



# **System-level drivers for the adoption of evidence-based practices in schools**

Systematic review

March 2026

**The Australian Education Research Organisation (AERO) is Australia’s national education evidence body, working to achieve excellence and equity in educational outcomes for all children and young people.**

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AERO acknowledges the Traditional Custodians of the lands, waterways, skies, islands and sea Country across Australia. We pay our deepest respects to First Nations cultures and Elders past and present. We endeavour to continually value and learn from First Nations knowledges and educational practices.

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# Summary

This report outlines strategies that education system leaders can use to support the adoption of evidence-based teaching practices within schools, recognising the importance of teaching quality to lift student outcomes. It is based on an adapted systematic review of available evidence conducted by the Australian Council for Educational Research (ACER) for and in collaboration with the Australian Education Research Organisation (AERO). The report begins by identifying considerations or approaches that system leaders can apply to selecting strategies to support schools, to ensure that they are culturally reflexive, aware of contextual enablers and barriers, and aligned with the approaches evident in high-performing education systems. It then presents strategies that system leaders can use, organised thematically in line with the COM-B model (**C**apability, **O**ppportunity and **M**otivation = **B**ehaviour change). The COM-B model is a trusted behavioural insights framework for helping system leaders understand how they can influence practice, focusing on schools as the key site of behaviour change.

# 1. Introduction

Despite recognition of the importance of evidence-based practice in schools, it remains difficult to achieve adoption of evidence-based practice at a system level. Driving uptake of evidence-based practices involves more than ensuring that quality evidence is available to teachers and school leaders. It also requires systems to establish conditions that make the uptake of evidence-based practices feasible and desirable (Nelson & Campbell, 2017). This review is focused on the actions of systems to support the adoption of evidence-based practices across their schools. It is complemented by [AERO's Learning Partner Project](#), where AERO has been working in partnership with schools, to learn about effective approaches to implementing evidence-based practices in different school contexts.

Adoption of evidence-based practices further warrants close attention to culture and context at the school and system level. The enduring effects of Australia's colonial history demand that cultural responsiveness to First Nations students and communities forms part of all efforts to improve teaching practice within education systems and schools. Strategies to drive adoption of evidence-based practice in schools must also be situated within the unique attributes of each education system that may support or inhibit practice change. Inattention to contextual factors may cause even proven reform strategies to falter.

This report aims to guide system leaders in selecting culturally responsive, contextually appropriate strategies to drive evidence-based practice in the schools that they support, based on the available evidence. It begins by establishing 3 considerations that system leaders can cultivate to engage constructively with the strategies identified in the evidence base: *cultural reflexivity*, *contextual awareness* and *common features of high-performing systems*. Beginning with these considerations recognises that how system leaders think about selecting strategies can be as important as the strategies themselves.

The report then offers an evidence-based 'playbook' to help system leaders identify the strategies to support evidence-based practice that are most likely to be effective. As the work of system leaders is highly complex and context-dependent, it is difficult to find evidence of rigorously proven approaches. Most studies are best treated as indicators of *what could work* rather than *what will work*, as some slippage inevitably occurs when system leadership strategies and insights are applied across contexts. There are nevertheless themes that emerge across studies and contexts that signal a degree of convergence in the approaches that have proven most effective in encouraging schools to adopt evidence-based practices. These themes form the substance of this report.

This adapted systematic review has been conducted by the Australian Council for Educational Research (ACER) on behalf of, and in collaboration with the Australian Education Research Organisation (AERO), by a team of non-First Nations researchers. AERO and ACER are grateful for the guidance received from members of AERO's First Nations Expert Reference Group (ERG) to support appropriate engagement with First Nations perspectives within this study.

# 1.1 Research questions

The study explored the following research questions:

- What are the key theories and approaches from implementation science and policy research on how education systems can support the adoption of evidence-based practices in schools?
- What are the key elements and strategies of high-performing systems and systems that have achieved significant improvement in student outcomes?
- What are the common operational functions within education systems that support the adoption of evidence-based practices in schools?
- What are the common enablers and barriers faced by systems in delivering these core functions to support the adoption of evidence-based practices in schools?

Key concepts from the research questions are defined in the following list:

- **Evidence-based practices**

This review adopted AERO's definition of evidence-based practices in education as practices backed up by research evidence, 'where there is broad consensus from rigorously conducted evaluations that they work in many cases across various contexts, for different subgroups of students and various locations' (AERO, 2023, p. 2). It is beyond the scope of this study to define specific evidence-based practices that schools may adopt, which can be found in other AERO publications. The strategies in this study may be used to support any practice for which a robust evidence base exists.

- **Education systems**

This review defined a 'school education system' as an authority directly overseeing the administration of multiple schools, with responsibility for workforce, curriculum, policy, funding, regulation and evaluation. In Australia's federated structure, such systems include state or territory departments of education; state or diocesan Catholic education offices managing systemic schools; or authorities responsible for multiple Independent schools. Internationally, it includes other federated systems, such as district education authorities in the United States, as well as national systems where school administration occurs centrally, such as in the United Kingdom or New Zealand.

This report extends on the language of the research questions by using the term 'system leaders' to refer to the individuals who work within education systems. This term helps focus attention on the people whose everyday decisions and actions may be influenced by this research, rather than positioning education systems as abstract entities. It is also a departure from the term 'policymakers' often used in educational research, recognising that system leaders occupy a range of roles not all directly connected to policymaking.

System leaders may be employed by education system authorities in a range of functions, including policy, regulatory oversight, or strategic, operational or pedagogical support for school leadership teams and networks. In Australia, a range of system leadership roles exist at state, territory or regional level, from executive roles to advisors working directly with teachers and school leaders. All such roles are within scope for this study, as subjects and potential beneficiaries of its findings. These system leaders may contribute to school improvement directly, by leading actions or collaborating with school leaders, or indirectly, by supporting and empowering school leaders and teachers through various forms of assistance (Hitt & Meyers, 2022) as described throughout this report.

Conceptualising system leadership in this way recognises the interdependence between policy and implementation roles within education systems, reflecting the disciplinary context for this study. Policy studies and implementation science are increasingly connected disciplinary fields, as all service systems strive to connect policy intent and implementation (Hudson et al., 2019). Implementation science can help to ensure that policies and programs are 'actually implementable', going beyond the usual focus on professional learning to consider the full suite of supports required for reforms to succeed in specific contexts (Mildon & Perini, 2018). Fostering a deep understanding of implementation science can also strengthen system leaders' theories of change and better position schools as the site of implementation (Cairney, 2024). By framing its findings using an implementation science model (see section 3), this report reinforces the message that attention to implementation is essential in all system leaders' roles.

## 1.2 Methodology

The study used an adapted systematic review methodology designed to explore a large and diverse evidence base with an appropriate level of rigour. The core systematic review process focused on peer-reviewed publications, while the expanded search strategies examined the broader evidence base for policy and implementation studies, including 'grey literature' published by credible organisations outside of academic journals.

### 1.2.1 Core systematic review

The core systematic review employed a systematic search of academic databases and other resources in the education, public policy and implementation fields. Trained ACER researchers applied internationally recognised procedures for conducting rigorous systematic reviews (Aromataris et al., 2024), derived from the field of health research and increasingly applied to quality research in education. These procedures, including the search strategy and Preferred Reporting Items for Systematic reviews and Meta-Analyse (PRISMA) diagram, are detailed in Appendix A. Studies located in the search were screened for inclusion using the following criteria:

- written in English and published in the last 20 years
- undertaken in Australia or other Organisation for Economic Cooperation and Development (OECD) countries to ensure some transferability across contexts
- focused on system leaders (as defined in section 1.1)

- useful for identifying specific system-level strategies or approaches that can effectively support the adoption of evidence-based practices in schools.

Further criteria were subsequently agreed with AERO, to exclude studies focused on funding, infrastructure, initial teacher education, workforce and teacher retention. While these system functions can impact of the uptake of evidence-based practice in schools, they also intersect with a range of other issues too broad for consideration in this study. Within-school mechanisms, such as school leadership strategies, were also excluded.

### **1.2.2 Extended searches**

Two extended searches supplemented the systematic search to locate relevant evidence and commentary from ‘grey literature’ and other non-academic resources. The extended searches further served to mitigate the power imbalance and bias of Western research. As such, one search explored prominent general resources not captured in the systematic search, while the other focused specifically on First Nations perspectives due to their under-representation in the academic literature. Both searches used targeted strategies as outlined in this section.

