

Working with the PLD Priorities: Nine high impact practices

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High impact practices

An overview of our process

The initial stage of this work took the form of two intertwined and concurrent research activities:

- We drew on high-level research reviews to describe the scope of practices implicated in each of MOE’s PLD priority areas. We organised these descriptions as a small number of clusters of capabilities, referencing these choices to the research literature. This scoping exercise provided a guide to the sorts of things we should search for in relevant quantitative data sets we could access.
- We mined available data sets for evidence of capability areas where teachers might need additional support. We chose two main data sets that captured *teachers’ own perceptions* of their practice: the Teaching and School Practices tool (TSP); and NZCER’s 3-yearly national surveys of teachers and principals. In some places we have supplemented these data with other data sets that make judgements *about* teachers, but this is only done where we do not have relevant data from the teachers themselves.

In the initial work just outlined, we found a strong overlap between the practices described for each of the four PLD priority areas. After reporting our initial findings to MOE we re-cut the data to work with synergies between the PLD areas. We went through the entire report to look for high-impact practices which are needed in each of the four priority areas. Then we refined the list to avoid duplication. We looked for practices where there was evidence that teachers found doing this thing hard. These are not the *only* practices associated with the four priority areas—just those that are likely to be more challenging for more teachers. The indicative statistics we have provided highlight areas where comparatively low numbers of teachers perceived they could do the practice “very well”, or where few agreed it was “a lot like our school” (which meant for far more teachers it was *not* a lot like the school). As a point of reference, Appendix A provides a list of all the practices described in the TSP tool that 25% or fewer teachers rated as those that they carried out “very well”—some of these data are not directly related to the four PLD priority areas.

The purpose of this secondary analysis was to identify areas that are likely to be a productive focus for PLD providers. We have drawn on our own wider PLD and research experience to think about *why* these practices might be particularly hard, and what the obstacles might be. PLD providers will bring a different lens and sets of experiences, and will no doubt want to adapt and add to the list. We see our list and breakdowns as provisional—PLD providers can adapt and supplement them.

Nine challenging practices

Below is the list of practices we arrived at by the process just outlined. For each practice we will provide indicative evidence that teachers might find making this sort of change comparatively harder than making other sorts of changes to practice.

Although we tried to avoid repetition, there are inevitable overlaps because each of these practices is complex and multi-faceted. Some pairs of practices could be seen as “two faces of the same coin”. In the pages that follow we will indicate where we see these synergies. PLD providers may well see others.

1. Knowing how to draw on students’ funds of knowledge as resources for learning
2. Building a repertoire of strategies to engage all/different students in their learning
3. Actively involving students in the assessment of their learning
4. Providing variety in the ways that students can evidence their learning
5. Analysing the impact that teaching has had on each student’s learning
6. Using whānau expertise, and expertise available in the local community, to support learning
7. Designing a curriculum that meets the intention of the NZC in ways that align with the values and interests of students, whānau, and the local community
8. Locating curriculum design thinking within the broader contexts of societal issues and trends, now and in the future
9. Using the affordances of digital tools to create learning experiences that would not otherwise be possible

1. Knowing how to draw on students' funds of knowledge as resources for learning

Teachers need to be able to:

- draw on awareness of their own cultural knowledge and assumptions (usually via some experience of being deeply immersed in a quite different culture from their own)
- use tasks that make space for students to bring their lives and interests into the learning
- understand the implications of students needing to be active constructors of knowledge and of their learning
- be on their own learning journey about the nature of knowledge and what different kinds of knowledge can do.

Indicative evidence that teachers might find this practice hard

18% of teachers chose “very well” when asked about their ability to “draw on students’ different languages, cultures, values, knowledges and practices as resources for the learning of all.” (Source: TSP tool)

28% of teachers chose “very well” when asked about their ability to “acknowledge your own languages(s), culture(s) and identities and how they influence your practice.” (Source: TSP tool)

61% of secondary teachers think it is “very important” for students to “make connections with things in their own culture or life outside school” but 27% said they did this “most of the time”. (Source: NZCER Secondary National Survey)

Challenges we might anticipate

The available evidence mainly supports the first two bullet points above. Points 3 and 4 are our attempt to dig beneath the surface of why these things might be so hard to do, even if they are valued in principle. If learning is seen as primarily being a process of transmission and accumulation of declarative knowledge, then the need to draw on students’ own funds of knowledge may not even make sense, and might not seem worth the effort when time in the classroom is so precious.

Self-awareness of one’s own culture is a good starting point for seeing and hearing learners, and not making essentialist assumptions about how to support different cultural groups.

The challenges of designing effective learning in context were explored by researchers in the 1990s (in response to the emphasis on contexts in the curricula developed in that decade) but then became somewhat neglected until recently.

