and need.
- Support staff to continuously strengthen their use of data to understand where students are at in their learning, to identify appropriate starting points for teaching and to personalise teaching and learning.
- Build a repertoire of differentiated teaching strategies to cater for the needs of individuals and groups of students, including those students with higher order capabilities.
- Embed explicit instructional strategies for the development of higher order skills as part of the school's pedagogical practices.
- Provide dedicated time and structured protocols for teachers and leaders to collaboratively review student data and plan the next stage in the teaching and learning cycle.

Empower students to take ownership of their own learning

- Encourage and support students to be motivated in their learning and to have the courage to take on challenging tasks.
- Explicitly teach students cognitive and metacognitive strategies, including goal setting and how to plan, monitor and evaluate their learning.
- Provide timely and effective feedback and strategies to students so they can understand where they are at and how they can improve.
- Communicate with parents to provide information about student progress and what they can do to support their children in their learning.
- Facilitate conversations between teachers, students and parents about how learning opportunities are tailored to meet individual needs, the progress students have made and the next steps.

School snapshot

Case study: differentiation – it's all about people and progress

A Prep to Year 12 school on the Sunshine Coast has established a systematic approach to differentiation that supports the needs and progress of all students.

Students are tracked with a learning progression 'star system' against curriculum milestone expectations in English and maths. Each student's work is considered and feedback provided against exemplars and success criteria aligned to the Australian Curriculum, with pre- and post-test data collected over five-week cycles. The system identifies where students are at in relation to targets and plots learning progress at the individual and class level. Student progress data are discussed at the cohort level to evaluate and respond to each student.

Two phases in the school's teaching and learning cycle focus on 'planning for differentiation' (see Teaching and Learning Cycle on the next page for more details). At the end of term, teachers review and celebrate student data, identify curriculum areas for improvement, and introduce learning goals and baseline assessment. In week 5, staff check in to review and reflect on class and student learning progressions, adjust programs and strategies, focus on key students and curriculum areas, moderate assessment and share experiences.

Staff data discussions determine the allocation of resources and produce collective ownership of students' learning progress. Wrap around teams provide additional class support and create opportunities for teams to share practice. Strategies are tailored to moving students into the next star category. A 'no excuses' ethos means that staff seek to understand why students are sitting below target and are able to respond.

Teachers' professional judgements play a significant part in differentiated teaching practices. Differentiation occurs in every class, with students drawn into groups for focused curriculum work and engaged individually for more advanced curriculum immersion. Master classes cater for high-achieving students, exposing them to different ways of thinking and a shared culture of excellence and challenge.

Empowering students to become literate learners is also a differentiated practice. In the early years, the focus is on



“Learning happens in the minds and souls of individuals — not in the databases of multiple-choice tests”

(Sharratt & Fullan 2012, p. 97)

teachers providing clarity to students about learning goals with visual displays of target success criteria. At higher year levels, students are more personally responsible for their learning. Learning progressions, success criteria and exemplars help students to know what is expected of them and guide discussions on their progress. Students are encouraged to take ownership of and strive towards their learning goals.



For further details, email the School Improvement Unit at siumb@qed.qld.gov.au.

Teaching and Learning Cycle

The Teaching and learning cycle is made up of 3 main phases.

P4D *

Check-in

Phase Three is planning for Differentiation (Check in) - The focus for this session is to review and reflect student progress on the learning progressions and to review and adjust key strategies, intervention and extension programs to respond to data.

Week 5 – Twilight Sessions

Session Agenda:

- Review the previous 5 weeks student data in relation to all student success, using success criteria. Adjust as necessary, programs and resources and identify key students or curriculum areas that may require further targeting moving forward.
- (Facilitated by DP)
- Whole team to look at writing samples from each classroom teacher as a focus on our writing goal and as a mini moderation.
- Discuss and share strategies in relation to student data and renew math goal and baseline assessment if applicable.
- (Facilitated by HOC)

Key Guiding Questions

How will we deliver the learning for the next 5 weeks? (TARGET)

Review

Feedforward, support and extend

Phase one is Unpacking the Curriculum and key assessments for the term. The focus of this planning session is to unpack the curriculum plans in all K/Ls to develop a common understanding units, assessment tasks, resources and key events and learning experiences.

½ Day planning in week 9/10

Session Agenda

- Unpack overview for the term including key unit focus areas, incursions/excursions and calendar events.
- Unpack key intent of each unit of work and links to the Australian curriculum
- Unpack and develop a collective understanding of key assessment tasks and guides to making judgements
- Examine, share and unpack key learning experiences, activities and resources in the unit.
- Develop an assessment schedule, outlining timing of key assessment tasks and data collection
- Identify key learning goals for Planning for Differentiation
- Working in smaller teams to reboot units and assessment tasks and to create key resources for the unit.

P4C *

Identify Focus Goal

Unpacking units and key assessment

Students

Reflect, Adjust, Plan

Planning for Differentiation

Teach, monitor, give feedback, support, extend

Act

P4D *

Phase Two is planning for Differentiation - The focus for this session is to review and celebrate achievements from the term before and to introduce learning goals and baseline assessment for the upcoming term.