Material was located in the extended searches using the following methods:

- Key references identified by the ACER or AERO teams from past research.
- Publications created or promoted by key influencing organisations in international and Australian education policy, such as The Australian Education Leader.
- ‘Snowballing’ to locate relevant materials from reference lists of key publications.
- Consultation with AERO’s First Nations ERG (via AERO team).
- Use of ResearchRabbit to check for additional citations from First Nations authors.

Literature identified in the extended searches was used for the following purposes:

- framing the context and themes for the systematic review, including in positioning cultural reflexivity as a guiding principle for system action
- calibrating the systematic review search results (checking for key texts)
- supplementing the systematic review findings in relevant areas.

While every effort was made to locate relevant literature, ACER recognises that the extended searches do not represent a comprehensive analysis of the ‘grey literature’ landscape. The quality of the extended searches was determined by their defensibility in meeting the project goals (fitness-for-purpose) and their contribution to the findings.

### **1.2.3 Extraction and synthesis**

The process of extracting evidence from the studies and resources located in each search was customised to the objectives of the review. While the extraction process in a typical systematic review involves detailed analysis of all included studies, the distribution of the literature (see Appendix B) indicated that a differentiated approach would yield more relevant insights with greater efficiency. The large number of American studies (45% of the 330 studies) were scanned rapidly to determine which were most relevant to the Australian context, while all Australian studies were examined closely. Higher priority was given to quality literature reviews or evidence syntheses. This enabled an effective analytic process to occur within the designated timeframe for the study.

Extraction of evidence was focused on identifying the specific system-level theories, approaches, elements and strategies that had contributed to adoption of evidence-based practices in schools. Many studies described combinations of multiple strategies or elements, and there was wide variability in the extent to which the theory underlying system leaders' actions was explored. Rather than adopting a common extraction frame for all studies, the insights extracted from each study were therefore selected based on the value that they were likely to add to system leaders' knowledge base against each of the research questions. An overview of all included studies is provided at Appendix C.

## **2. Considerations for system leadership**

This section addresses the considerations that system leaders can adopt in taking action to support the adoption of evidence-based practice in schools. These considerations were both recurrent in the literature, and implicit in the research questions for this study (see section 1.1). Rather than constituting evidence-based strategies or actions themselves, they are best viewed as 'lenses' through which to appraise, select and adapt specific evidence-based strategies for supporting practice change in schools. These lenses have also been applied throughout the study in synthesising and interpreting the findings.

### **2.1 Cultural reflexivity**

Cultural reflexivity requires individuals to critically examine their personal attitudes, values, biases and assumptions to become responsive and engage with people in a culturally safe manner (Ryan, 2023). In Australian education systems, cultural reflexivity is essential for enabling individuals to develop responsive practices that create culturally safe learning environments that address the diverse knowledge, skills, and cultural identities of First Nations students (Morrison et al., 2019; Ryan, 2023).

Critical reflection on one's own assumptions and beliefs, alongside meaningful engagement with First Nations communities and knowledge of First Nations cultures and histories, can enable cultural responsiveness or competence to emerge (Ranzijn et al., 2008).

Cultural reflexivity can be applied to the selection of strategies to support evidence-based practices in schools through attention to local cultural contexts. For new initiatives to be culturally responsive, caution is required to ensure that change initiatives from another context are not ‘inappropriate to the prevailing cultural norms’ (McLure & Aldridge, 2022, p. 417), and ensuring that system-wide initiatives can be flexibly ‘adapted at the local level with local stakeholders’ (NSW Department of Education, 2023, p. 28). In the Australian context, this includes paying attention to the differences between and, importantly, within diverse First Nations communities (Carey, 2015).

At a deeper level, cultural responsiveness and reflexivity is a lifelong, non-linear process, unique to each individual and situated in the changing dynamics of culture, identity and society (J. Biles & Biles, 2020). It involves attention to how education systems marginalise First Nations voices and communities – for example, Burgess and Lowe (2022) argue that the Alice Springs (Mparntwe) Declaration’s ‘privileging [of] western values such as education for employment and economic prosperity’ (p. 17) presents a deficit view on First Nations students. It also involves considering which voices may be silenced or marginalised in research, recognising the scarcity of First Nations-led research and the paucity of Indigenous worldviews in the academic community (Shay et al., 2023).

System leaders who engage in deep cultural reflexivity are better able to understand the power dynamics that affect policy and implementation, and how ‘different policies bring with them different values and racialized meanings that are consequential for how policies are supported (or not) and taken up in practice’ (Daramola et al., 2023, p. 27). They are therefore more likely to lead systems effectively, as well as to be effective allies for First Nations leaders creating change in their own communities. System leaders are therefore encouraged to engage with this study through a culturally reflexive stance.

## **2.2 Contextual awareness**

Contextual awareness is an essential consideration for leadership in any system, to recognise the unique set of enablers and barriers that exist within the system that affect the likely success of policies or programs. Mapping these factors can help to identify strengths in the system that can be leveraged to accelerate or enhance the change process, as well as barriers that may impede progress even when a robust implementation plan is in place.

This section highlights 3 dimensions of system context to be considered in system leaders’ choices of strategies to support evidence-based practice in schools. While these dimensions may be influenced to some extent by the strategies outlined later in this report (for example, a leadership development strategy may influence relationships), the goal of this section is to identify the relatively durable systemic characteristics that are unlikely to be readily modified through system leaders’ actions. They therefore constitute the circumstances or contextual factors that system leaders must consider, both to leverage the system’s strengths and work within (or around) its limitations.

### **2.2.1 Historical factors**

Education systems are cultural historical products (Daniels, 2013) with inherent legacies that can enable or block change. Any new initiative introduced into schools is layered onto existing practices that have evolved within the school’s historical context – often influenced by long-standing challenges

like systemic underfunding (Stornaiuolo et al., 2023) or existing system-wide inequity (Meyers, 2020). System leaders, therefore, require deep awareness of existing system and school contexts and histories (Schleicher, 2024).

Historical factors can affect readiness for change by creating system inertia, when established policies and processes do not provide the flexibility required for change, or when teachers' lived experience of prior reform makes them reluctant to engage with new initiatives (Snyder, 2017). Conversely, inertia can also fuel change when 'inertial momentum' occurs; multifaceted and sustained interventions across the system can bring about change that gets locked in, building momentum for new initiatives to succeed (Mason, 2014, p. 8). Understanding these dynamics can help system leaders leverage momentum from past policies and programs to drive new initiatives.

Understanding the history of Australia's education systems is especially important for cultural reflexivity as it relates to First Nations perspectives. As exemplified in the following quote, the history of education reform – as in other policy areas – may be seen by First Nations communities as failing to address the ongoing effects of colonisation:

*Policy across generations has done little to change our life circumstances and health. We are but 1 million people. Yet successive governments fail us, and we live with untended consequences of policy failure* (Bainbridge, 2023, p. 2).

System leaders also require awareness of the historical and ongoing exclusion of First Nations voices in education policy and research, and the ways that this affects levels of trust among First Nations peoples in consultative processes and system-led initiatives:

*The lived experiences, voices, knowledges, solutions and aspirations of Indigenous peoples who are the subjects of these policies and research are frequently excluded, disregarded and deliberately silenced* (Shay et al., 2023, p. 77).

Listening to truth-telling about First Nations people's historical experiences of education can help non-First Nations system leaders build their cultural reflexivity.

## **2.2.2 Relationships and networks**

The relationships between interconnected stakeholders across education systems can catalyse or obstruct change strategies. System leaders need deep knowledge of relationships at system, school and local levels, to know where productive (or inhibitory) alliances are likely to be formed and build strong alliances with supportive stakeholders (Schleicher, 2024). Such alliances can ensure that stakeholders across the system and beyond (including media) converge to support change strategies. In contrast, tensions among stakeholders can challenge implementation efforts (Rodwell, 2010).

A school system's location or size can affect the quality of its relationships, with logistical challenges hindering meaningful engagement with system strategies and leading to inequitable policy implementation (Wallace & Arredondo, 2022). System leaders should therefore work to build 'connections between the macro (district), meso (individual schools) and micro (teachers) levels of the system' (McLure & Aldridge, 2022, p. 421). Leveraging formal and informal networks between

teachers and leaders can also allow them to self-organise, coordinate and adapt strategies, and let new approaches come to fruition (Koh & Askell-Williams, 2021; Rodgers, 2024). This complex web of relations can therefore be an enabler when system leaders can leverage these networks, relationships, and informal structures in a way that supports evidence-based practice.