2. Building a repertoire of strategies to engage all/different students in their learning

The practice of drawing on students' funds of knowledge puts students' life experiences and understandings in the foreground. This complementary practice foregrounds what teachers do when they work with those understandings to implement the learning they envisage.

Teachers need to be able to:

- understand Treaty of Waitangi commitments and their implications for professional practice
- apply Universal Design for Learning principles to learning/assessment resources and teaching practices
- engage in culturally responsive interactions with students
- understand the dynamics of engagement, i.e., what engages students, and why.

Indicative evidence that teachers might find this practice hard

31% of teachers and 35% of principals said it was “very like our school” that “students experience culturally responsive pedagogy embodying manaakitanga, whanaungatanga, ako and mahi tahi”. (Source: TSP tool)

31% of teachers chose “very well” when asked about their ability to “provide students with opportunities to use different approaches to demonstrate their learning (e.g., through oral or written work or using assistive technology).” (Source: TSP tool)

17% of teachers chose “very well” when asked about their ability to “ensure students think critically and talk about what and how they are learning.” (Source: TSP tool)

Challenges we might anticipate

While there is sound advice about UDL principles on TKI, we did not have access to data about awareness/access to these resources, or teachers' views about how important these types of practices actually are.

We wonder how many of our teachers have had opportunities to deeply reflect on learning and engagement per se. We talked about problematic behaviours that appear to be widespread in some contexts—for example, the use of “carrots” such as assessment and NCEA credit accumulation appears to be a proxy for genuinely engaging learning in some senior secondary contexts.

We wonder if easily accessible ideas such as learning styles, learning mind-set, etc. are also problematic. There is a kernel of useful insights in these ideas but none can ever be a “silver bullet”. We wonder if their emphasis on how *individuals* behave might come at the expense of a focus on *opportunities to learn* (i.e. a more sociocultural view of learning).

3. Actively involving students in the assessment of their learning

Teachers need to be able to:

- use a range of strategies for effective peer- and self-assessment
- conduct dialogic conversations that draw out and extend students' thinking about their learning and progress
- make effective use of exemplars that show students what the full range of work might look like (not just the very best examples)
- use metacognitive strategies that support insightful reflection about learning.

Indicative evidence that teachers might find this practice hard

21% of teachers responded “very well” when asked about their ability to “engage students in specific and timely feedback and feedforward on their learning”. (Source: TSP tool)

9% of secondary teachers and 7% of primary/intermediate teachers chose “very often” when asked about students’ opportunities to “critique examples of actual work across a range of quality”. (Source: NZCER National Surveys)

9% of secondary teachers and 16% of primary/intermediate teachers chose “very often” when asked about students’ opportunities to “assess each-others’ work and give each other feedback”. (Source: NZCER National Surveys)

6% of secondary teachers selected “very often” when asked about students’ opportunities to “help set expected outcomes/ standards for assigned work.” (Source NZCER National Survey)

Challenges we might anticipate

We suspect that it will be important for teachers to have opportunities to explore their own assumptions about what constitutes appropriate support. For example, in the early years of standards-based assessment some teachers thought it would be “cheating” to share assessment criteria with students. To what extent do teachers still worry about this?

The paucity of self- and peer-assessment opportunities, and the lack of use of a wide range of exemplars of different quality, might also indicate deeply-held instincts about what is appropriate and what is not. For example, teachers might worry that students will just be confused if they are shown work of lesser quality, or that contains errors of some sort.

We also worry about the binary way in which teacher-led and student-centred learning are often contrasted as either/or alternatives: either the teacher is in charge, or students (who don't know what they don't know) are left to their own devices. Do teachers understand, and know how to, draw on their own knowledge and skills as they support more student-centred learning?

4. Providing variety in the ways that students can evidence their learning

This practice constitutes the flip side of active student involvement in assessment. It is differentiated by a greater emphasis on the range of types of evidence collected.

Teachers need to be able to:

- build their own knowledge about key markers of progress in each learning area, and different ways these might be demonstrated
- notice instances where individual students make important shifts in their learning
- make effective and efficient use of student portfolios
- make strategic decisions about what is most important to assess, and why.

Indicative evidence that teachers might find this practice hard

14% of secondary teachers and 13% of primary/intermediate teachers selected “very often” when asked how frequently their students could “document their own learning achievements (e.g., through portfolios, reflection books).” (Source: NZCER National Surveys)

15% of primary/intermediate teachers and 23% of secondary teachers said students could “often” “share digital evidence of their learning progress and achievements in private online communities or e-portfolios.” Considerably more (45% primary/intermediate; 31% secondary) said they don’t do this but would like to. (Source: NZCER National Surveys)

Challenges we might anticipate

The research literature is clear that much greater support is needed to help teachers develop a robust understanding of expected learning trajectories, and to be able to detect “next steps” then proactively help students get there from where they are now. Access to robust research-informed progressions could help here, but teachers could also be overwhelmed because there are too many progressions to be able to keep them all in mind. This is why we added the final bullet point about making strategic choices about assessment priorities.