½ Day Planning in week 9/10

Session Agenda:

- Review the term's learning progressions, programs and resources to review and celebrate student progress. Identify key students or curriculum areas that may require further targeting moving forward.
- (Facilitated by DP)
- Plan for differentiation by unpacking learning goals, scales and baseline assessment. (Facilitated by HOC)

What do we expect the students to learn?

What will the learning look like? Unpack each draft learning goal and success criteria (Scale) with teachers for writing, reading and maths. Make adjustments to these scales using feedback from teaching teams.

How will we know when they have learned it? Examine and make adjustments to baseline assessment tasks for each learning goal. Plan for implementation of baseline test, post-test and ways to further monitor and give feedback to students across the term.

Identify and record targeted teaching activities, resources and programs that we will provide students the best chance of reaching our target.

Scan and Assess

Prioritise

Develop and Plan

* P4D = planning for differentiation

P4C = planning for curriculum

References and further reading

Australian Council for Educational Research (ACER) 2012, *National School Improvement Tool*, ACER, Melbourne.

Education Endowment Foundation, *Metacognition and self-regulated learning: guidance report*, educationendowmentfoundation.org.uk/public/files/Publications/Metacognition/EEF_Metacognition_and_self-regulated_learning.pdf.

Frey, N, Hattie, J & Fisher, D 2018, *Developing assessment-capable visible learners, Grades K–12*, Corwin, Thousand Oaks.

Hattie, J 2012, *Visible learning for teachers: maximizing impact on learning*, Routledge, London and New York.

Hattie, J & Clarke, S 2019, *Visible learning: feedback*, Routledge, Abingdon and New York.

Quaglia, RJ & Corso, MJ 2014, *Student voice: the instrument of change*, Corwin, Thousand Oaks.

Sharratt, L & Fullan M 2012, *Putting faces on the data: what great leaders do*, Hawker Brownlow Education, Moorabbin.

State Schools Division

Resources

- [Actionable playbooks](#) support teams to plan evidence-informed improvements in specific focus areas. Each playbook contains specific questions to prompt inquiry into the differentiated teaching and learning domain of the School Improvement Hierarchy and provides links to related resources.
- Australian Curriculum, Assessment and Reporting Authority (ACARA), *Student diversity*, www.australiancurriculum.edu.au/resources/student-diversity/
- [Early Start — Implementation](#)
- [Every student succeeding: state schools strategy 2019–2023](#)
- Global schools through languages hub:
 - [Supportive and differentiated teaching](#)
 - [Differentiation for languages](#)
- [The P–10 Literacy continuum supports diverse learners](#)
- [Whole school approach to differentiated teaching and learning](#)
 - [Individual curriculum plan](#)
 - [Students with disability](#)
 - [Curriculum provision to gifted and talented students](#)
 - [English as an additional language or dialect \(EAL/D\) students](#)

Evidence digests

Evidence digests are a resource for schools to use evidence to inform inquiry, which brings together learnings from local improvement initiatives, and links to relevant policy contexts and the wider body of research:

- [Special issue on Technology-assisted instruction](#)
- [Special issue on Every student with disability succeeding](#)
- [Special issue on Differentiating reading instruction](#)

Evidence studies

Case studies and projects section of the Evidence Hub:

Differentiation by design: challenge for every child. Tallebudgera State School [summary](#) (178KB) and [report](#) (1.20MB)

How do we improve student outcomes by meeting individual needs, and build teacher capacity at the same time? Belmont State School [report](#) (1.36MB)

Writing in P–2: Making writing criteria and data visible to students and teachers to gain a better outcome. Nashville State School [report](#) (1.25MB)



Resources

Australian Institute for Teaching and School Leadership (AITSL), 'How-to' guide: instructional coaching, www.aitsl.edu.au/docs/default-source/default-document-library/how-to-guide---instructional-coaching.pdf?sfvrsn=51acec3c_2.

Describes instructional coaching as learning alongside an expert who observes your practice and provides feedback.

Deans for Impact, *The science of learning*, deansforimpact.org/wp-content/uploads/2016/12/The_Science_of_Learning.pdf.

Summarises existing cognitive-science research on how students learn, and connects it to practical implications for teaching.

Knight, J, Elford, M, Hock, M, Dunekack, D, Bradley, B, Deshler, DD & Knight, D 2015, '3 steps to great coaching', *The Learning Professional: The Learning Forward Journal*, learningforward.org/journal/february-2015-issue/3-steps-to-great-coaching/.

Informs the practice of effective behaviour change and outlines three steps to this approach.

Professional learning

'Every child succeeding by design', QELi conference 2019, Monday 18 and Tuesday 19 November 2019, Pullman Hotel, King George Square, Brisbane, qeli.qld.edu.au/every-child-succeeding-by-design-qeli-conference/

Join Doug Fisher, Professor of Educational Leadership, San Diego State University and a teacher leader at Health Sciences High and Middle College, for two days of in-depth thought leadership examining building equity in schools, targeted teaching and intentional collaboration. Doug will be joined by educators from across Queensland who will share examples of professional practice in action through interactive workshop sessions.

[National School Improvement Tool training for principals, school leaders and peer reviewers](#)



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