Relationships are the cornerstone of engagement with First Nations communities, and an essential precondition to determining strategies for action (Yunkaporta, 2023). Relationships between system leaders and First Nations stakeholders can be complex and ‘take time to develop and effort to maintain’ (NSW Department of Education, 2023, p. 48). Strong relationships with First Nations stakeholders ensure that engagement in all aspects of school reform is not tokenistic or superficial (Morrison et al., 2019, p. 48), and provide a strong foundation for collaboration to achieve system change over time.

### **2.2.3 Agility**

The agility of an education system, or its capacity to absorb change, is an important dimension of system context to consider in choosing strategies to support the adoption of evidence-based practices. Another recent AERO study of variation in schools’ readiness to implement change (Scott et al., 2023) uses the following definition of readiness for change: ‘the developmental process by which a person, organisation, or system increases its capacity and willingness to engage in a particular activity’ (Peterson, 2013, p. 44). The study argues that readiness for change in schools has been given insufficient attention in efforts to improve practice – and also warrants consideration at a whole-of-system level.

Schools are increasingly regarded as complex adaptive systems (Rodgers, 2024), with many interactions between different parts of the system affecting whether intended outcomes will occur (Koh & Askell-Williams, 2021). The ‘evidence ecosystem’ is similarly dynamic (Moore et al., 2024, p. 11), meaning that systems’ work in supporting schools to implement evidence-based practices should be seen as a ‘continuous, reciprocal process rather than an end-product of an intervention’ (Koh & Askell-Williams, 2021, p. 282). Rather than treating school improvement as linear, system leaders can give attention to opportunities arising in cycles of growth, change and renewal, such as those triggered by significant events (Jackson et al., 2022, p. 15). They can also increase system agility by supporting capacity for school-level innovation to enable schools to respond dynamically to ongoing changes and newly emerging evidence (Moreno-Casas & Bagus, 2022).

First Nations perspectives can help non-First Nations system leaders to understand non-linear, iterative models of change in complex adaptive systems. A recent health study notes that ‘while ‘systems science’ is relatively new in the Western world, elements of systems thinking have been strongly present in Aboriginal communities for thousands of years’ (Browne et al., 2021, p. 2). These ways of thinking connect history and relationships to readiness for change, grounded in deep awareness of Country and local context.

## 2.3 Common features of a high-performing system

The research questions highlight high-performing education systems as useful sources of insight into supporting evidence-based practices in schools. High-performing systems may have achieved notable increases in student learning outcomes at a particular point in time, or for a particular curriculum area or cohort. The findings in this report include a range of insights from high-performing systems around the world, especially US school districts where most of the evidence has been generated.

While specific strategies from high-performing systems are noted in the findings that follow, this section notes the features that appeared common to high-performing systems in the literature. These features appeared in the literature as broad cultural, technical and interpersonal norms that influenced the way that system leaders exercised their responsibilities. The 3 key features that emerged most strongly are:

- **A 'relentless focus on alignment'** (National Center on Education and the Economy, 2024) leads high-performing systems to maintain a high level of coherence across all system activity. They are characterised by well-integrated policy and instructional materials and alignment between systems and schools. In applying this consideration to the selection of strategies to support evidence-based practice, system leaders need to consider how all strategies work together (for example, how system-wide professional learning relates to local engagement with communities) to avoid burdening schools with the task of connecting the dots.
- **A balance between flexibility and prescription** (Masters, 2023) leads high-performing systems to set clear expectations for their schools with enough flexibility to enable teachers and leaders to exercise autonomy and respond to their contexts. These systems are willing to adjust the balance for individual schools and over time, as the need for guidance or openness keeps evolving (Schleicher, 2018). A recent literature review on high-performing school systems noted that the increase in evidence about effective practice suggests a stronger role for system leaders in supporting schools to adopt these practices (Literacy and Numeracy Education Expert Panel, 2024). This consideration is therefore especially relevant to promoting evidence-based practices, to avoid overprescription that stifles local adaptation, but also ensuring that practice reflects the evidence base.
- **Belief in the capacity of all stakeholders** leads high-performing systems to activate capability at all levels of the system, from system leaders to school staff, to students and the wider school community. Belief in their ability to effect change motivates all stakeholders to engage in school improvement and is most effective when stakeholders can both guide and contribute to the change (Purcell et al., 2020). This consideration avoids overburdening any single stakeholder (at a system or school level) with carrying the responsibility for practice improvement, and ensures that all resources within the system are effectively deployed.

System leaders in any part of the system can adopt these features in selecting and applying strategies from the literature to support evidence-based practices in schools. These features may be especially valuable in coordinating effort across parts of a system, to ensure that system leaders across all operational functions are driven by shared understandings. They can mitigate against some of the known risks in system reform (such as loss of cohesion, excessive prescription or flexibility, or reliance on 'top-down' action), creating a constructive climate for change leadership across multiple strategies.

# 3. Strategies to influence behaviour

This section moves from the considerations that guide system leadership to the specific strategies that system leaders can use to support the adoption of evidence-based practices in schools. It draws together the key theories, approaches, elements and strategies that have been found across the core systematic and extended searches, focusing on those that are most likely to usefully inform action by system leaders in the Australian context.

The findings from the review are organised thematically, to help system leaders readily identify opportunities to apply them in their work. The themes are derived from the COM-B model (**C**apability, **O**ppportunity and **M**otivation = **B**ehaviour change), a trusted behavioural insights framework used in implementation science for helping system leaders understand how they can influence practice (Ejler et al., 2016; Michie et al., 2011), as illustrated in Figure 1.

**Figure 1: COM-B model (adapted from Abdo et al., 2021, p. 45)**



Focusing on behaviour change by teachers and school leaders as the target outcome helps to position the school as the key site of action in theories of system change. A 2017 OECD Working Paper noted that insufficient attention has been paid to schools as the site of implementation in international definitions of education policy implementation:

*Very few definitions consider the role of implementation in translating policy in schools' daily practices. These changes on the ground are what really affect education outcomes, however, and as such they deserve a central place when studying implementation (Viennet & Pont, 2017, p. 26).*

While action at the school level matters, system leaders cannot ‘let themselves off the hook’ (Burns, 2023, p. 7). Implementation of evidence-based practice is most likely to occur if system leaders adopt strategies to actively support action at the school level.

The COM-B model has been reordered in the discussion of the findings, to position Opportunity as the first influence on behaviour that system leaders must address. This counterbalances a tendency among system leaders to focus on Capability first, and to assume that all that teachers need to adopt new practices is the expertise to do so. In fact, the findings in this review show that opportunity may have even greater bearing on the adoption of evidence-based practices – and is linked to capability, in that proficiency in new practices cannot be achieved without the opportunity to explore them. Motivation is placed at the centre of the model, as both influencing – and influenced by – capability and opportunity.

## 3.1 Building opportunity to adopt evidence-based practices

The opportunity for teachers to adopt evidence-based practices depends on how easily these practices can be accessed and implemented within their day-to-day work.

System leaders can build opportunity using the following levers.

### 3.1.1 Clear, aligned system-wide strategy and vision

**A clear strategic focus on evidence-based practices enables teachers and schools to prioritise it, reducing ‘opportunity costs’ that arise when effort is directed elsewhere.**

To create opportunities for schools to effectively implement evidence-based practices, system leaders must establish a clear, aligned strategy and vision. A clear vision creates a driving force for change across the education system, ensuring that all schools remain focused on the evidence-based practices that will help them achieve their goals. It is a key feature of the focus on coherence that high-performing education systems adopt.

Research indicates that education system strategy is most effective when it is:

- oriented towards clearly-defined goals (McLure & Aldridge, 2022), with a small number of priorities to focus attention (McKinsey, 2024). Teachers’ need to address numerous policies and frameworks daily can cause reluctance and difficulty prioritising (Fletcher et al., 2004). Multiple reforms being implemented at once can lead to change fatigue and a perceived lack of agency among teachers (McLure & Aldridge, 2022), or to deprioritisation of implementation (Vanlommel & van den Boom-Muilenburg, 2024, p. 625).
- supported by a clear theory of change to translate strategy to action (Honig & Rainey, 2023), with school-level implementation considerations built into all stages of the policy process (Australian National Audit Office, 2014).
- ‘carefully sequenced and paced’ (Vanlommel & van den Boom-Muilenburg, 2024, p. 623) to establish a manageable cadence for change (McKinsey, 2024). Effective education reform is typically ‘evolutionary rather than revolutionary’ (Leithwood, 2010, p. 267).