Time management is a key practical challenge, specifically finding efficient ways to collect and document evidence. Knowledge of, and fluency in using, appropriate e-resources is also a practical challenge. The number of teachers who have expressed desire to use e-portfolios is one clear indicator of this.

5. Analysing the impact teaching has had on each student's learning

This practice again has strong overlaps with practices related to student involvement in assessment and the documentation of a range of evidence of learning. An *evaluative* component is the point of difference here, with an inquiry focus on how effectively the teacher has supported students to learn (and by implication what they might need to do differently).

Teachers need to be able to:

- notice and respond in the moment and recognise the significance of the learning as it unfolds
- keep systematic records of student achievement, and record a range of evidence so that records of learning are not always reliant on the same types of outcomes
- understand how to draw deeper layers of meaning from student assessment tools
- meaningfully interpret patterns in achievement data.

Indicative evidence that teachers might find this practice hard

24% of teachers selected “very well” when asked about their ability to “analyse the impact your teaching has had on students’ learning”. (Source: TSP tool)

A recent evaluation of multiple professional inquiry projects, completed with support from the Teacher-led Innovation Fund (TLIF), reported ongoing issues with teacher confidence and capability in collecting, analysing, and acting on data. On the evidence presented, many TLIF projects did not demonstrate substantive improvements for learners. (Source: National-level research report)

Challenges we might anticipate

There is a clear message in the wider research literature that building data literacy for *all* teachers is a challenge. To illustrate: we found a professional learning inquiry within a *kāhui ako* that found that many teachers are challenged to: ask meaningful inquiry questions; be systematic about data collection; access advice about appropriate analysis tools; “unpack” the data generated by the analysis; and understand what the findings of the data analysis mean in the context of the inquiry.

Another challenge is to use assessment data appropriately. For example, over-determination of the meaning of small statistical differences is something NZCER researchers encounter quite often. Conversely, sometimes summative data that could be useful for teaching and learning purposes are not used in this way. Both PAT and e-asTTle assessment resources can be used formatively if teachers know how. Increasingly, National Monitoring (NMSSA) data is undergoing additional analysis to support the provision of advice and guidance for teachers. The challenge here is to ensure widespread awareness of these “value add” possibilities.

6. Using whānau expertise, and other expertise available in the local community, to support learning

We envisage two distinct but interrelated aspects of this practice. One is to draw on whānau expertise about the learning of the individual child. The other is to draw on the expertise available in the local community to support class/school-wide learning programmes.

Teachers need to be able to:

- clearly articulate and communicate their professional purposes when in conversation with other adults
- build reciprocal relationships that allow them to hear whānau advice about their own children's learning
- use strategies that allow them to find common ground with whānau
- listen to, and act on, advice from whānau and the local community.

Indicative evidence that teachers might find this practice hard

23% of teachers and 21% of principals think it is “very like our school” to “actively seek the expertise of local community, hapu, and iwi.” (Source: TSP tool)

22% of teachers selected “very well” when asked about their ability to “use the knowledge that parents/whānau have about their child to support their child's learning (e.g. to set and review goals)”. (Source: TSP tool)

5% of secondary teachers indicated that “my professional learning has provided practical help with building positive relationships with parents and whānau.” (Source NZCER National Survey. A caveat here is that we do not know how often this was an explicit focus of the PLD they did experience.)

Challenges we might anticipate

In the initial sweep of the research we noticed that practices that convey information from school to home appear to happen more often than dialogic practices that bring insights from home into the school and classroom. Why might this be? There is a widespread societal expectation that the teachers are the *experts* in the learning context. Their expertise is unquestionably critical to implementation of effective learning but we wonder if this expectation might get in the way of them being open to hearing other expertise and acting on it.

The challenges outlined for the practice of drawing on students' funds of knowledge as resources for learning are also relevant here, particularly being aware of one's own cultural biases and preconceptions.

7. Designing a curriculum that meets the intention of the NZC in ways that align with the values and interests of students, whānau, and the local community

Teachers need to be able to:

- articulate clear purposes for the learning programmes they design
- design and implement rich tasks that integrate key competencies and content to create more complex outcomes
- draw on the potential learning resources in the local community to support student learning in ways that have reciprocal benefits for students and the community
- draw clear lines of sight between the overarching school curriculum (vision, values, etc.) and their classroom programme.

Indicative evidence that teachers might find this practice hard

8% of teachers selected “very well” when asked about their ability to “collaborate with the local community so that their expertise can be used to support collective learning in class or other school activities.” (Source: TSP tool)

A recent ERO evaluation reported that key competencies were not visible in learning programmes at 28% of schools visited, and were still at the basic level of “learning about key competencies” in a further 50%. The reviewers saw very few instances where key competencies were fully integrated into rich learning tasks. (Source: ERO report)

28% of secondary teachers and 34% of primary/intermediate teachers said it was “very important” for students to have opportunities to “work together on a project/activity to make a difference in their class/ school/ local environment/ community”. Fewer said students in their calls could do so “most of the time” (8% secondary; 16% primary/intermediate). (Source: NZCER National Surveys)

43% of secondary teachers and 63% of principals perceive that “NCEA sets the senior secondary curriculum” (Source: NZCER National Surveys)

Challenges we might anticipate

There is a substantive body of research that identifies the two-part structure of NZC as problematic. While the vision, values, principles, and key competencies of the front part are well supported in principle, they have not demonstrably influenced the design of classroom learning programmes in practice.

A growing number of researchers have identified the importance of a having clear moral purpose as a guide to curriculum design thinking in rapidly changing and uncertain times. One specific

challenge for secondary teachers is to not allow NCEA assessment and gaining credits to become the default purpose for learning that is communicated to students by teachers.

8. Locating curriculum design thinking within the broader contexts of societal issues and trends, now and in the future

This practice complements designing and enacting a curriculum specific to teachers' own classes. The point of difference is that curriculum design thinking is a *collective* exercise designed to ensure coherence within the school, and on pathways between schools in a community.

Schools need to be able to:

- identify and investigate key societal issues and trends that have implications for their work
- based on these investigations, collectively articulate clear purposes for learning programmes and ensure coherence between them (e.g., across subjects, at different levels)
- collaborate with teachers in other schools to design coherent and flexible learning pathways.

Indicative evidence that schools might find this practice hard

24% of teachers and 32% of principals selected “very like our school” when asked if they collectively “discuss trends in society and the economy and what they might mean for our teaching now and in the future.” (Source: TSP tool)

40% of teachers and 39% of principals selected “very like our school” when asked if “staff take a meaningful part in the development and review of the school vision and goals.” (Source: TSP tool)

27% of teachers and 36% of principals selected “very like our school” when asked if “school goals really do guide our day-to day work.” (Source: TSP tool)

34% of teachers and 34% of principals selected “very like our school” when asked if “there is coherence across year levels for students to ensure they keep building knowledge and skills over time.” (Source: TSP tool)

Challenges we might anticipate

It is a challenge for everyone to become and stay well informed about complex issues in rapidly changing times. Further complexities are added by a web of interrelationships between issues, often with implications for learning and for students' future lives. Given their busy “day jobs” many teachers might see discussion of such issues a lower priority than their immediate tasks.

People's values will inevitably influence their responses to issues, and dissent is to be expected. Yet dissent (and indeed anything seen to be political) is usually avoided in classroom discussions. Does this avoidance also impact collective professional debates? If not, why is it that only around a third of teachers and school leaders perceive that these critical conversations about the moral purpose of their work are taking place in their school?

9. Using the affordances of digital tools to create learning experiences that would not otherwise be possible

This practice is not about teaching the digital technologies curriculum but about using digital technologies in situations where intended learning outcomes are more difficult, or not possible, to achieve with traditional teaching and learning.

Teachers need to be able to:

- build their personal digital fluency
- clearly identify and articulate the learning purposes of the digital tools they are interested in (affordances and limitations)
- understand how to implement effective pedagogies for interactive devices.

Indicative evidence that teachers might find this practice hard

15% of primary/intermediate teachers and 19% of secondary teachers selected “strongly agree” when responding to the statement “I have the knowledge and skills I need to provide learning with digital technology”. (Source: NZCER National Surveys)

36% of primary/intermediate teachers and 17% of secondary teachers selected “strongly agree” when asked whether they had “the knowledge and skills I need to support students who rely on digital technologies to access the curriculum” (Source: NZCER National Surveys)

13% of secondary teachers strongly agreed that “I have good access to ongoing PLD and support to continue developing my use of digital technology”. (Source: NZCER National Survey)

10% of primary/intermediate principals and 28% of secondary principals selected “strongly agree” when asked whether “this school had adequate expertise to support good quality learning with digital technologies”. (Source: NZCER National Surveys)

Challenges we might anticipate

The teacher data mainly implies personal challenges with digital fluency, in combination with practical support challenges when using digital technologies for learning. PLD in these practical areas would appear to be an urgent need.

We found no quantitative data from the teachers themselves that directly addressed the challenge of using digital technologies to achieve learning outcomes that cannot be achieved via conventional pedagogies. Many of the deeply held beliefs that we have already raised in the discussion of the other high impact practices potentially come into play here. For example, teachers need to perceive that they can, and should, still provide strong direction and support when students are working with individualised learning programmes (this is not an either/or binary). They also need a clear sense of the learning purposes they wish to achieve, both immediately and longer term.