- sufficiently adaptive to accommodate emerging priorities, while buffering against distractions that may divert resources from system goals (Honig & Rainey, 2023).

## Alignment of strategy and context

A clear strategy or vision must also be aligned with its context, with system leaders applying the consideration of contextual awareness (see section 2.2) to strategic planning. This requires system leaders to consider ‘the extent to which the strategy, structure, and culture of a system are aligned with the environment and the change initiative to create a synergetic whole that makes change possible’ (Vanlommel & van den Boom-Muilenburg, 2024, p. 612). Elements of structural, cultural and environmental alignment are outlined in the following sections.

### Structural alignment

Structural alignment involves ensuring that any change initiative is aligned with the system’s overarching strategy and goals. Clear strategies or improvement plans can be vehicles for such alignment (Hannay et al., 2006a; Leach, 2021). To improve structural alignment in their strategy and vision, system leaders must give attention to:

- **Top-down alignment**, to ensure that system-level priorities flow through to regions, schools and classrooms. Australian examples from the literature include a:
  - NSW Catholic diocese establishing a system-wide, whole-school and system improvement 5-year plan (Wilkinson et al., 2019), which ensured that school-level staffing structures, principal selection procedures, and professional learning all supported whole-system goals.
  - Victorian Government initiative to ensure that ‘the language and culture of school improvement and professional development extend across the department and the principal class of the state’, as well as penetrating to other levels of leadership in many schools (Matthews et al., 2008, p. 201).
- **Backward mapping** to link system reform activities to school improvement goals, increasing the likelihood of successful school-level implementation (McLure & Aldridge, 2022). This is most effective when system leaders also stimulate schools to move beyond generic vision statements in their school-level improvement plans, towards targeted ‘programs, policies and teaching strategies that lead to higher levels of achievement’ (Cawelti, 2001, p. 32, as cited in Leithwood, 2010 p. 250).
- **Environmental scanning** to ensure that reform activities complement existing system directives and school practices. One recent systematic review attributed the success of a reform program to the fact that ‘new initiatives were evaluated for compatibility with extant programmes, and the reform programmes were then carefully integrated with ongoing initiatives’ (McLure & Aldridge, 2022, p. 414).
- **Cohort analysis** to map all cohorts being impacted by planned reforms, and test the alignment of system-wide reforms with the specific needs and experiences of cohorts while also considering any targeted initiatives already in place for priority cohorts. For example, Truscott et al. (2004,

as cited in McLure & Aldridge, 2022) critique reform activities that did not consider engagement of students with disability, resulting in ‘change initiatives [that] did not include goals and strategies appropriate for students with [disability]’ (p. 412). Co-constructing priorities with stakeholders from diverse cohorts can help to ensure diverse experiences are considered (Louis & Robinson, 2012) – including co-construction with First Nations communities as discussed later in this report. A system-wide focus on equitable outcomes and academic rigour for all students can also encourage attention to specific cohorts (Meyers, 2020; Sherlock, 2020), although system leaders must ensure that broad aspirations are supported by action to ensure cohorts’ interests are protected.

## Cultural alignment

In the context of a school, cultural alignment involves aligning reform activities to the school’s philosophy, vision, or theoretical framework for practice. Conflict between change initiatives and the school culture reduces the chances of successful school-level implementation (Vanlommel & van den Boom-Muilenburg, 2024). Cultural alignment is especially important in building evidence-based practices that build cultural responsiveness and reflexivity. For example, in New Jersey, United States, efforts to implement a Black history curriculum under Amistad legislation were hindered by gaps in teachers’ cultural knowledge and experience. A superintendent noted the importance of cultural alignment, stating that ‘once the spirit is adopted, the logistics of implementing a comprehensive curriculum can begin’ (Clay & Broege, 2022, p. 735). In contrast, the Te Kotahitanga reform to lift Māori students’ outcomes in New Zealand was well-aligned with schools’ cultures and values (Bishop et al., 2012, as cited in McLure & Aldridge, 2022). System leaders, therefore, require knowledge of each school’s context, values, beliefs and associated practices to evaluate alignment, and to identify any actions at a system and/or school level that might support cultural change (Meyers, 2020).

## Environmental alignment

Environmental alignment involves ensuring that change activities reflect the wider educational, societal and political landscape (Sahlberg, 2021, as cited in Vanlommel & van den Boom-Muilenburg, 2024). System leaders at state or regional level are well-placed to align reform initiatives with other government actions and resources, including by leveraging existing system and school infrastructure (Leithwood, 2010). Researchers can also help connect strategic goals and communication to broader issues and contexts if system leaders invite them to share their expertise (Malin & Altowajri, 2020).

### 3.1.2 Coherent technical core

**The technical core of an education system (pedagogy, curriculum and assessment) must work coherently to embed evidence-based practices into teachers’ work.**

Pedagogy, curriculum and assessment are the technical core of teachers’ everyday practice. When they work together in a clear, aligned and coherent manner, it creates opportunities for evidence-based practices to be readily embedded into classrooms. In contrast, an incoherent technical core is evident when curriculum materials do not align with the prescribed curriculum, or when assessment practices fail

to reflect curriculum intentions. If the technical core lacks coherence, teachers may find their attention divided between competing imperatives or may even be prevented from integrating new practices into their work.

Cultural responsiveness is an important component of all elements of the technical core, and an area where Australian education systems are still building coherence. For example, the cross-curriculum priority on Aboriginal and Torres Strait Islander Histories and Cultures in the Australian Curriculum has been criticised as positioning cultural responsiveness as ‘simply a matter of adding content to each of the learning areas’, thereby ‘side-stepping profound socio-political issues’ affecting First Nations people across the school system (Morrison et al., 2019, p. 37). Systems may also create guidelines that wrap around the technical core, such as Queensland Department of Education’s (2022) Aboriginal and Torres Strait Islander Cultural Capability Framework, but these again risk of positioning cultural responsiveness as additional rather than integral.

Cultural reflexivity and consultation with First Nations communities can help system leaders integrate First Nations perspectives more meaningfully into core materials and promote culturally responsive teaching across all aspects of the curriculum. International research suggests ‘empowering minorities in the production process’ (Barr, 2006, p. 25) to ensure that curriculum content is created by diverse groups. However, cultural reflexivity must also extend beyond creating content and must consider how content will be used in classrooms in culturally authentic and respectful ways. This means system leaders must apply cultural reflexivity to all aspects of the technical core outlined in the following sections.

Examples of how system leaders have supported coherence in the technical core include:

## **Pedagogy**

The importance of teaching quality in lifting student outcomes means that system leaders must play an active role in supporting it. While pedagogical practice in Australia is primarily determined at school rather than system level, system leaders can drive evidence-based practice in schools by defining and describing which practices have been found to be most effective. These practices can be embedded into all components of the technical core, including teaching standards and curriculum resources. Opfer et al. (2016) point to the value to schools when systems provide guidance on which instructional materials and practices to use that align with standards and deliberately discourage practices or materials that do not align with standards.

At the same time, high-performing systems maintain a balance between prescription and flexibility (see section 2), with the core promoting good practice while leaving space for teachers to respond to their contexts (McKinsey, 2024). This also enables teachers to engage in developing effective teaching strategies, not just delivering content (Honig & Rainey, 2023). Australian states and territories have developed a range of quality teaching strategies and guidelines to strike this balance, supported by national standards for teaching practice. A focus on evidence-based practice can support coherence across this technical core.

## Curriculum

The design of school curriculum and supporting materials must cohere with the use of evidence-based practices in enacting the curriculum. High-quality centralised curriculum resources can help ensure that school-level curriculum development aligns with system-wide objectives and curriculum standards, while effectively supporting the learning of all students.

Quality curriculum materials can be key enablers of cultural responsiveness (First Nations Education Steering Committee, 2020; Opfer et al., 2016; Stornaiuolo et al., 2023; Wallace & Arredondo, 2022). For example, in Canada, a free online database offers teachers First Nations-authored resources to embed First Nations knowledges into their classrooms (Ontario Institute for Studies in Education, n.d.). An example is a mathematics curriculum guide, developed with support from the British Columbia (BC) Ministry of Education, which aligns inclusion of First Nations knowledges and perspectives with the BC curriculum (First Nations Education Steering Committee, 2020). Similarly, First Nations authorship of curriculum materials is also increasing across Australian education systems.

In supporting the alignment between curriculum and system-wide objectives, one US district mapped the district curriculum to state standards and developed ‘pacing guides’ (Hitt & Meyers, 2022, p. 972) to help teachers align their planning to state and district goals. Another example is the provision of Research-Practice briefs to school leaders and teachers to accompany new mathematics standards in one US state. These briefs enabled teachers to better plan their lessons, facilitated professional learning, and informed a myriad of curriculum decisions (McCulloch et al., 2022). The briefs explained how certain concepts aligned vertically within the curriculum, provided teachers with example tasks that aligned with the new standards, and offered points for collegial discussions. These elements informed school-based professional discussions around technical alignment, as well as guided schools’ decision making on scope and sequence of curriculum content and pacing.

System leaders can also establish processes for reviewing externally developed curriculum materials for quality and alignment with evidence-based practices, then encourage access by making them available free of charge or incentivising their use (Opfer et al., 2016; Stornaiuolo et al., 2023).

## Assessment

Student assessment can be a powerful driver of coherence in an education system. In the United States, Leithwood (2010) found an association between school and district performance and ‘the extent to which...components of the technical core are aligned with relevant standards for student performance’ (p. 253). System leaders’ reflections on the ‘cultural validity’ of existing testing programs are important, as such reflections inform their support for schools to establish culturally responsive assessment processes. A culturally responsive assessment process ‘shares power across all concerned parties, including them in all stages of the assessment process. This shared power includes monitoring the consequences of assessments and their uses’ (Walker et al., 2023, p. 4). System leaders can build a coherent technical core by aligning reforms with existing testing programs and prescribed curriculum outcomes (McLure & Aldridge, 2022). They can further ensure that system-level assessment processes are fit for purpose and generate reliable evidence to inform improvement strategies across levels of the system (Masters, 2023). High-performing systems have involved stakeholders (e.g., teachers, parents, academics) in ‘planning assessment programs and how results will be reported and used’ (Masters,

2023, p. 81), resulting in the provision of data to support local decision making and the use of those data to provide targeted support to regions and schools.

A coherent technical core does not need to be rigid. System leaders need to carefully balance the need for specificity of materials with honouring local contexts and teachers' autonomy. Stornaiuolo et al. (2023) describe how 2 US districts embedded teacher voice in curriculum development and implementation, using ongoing data collection, analysis of teachers' needs and perspectives and regular collaboration among teachers and with district staff. They were transparent about how these inputs shaped curriculum changes.

### 3.1.3 Enabling system infrastructure

**The system infrastructure around schools (staffing, accountability structures and resourcing) can influence their opportunities to adopt evidence-based practices.**

Many system leadership roles concern the fundamental system infrastructure that enables schools to operate, including staffing, technology and accountability processes. By shifting their mindset from 'operations to opportunity' (Honig & Rainey, 2023, p. 113), system leaders can design these structures in ways that enable evidence-based practice.

#### Staffing

Opportunities to adopt evidence-based practices depend on the right people having the right roles. The staffing profile of schools and system authorities (especially at the regional level) is a key determinant of the opportunities that schools will have to change practice. Staffing shifts can be decisive moments in opening up new horizons for practice change.

#### Supporting staffing in schools

Putting people into places that create these opportunities may involve:

- supporting schools to be strategic in **staff recruitment, deployment, induction and retention**. Well-selected teams can generate opportunities for change through collaboration or constructive conflict. This includes building diversity in the workforce to create opportunities to nurture culturally responsive practice (Honig & Rainey, 2023).
- ensuring that roles are designed to **support a focus on good practice**. In the United States, high-performing school districts decreased administrative requirements so principals and teachers could focus on student learning (Leithwood, 2010).
- **planning medium-long term** to ensure effectively trained staff to meet community needs. Increasing the number of Aboriginal and Torres Strait Islander staff, including in leadership (Buckskin, 2016), is important to better balance cultural knowledge and population of schools
- engaging **external change agents** in school governance arrangements, to inject new skills and ideas. McLure and Aldridge (2022) emphasise the effectiveness of school-level implementation efforts involving 'planned coordination of reform between external and internal change agents or a central steering group' (p. 411).

## Staffing in regional offices

Staffing within system leadership authorities, especially at a regional level, also impacts on schools' opportunities to adopt evidence-based practices. There is widespread recognition of the impact of employing system leaders to work directly with schools to stimulate and support practice change (Hunter, 2021; Leithwood, 2010; Liang et al., 2021; Meyers, 2020; Robinson, 2011; Wilkinson et al., 2019). These staff act as intermediaries, gaining deep knowledge of school contexts through a strong presence on-site, and creating a perceived hierarchical 'flatness' where school staff 'feel socially and organisationally close to those working in the central office' (Leithwood, 2010, p. 260). Providing school leaders with the opportunity to engage in system-level roles can also help build a sense of collaboration and reciprocity (Louis & Robinson, 2012).

The direct engagement of regional system staff with schools creates opportunities to adopt new practices by enabling system leaders to see where they might be integrated into school practices and cultures. A deep understanding of teachers' challenges and the complexity of their role helps shape policymakers' goals, strategies, and tools, increasing the likelihood of successful classroom implementation (Hunter, 2021). Intermediary roles can be a powerful way to ensure that system leaders develop this understanding (Wilkinson et al., 2019) and can tailor change strategies effectively (McLure & Aldridge, 2022). They can also give teachers and school leaders a sense of permission to experiment with system leaders' backing.

Examples of intermediary roles in Australia and internationally include:

- Australian state and territory education departments appointed regional literacy and numeracy support staff to provide school-level support and teacher training (Hunter, 2021; Robinson, 2011; Wilkinson et al., 2019). These initiatives were successful where regional staff could foster strong relationships and flexibility in meeting local needs, especially in geographically diverse regions. However, limited opportunities for regional staff to interact with schools due to high caseloads or decentralisation has reportedly hindered their impact (Hunter, 2021), leaving schools with the responsibility for change without the necessary level of skilled or experienced teachers and leaders to succeed (Robinson, 2011).
- In a US district turnaround effort, a 'District Shepherd' had autonomy to communicate and enact urgent change in underperforming schools, working with principals of schools in their zone as well as with senior district leadership. This targeted coordination of reform efforts resulted in rapid district response to schools' needs and improved student outcomes (Meyers, 2020, p. 722).
- A NSW diocese created regional roles such as data officers to support principals in interpreting and applying data effectively for school improvement (Wilkinson et al., 2019). By placing school improvement experts directly in these collaborative roles, system leaders ensured that principals received high-quality guidance in areas like data-driven decision-making and instructional planning.
- Another high-performing US district invested in 'provision of mid-level central office staff with instructional expertise for ongoing consultation in the school' (Leithwood, 2010, p. 265), significantly enhancing school leadership.

## Staffing for cultural responsiveness

Cultural reflexivity in staffing initiatives can create opportunities to support schools in culturally responsive ways. For example, Meyers (2020) highlights the impact of African-American leaders in one US school district raising awareness of inequalities affecting schools that served predominantly African-American communities. This led to a form of needs-based funding being allocated to the schools to attract and retain quality staff.

In Australia, First Nations leaders can play an important role in opening up opportunities to adopt evidence-based practice to improve outcomes for First Nations children. The importance of First Nations self-determination in improving education outcomes is increasingly recognised, challenging past discourses of ‘government as savior’ (Burgess & Lowe, 2022, p. 2). First Nations leaders are achieving impact in the Australian education system, including in First Nations-led organisations and schools (Hand & Thomas, 2024). Non-First Nations system leaders retain a role in supporting First Nations leaders and communities to effect change through allyship and partnership (Hill, 2022). A ‘stewardship’ approach to system leadership has been identified as creating new possibilities for genuine partnership models to emerge (Morgan, 2022), although considerable work remains to be done to translate this concept into workable, culturally responsive strategies with impact at school level.

## Accountability structures

Accountability structures, as part of a system’s infrastructure for school improvement, have capacity to ‘incentivize, but also to provide information that can be used to inform decision making’ (Hamilton et al., 2013, p. 463). Accountability frameworks provide a structure within which districts can drive improvements, especially in struggling schools (Leithwood, 2010). As such, they create opportunities to adopt evidence-based practices by positioning such practices within ongoing cycles of improvement and review.

Some accountability frameworks involve rewards (or sanctions) to incentivise schools’ fidelity to system expectations (Porter, 1994, as cited in Stornaiuolo et al., 2023). Although they therefore also contain an element of motivation, accountability structures are positioned in this report as opportunities to adopt evidence-based practice because they are shaped by actors outside of the teacher and the school. Motivation concerns intrinsic drivers for change (as discussed later in this report), rather than external accountabilities.

Opportunities to adopt evidence-based practices may be embedded into accountability structures at the school, individual or system level, as illustrated in the following points:

- **At a system level**, accountability structures can be informed by overarching goals as stipulated in mandated policies, such as the No Child Left Behind policy in the United States, or frameworks like the Alice Springs (Mparntwe) Education Declaration in Australia. A focus on accountability for outcomes of specific cohorts of students can drive examination of disaggregated data and inform change. For example, Stoker et al. (2022) highlight the low English proficiency of American First Nations English learner students in New Mexico as an impetus for examining actionable causes, such as lack of access to culturally responsive curricula.

- **At school level**, evidence-based practice can be embedded into accountability structures through joint region-school discussions of school results (Wilkinson et al., 2019), using data aligned with specific improvement areas (Hitt & Meyers, 2022), or by creating resources that guide implementation and enable evaluation against intended outcomes. A strong link between such (self-) evaluations and school improvement planning is evident in high-performing systems (Masters, 2023). In Australia, school improvement frameworks such as the School Improvement Tool (previously: National School Improvement Tool) have been adopted by various systems to undertake external reviews of schools or support schools' self-reflection on school practices, in order to identify areas for improvement (Hartnell-Young et al., 2014). Internationally, Swedish system leaders worked with schools to develop a 'plan for improved quality of teaching' to evaluate their progress in, and strategies for, improving teaching quality (Andersson & Liljenberg, 2020, p. 472).
- **At the individual staff level**, opportunities to adopt evidence-based practices can be embedded in clear performance expectations (Hitt & Meyers, 2022) – for example, through job descriptions, providing a foundation for accountability. Vanlommel and van den Boom-Muilenburg (2024) point to embedding the requirement for evidence use and evidence-informed change in job descriptions. This integration signals a commitment to evidence-based practices, ensures that staff across all levels understand their role in advancing these initiatives, and provides an opportunity to evaluate the extent to which staff are enacting these priorities.

Attaching performance-based incentives that align with such goals can further reinforce accountability while motivating school leaders and educators to achieve intended outcomes (Hamilton et al., 2013). However, a balanced approach to accountability is required to avoid unintended consequences. A high-level accountability system could inadvertently promote cautiousness and suppress innovative approaches, as school leaders may retract into 'safe zones' (Louis & Robinson, 2012, p. 31). Such consequences could be mitigated by flat hierarchy structures (Leithwood, 2010), with school and system leaders' collaboration based on a sense of collective responsibility and collective trust (Andersson & Liljenberg, 2020). This relationship is detailed later in this report (section 3.2.1).

Effective accountability structures are enhanced by system-wide data-use policies that contribute to schools' and systems' readiness for change (Blazar & Schueler, 2023). For example, a NSW Catholic diocese enacted their focus on student achievement by investing in technological infrastructure, which 'assisted schools in making fine-grained analysis of students' test results' (Wilkinson et al., 2019, p. 506), enabling evidence-based planning. This investment supported accountability structures as schools' increased evidence use led the region to instigate annual meetings where principals shared and discussed school results (Wilkinson et al., 2019). Such accountability structures can support the adoption of evidence-based practices when data discussions are positioned as an opportunity for improvement, rather than as a punitive measure. This positioning can generate conversations to identify where evidence-based practices can be used.

## Resourcing

System leaders can create opportunities for school-level implementation of evidence-based practice by ensuring that schools have access to appropriate resources. While funding is beyond the scope of this review, financial resources are implied in all reform initiatives. Funding and allocated time have

the capacity to reinforce a system's priorities, while underfunding and under allocating time convey a limited sense of urgency to school staff (Daramola et al., 2023). Importantly, Iatarola and Fruchter (2004) demonstrated that high-performing New York City districts 'focused more of their resources on the goal of improving instruction' (p. 509) – for example, through continuous investment targeting teaching quality. Targeted, system-level grants have also been shown to effect substantial change (Hitt & Meyers, 2022). Lastly, Blazar and Schueler's (2023) review highlights the positive relationship between teacher salaries and student outcomes.

## 3.2 Building motivation to adopt evidence-based practices

Motivation to adopt evidence-based practices comes from teachers seeing their value, not just as a compliance exercise but as a means of achieving their professional goals and supporting improved student learning and engagement. Motivating change in schools requires system leaders to draw on diverse strategies to influence practitioners, beyond 'harder' action such as regulation and accountability to 'softer' action such as convening people around shared goals (Siodmok, 2020, p. 1).

System leaders can build motivation using the following levers.

### 3.2.1 Culture of shared responsibility and efficacy

**Adopting evidence-based practices requires collaborative effort within and across schools, and between schools, system leaders and communities.**

The research identifies attributes of effective collaboration between system leaders and schools, going beyond superficial engagement to a sense of shared purpose and efficacy:

- **Systemic collaboration** drives successful educational reform (Pyhältö et al., 2012). Co-design of systems, strategies, and programs that involve all stakeholders are more likely to be successful (Hopkins & Woulfin, 2015) and have been shown to lead to educational improvement (Suggett, 2013; Wilkinson et al., 2019). Effective improvement strategies combine top-down activities with opportunities for teachers to define and enforce standards of practice (Leithwood, 2010). Regular surveys, conversations, community consultation and teacher representation in governance structures can further reinforce a collaborative systemic culture (Stornaiuolo et al., 2023). Effective collaboration also involves clearly defining individual roles (Fullan & Quinn, 2016).
- **Collective efficacy** involves establishing a shared moral purpose that all schools and system leaders play a part in achieving, enabling accountability to be driven 'from the inside out' (Fullan & Quinn, 2016, p. 110). For example, a system-wide commitment to equity can drive change when it is clearly and consistently communicated and collectively owned (Meyers, 2020). A culture of collective efficacy is more likely to emerge when teachers and leaders (as well as students and families) are involved in collaborative system design (Hamilton et al., 2013). System leaders can promote the mindsets that support collective efficacy by encouraging:

- a strong sense of shared responsibility for student success (Leithwood, 2010) and belief in the potential of all students to succeed (Suggett, 2013)
  - a distributed leadership framework that encourages leaders at all levels to take responsibility for system-wide improvements (Masters, 2023)
  - organisational structures to support collegial learning and problem-solving, alongside investment in building instructional expertise (Leithwood, 2010)
  - an emphasis on ‘systemness’, helping schools think of themselves as part of a larger system rather than independent entities (Wilkinson et al., 2019)
  - collaborative data interpretation practices that create a culture of shared responsibility for improving outcomes across districts (Leithwood, 2010)
  - regularly reviewing strategic plans for collective awareness and prioritising strategic plans over other system-level priorities (Ford & Ihrke, 2020).
- **Trusting relationships** between system leaders, schools and communities play a crucial enabling role in school-level implementation, and system leaders find it easier to gain support for initiatives in regions where trust has been established (Leithwood, 2010). System leaders can build the trust required to transform practice by:
    - implementing a ‘no-blame’ policy where some failure is anticipated and seen as an invitation to continue to try and improve, with continuous support (Skrla & Scheurich, 2001, as cited in Leithwood, 2010, p. 260)
    - maintaining stable policies to provide the time and space for schools to learn, refine, and integrate changes into practice (Porter, 1994, as cited in Stornaiuolo et al., 2023). Keeping the same curriculum in place over time allows teachers to develop familiarity and increase their expertise (Stornaiuolo et al., 2023).
    - consulting with practitioners to understand how school-level implementation of new initiatives can be successful in their contexts (Baan et al., 2023, p. 6).
  - **School autonomy** further reinforces trust by positioning teachers and school leaders as capable agents of change. When system leaders respect teachers’ and leaders’ professionalism, it increases their agency, autonomy and flexibility in implementing reforms, encouraging more active engagement at school level (Pyhältö et al., 2012). In high-performing systems, system leaders prioritise teacher autonomy. They create a trusting systemic environment where teachers have significant professional responsibility and are supported by a strong technical core to ensure ‘consistency across schools’ (Masters, 2023, p. 170). Similarly, schools also need to have the agency to implement policy as suitable for their context, including by appointing staff and making budgetary decisions (Meyers, 2020).
  - **Targeted support is imperative** to ensure that system leaders offer the right level of assistance for each individual school. Levels of support provided to schools can be determined through consultation with stakeholders, responsive to individual contexts, and regularly revisited and critiqued, so that support can be modified as required (McLure & Aldridge, 2022). In Queensland,

for example, system leaders focused on providing tailored, locally responsive professional learning and resources, while allowing schools autonomy in how they implemented system-wide initiatives (Wilkinson et al., 2019).

### 3.2.2 Iterative use of evidence and data

#### **Evidence and data can be powerful motivators of change and a catalyst for collective effort.**

Evidence from the health sector indicates that system leaders rely on a blended and often reactive approach to their own use of evidence. Depending on the issue at hand, participants use strategies including synthesising key messages from research, engaging with external research organisations, and fostering a culture of embedded research (Calnan & McHugh, 2024; Clark et al., 2024).

System leaders may have different motivations to use evidence, including to:

- define a problem, to flag a case for change or to keep certain ideas on the agenda
- clarify international practice, state and/or national trends, or to identify key drivers or levers
- challenge proposals, challenge assumptions or to get buy-in from key audiences
- design interventions, identify possible existing interventions or select the most effective intervention (Rickinson et al., 2019, p. 243).

The prominent Deliverology framework – often applied to education policy implementation – positions data as a driver for change through performance monitoring and accountability (Barber et al., 2016), although has attracted critique for its audit approach (Ball et al., 2012, p. 514). The System Wise model for education system reform also focuses on data use as a driver for improvement, including building ‘data literacy’ within schools and using qualitative ‘stories’ to ‘ignite curiosity’ and motivate change (Parrott-Sheffer et al., 2024).

Engagement with data and evidence can motivate changes to practice in multiple ways:

- **Establishing an evidence base for system reform:** System leaders can use data to reinforce reform goals (Hamilton et al., 2013). High-performing US districts use various data, such as academic performance and behavioural data, as well as parent feedback to drive improvement (Iatarola & Fruchter, 2004). This approach requires that system goals, associated programs, as well as the research and data underpinning these goals and programs, are well-defined and widely understood (Iatarola & Fruchter, 2004; McCulloch et al., 2022). This is likely to have greatest impact when it includes implications for both policy and practice, moving from ‘what we know’ to ‘what’s next’ (Honig & Rainey, 2023).

- **Generating curiosity at the school level:** Developing an ‘inquiry habit of mind’ among teachers and school leaders, along with data literacy, has been shown to support reform implementation (McLure & Aldridge, 2022, p. 419). In Queensland, targeted professional development for principals focused on data analysis has enabled a data-informed culture within schools (Wilkinson et al., 2019). To avoid overwhelming staff, leaders should offer support and training that prioritises and interprets signals from multiple measures (e.g., test scores as well as parental feedback), providing contextual insights into students' needs (Hamilton et al., 2013). Providing training can make teachers more open to learning from data, even when improvement is required (Leithwood, 2010). Other recommendations include analysing data collaboratively in 90-day cycles (Stornaiuolo et al., 2023); publishing data in timely, clear, and accessible formats (Hamilton et al., 2013); and providing data analysis time for teachers in order to inform planning and identify the cause of gaps in student understanding (Hitt & Meyers, 2022).
- **Monitoring the impact of practice change:** Monitoring the effect of change initiatives is imperative to ensure that school-level implementation is achieving intended outcomes. It can also motivate change by enabling teachers and leaders to see the impact of new practice. AERO (2022) has previously found that analysing student learning data allows teachers to see the impact of any changes to their practice, making them more confident about recommendations from research on practices that work. Data analysis and accountability systems must be established ‘at the outset of the change process’ (Robinson et al., 2017, as cited in McLure & Aldridge, 2022, p. 411), with opportunities for evaluation embedded into change processes (McLure & Aldridge, 2022). This includes formal data collection processes such as teacher and student surveys (Andersson & Liljenberg, 2020), as well as informal monitoring strategies to signal priorities for deeper exploration. Flexible data collection cycles can give educators the confidence to make iterative changes to practice without waiting for fixed review periods (Leithwood, 2010).

Engagement with data and evidence can only occur when systemic structures exist to enable it. In examining whole-system evidence-informed change, Vanlommel and van den Boom-Muilenburg (2024) underscore the importance of setting up organisational systems (including responsibilities) and policies to enable access to evidence and provide advice about its use. This includes creating digital channels and resources to promote access to and use of high-quality evidence and data products (Abdo et al., 2021). In Australia, the need for enabling data infrastructure is fuelled by the National Reform Directive to implement multi-tiered systems of support (Australian Government Department of Education, 2024), as is the need for collection of and access to quality student data.

Cultural reflexivity is important to bring to engagement with data, for system leaders and schools alike. System leaders need to ‘transform how [they] use data to strengthen the education ... of Native youth and their families’ (Villegas, 2019, p. 48). Data use policies should therefore reflect how data could enable inquiry into focus areas, such as the disproportionate suspension of First Nations students or students with disability (Jimerson & Childs, 2017). In recognition of Indigenous Data Sovereignty, it is important for First Nations communities to exercise control over the collection, access and use of First Nations data (NSW Department of Education, 2023, p. 17). For existing initiatives and associated data, system leaders can empower First Nations communities to evaluate system-level programs or ‘examine existing data in ways that illuminate more about their citizens and the systems that are supposed to serve them’ (Villegas, 2019, p. 967).

In Australia, data has often been used to reinforce deficit-based narratives relating to First Nations students and communities, rather than presenting a balanced perspective that acknowledges both strengths and needs (Jackson, 2015). For example, the Closing the Gap policy targets 'were framed relative to non-Indigenous health and life outcomes' and governments have been criticised for not collecting 'accurate data' to measure progress towards these targets (Larkin & Hobbs, 2022, p. 4). In contrast, system leaders can adopt a 'strengths-based approach to data and policy development' (Villegas, 2019, p. 966) by:

- bringing together a range of indicators to determine both strengths and needs of First Nations communities
- examining cross-agency data to highlight system accountability, drawing out system-level strengths and gaps
- using disaggregated data to compare different First Nations communities and share effective strategies (Villegas, 2019).

Data can also be effective for tracking the effectiveness of evidence-based and culturally responsive practices. Lamb et al. (2015) highlight the importance of data analysis to track improvements for First Nations students, which can in turn help strengthen the evidence base for practices that have most impact. While recent changes to proficiency standards for the National Assessment Program – Literacy and Numeracy (NAPLAN) have affected the ability to compare data over time, they have also created a more nuanced picture of student outcomes across Australia. This may help build the evidence base for practices that are supporting First Nations students – and all students – to succeed at school.

### **3.2.3 Responsiveness to community**

**School communities can be powerful motivators for practice change, as well as potential collaborators in supporting the adoption of evidence-based practices.**

Parents and other school community members are often 'crucial and largely untapped resources' in school improvement initiatives (Fullan, 2016, p. 190), and can be a strong motivator for schools to adopt evidence-based practices. Responsiveness to community requires system leaders to balance flexibility and prescriptiveness, and extend their focus on alignment to the community level to 'ensure there is alignment between an activity and the needs and context of the school and its community' (McLure & Aldridge, 2022, p. 420). It also requires high expectations to be shared across the community, beginning with critical reflection on personal beliefs and assumptions (Purcell et al., 2020, p. 20).

## **Communities contributing to change**

System leaders can engage with school communities to generate momentum around school improvement. A study of ten high-performing Texas districts found that superintendents worked to create a ‘sense of urgency’ in the community regarding students’ academic achievement, including by sharing data (Ragland et al., 1999, as cited in Leithwood, 2010, p. 250). These districts had already established trust with the parents and the wider community, as well as a productive working relationship between the superintendent and the school board (Ragland et al., 1999, as cited in Leithwood, 2010).

System leaders are also responsible for seeking the community’s views of their schools (Leithwood, 2010). ‘Co-construction’ (OECD, 2021, p. 12) or co-design is an approach that involves communities in shaping system decisions that affect them. This is action that is genuine rather than tokenistic, especially in relation to groups within the community who may be marginalised or disengaged from the education system. This form of community engagement is essential across all areas of government, to ensure that solutions are responsive to local priorities and contexts and draw on community expertise.

First Nations communities often suffer consultation fatigue, arising from consultation processes where people are invited to participate but have limited decision-making power, or where non-First Nations perspectives dominate and reinforce ongoing colonial mindsets; exacerbated by a sense that even consultative policies have failed (see section 2). Culturally reflexive system leaders must be prepared to explore ways to empower First Nations communities in decisions affecting First Nations learners, to provide these communities with the opportunity to lead positive change (Lowe et al., 2019) and to also incorporate less dominant First Nations voices into reform initiatives.

Engaging communities in efforts to adopt evidence-based practices in schools therefore requires openness to community perspectives about which evidence matters and how it may be interpreted. This is especially important in engaging with First Nations communities, to ensure First Nations Intellectual and Data Sovereignty are respected (Shay et al., 2023). First Nations communities may have cultural knowledge systems, practices and lore, and decision-making may also need to respect complex cultural relationships within the district, community and state (Louis & Robinson, 2012, p. 10). Commitment to dialogue and cultural reflexivity are essential tools in system leaders’ engagement with First Nations communities, as well as allowing time to build culturally respectful, authentic, collaborative relationships and mutual understanding.

Community members can also contribute to making change happen, and a culture of collective effort can extend beyond the school (McKinsey, 2024). One US District Shepherd engaged community organisations to obtain additional resources to support improvement in prioritised schools (Meyers, 2020). Communities can contribute valuable feedback to guide systems’ support for school-level implementation as it progresses, and research shows that systems that seek and respond to such feedback are more likely to demonstrate agile approaches to supporting implementation (Comstock et al., 2022, as cited in Stornaiuolo et al., 2023, p. 553).

## Ongoing community engagement

System leaders can also support schools to embed community engagement into their governance and decision-making processes, including representation from diverse groups. Elements of community engagement to be embedded in schools include:

- establishing shared high expectations for students and the school across the community (Purcell et al., 2020, p. 20)
- ensuring that school boards and consultative groups are representative of the school community, not just families who have time and resources to volunteer
- intentionally recruiting low-income and other underserved populations
- developing 2-way communication with parents, using multiple methods
- explaining expectations for communication between parents and the schools.
- reminding teachers to communicate with parents on both student successes and challenges (Hitt & Meyers, 2022, p. 973), to build confidence and engagement.

System leaders' own behaviours can also contribute to community engagement. Spending time in schools can help school staff and community accept visits from their system leaders as 'just a natural thing' (Louis & Robinson, 2012, p. 32), rather than seeing system authorities as a step removed from families and the school community.

## 3.3 Building capability to adopt evidence-based practices

Teachers need the capability to adopt evidence-based practices, including knowledge and awareness of practices and ongoing support to extend their capability over time.

System leaders can build capability using the following levers.

### 3.3.1 Grow effective leadership

**Leadership must have an instructional focus to champion evidence-based practices.**

Purposeful system-level actions to develop effective school leadership are essential to enable school leaders to implement evidence-based change (McLure & Aldridge, 2022). Leaders across system and school levels act as role models for change (Vanlommel & van den Boom-Muilenburg, 2024), so it is important that system leaders adopt, and support school leaders in adopting, an instructional focus. Strategies that system leaders can use to promote instructional leadership in schools include:

- **Modelling by system leaders** positions system leaders themselves as exemplars of instructional leadership (Fink & Resnick, 1999, as cited in Leithwood, 2010). For example, superintendents in some US districts modelled instructional leadership practices such as classroom observations and leading improvement-focused discussions, guiding principals to strengthen their instructional leadership – which in turn enabled principals to engage middle leaders and teachers in similar ways

(Hannay et al., 2006b). When principals recognise system leaders' competence and ability to help them become better instructional leaders, it can increase trust between principals and system staff (Andersson & Liljenberg, 2020).

- **Support from system leaders** positions system leaders (typically at regional level) as providers – not just enablers – of school leadership development. Honig and Rainey (2023) encourage system leaders to adopt a supportive rather than supervisory role in overseeing principals' work to develop their instructional capabilities, as examples of such support from international research include:
  - High-performing US districts dedicated regular system-principal meetings to capability building rather than administrative tasks (Leithwood, 2010).
  - System leaders in high-performing US districts also facilitated regular school improvement conferences, where district staff and principals discussed how to collaboratively analyse and interpret data to inform school improvement strategies (Fink & Resnick, 1999, as cited in Leithwood, 2010).
  - Also in the United States, system leaders used informal mentoring approaches, such as collaboratively discussing research and policy documents, to help school leaders engage positively with external policies (Louis & Robinson, 2012).
  - Local education authority (LEA) officials in Sweden built principal capability through formal support programmes using a pedagogical approach (Andersson & Liljenberg, 2020). This included analysing school improvement plans and data to 'add a new perspective to the analysis and [help] the principals to be more specific in their improvement work' (p. 475).
- **Strategic recruitment** to ensure that system and school leaders with the right skills are appointed to key positions. Rather than prioritising seniority alone, system leaders can place individuals with demonstrated expertise in instructional leadership into school- and system leadership roles (Wilkinson et al., 2019). Such targeted appointments allow system leaders to shape an instructional leadership team that is capable of and committed to advancing evidence-based practices (Meyers, 2020). System-level succession planning and distributed leadership are also important, including cultivating multiple leaders to drive change (McKinsey, 2024), and supporting new system leaders to maintain momentum after a turnover (McLure & Aldridge, 2022).
- **Continuous capability building** is essential for developing effective school leaders who can implement evidence-based practices and foster high-quality teaching and learning (McLure & Aldridge, 2022). Leaders learn in many ways, including in preparation programs, ongoing in-service training and learning on-the-job (Leithwood, 2010). System leaders support ongoing school leadership development by:
  - formal training, which emerged as a key enabler in McLure and Aldridge's (2022) systematic review on factors influencing system-wide change
  - setting up principal support groups and buddy systems (Fink & Resnick, 1999, as cited in Leithwood, 2010)
  - granting principals access to conferences (Fink & Resnick, 1999, as cited in Leithwood, 2010)

- planning activities to build principals' skills in targeted areas related to planned reform, such as data literacy or curriculum implementation (Hussin & Al Abri, 2015, as cited in McLure & Aldridge, 2022). Building principals' data literacy has been found to positively impact student achievement when it is supported by clear data use policies (Blazar & Schueler, 2023). By tailoring support for principals (Hitt & Meyers, 2022), system leaders can align capability building with system priorities (Louis & Robinson, 2012)
- leadership coaching (McLure & Aldridge, 2022), including tailored coaching to address specific school-level priorities (Leithwood, 2010)
- tailored within-school support programs. For example, in Wilkinson et al.'s (2019) case study, system leaders within a Queensland diocese 'opted to employ more site-based professional learning support (e.g. appointing part time literacy advisors based in schools) rather than regular, large, centralised events (e.g. seminars and workshops)' (p. 510), in response to the geographically and socio-economically diverse nature of their schools.

### 3.3.2 Resource individual and collective growth

#### **System leaders can adopt a multi-tiered approach to build schools' capacity to adopt evidence-based practices that enhances both individual and collective growth.**

School-level implementation of any practice change is a learning process (Elmore, 2016), and deep learning is needed to accelerate improvement and foster innovation (Fullan & Quinn, 2016). Support from system leaders for teacher professional learning is therefore essential to supporting the adoption of evidence-based practices, including facilitating access to meaningful professional learning opportunities and resources. The literature shows that effective systems have a strong focus on teacher professional development as key enabler for practice change (Hitt & Meyers, 2022; Leithwood, 2010; Newton, 2016; Wilkinson et al., 2019). System leaders can support teacher professional learning by:

- **Building capability for reform:** Any system-led reform must involve system support for professional learning to equip schools for implementation. Queensland regional education officers' approach to support policy implementation in schools involved 'the use of collaborative practices that focused on building teacher and leadership capability' (Leach, 2021, p. 201). In the United States, district-wide professional development on specific reforms appears more effective when it is mandatory for leaders and teachers and scheduled within school hours (Daramola et al., 2023).
- **Balancing system and school priorities:** Professional development programs can significantly elevate educational practices when they are aligned with school and system goals and initiatives (Leithwood, 2010). For example, Iatarola and Fruchter (2004) found that high-performing New York City districts were better at integrating school- and district-initiated learning needs and programs in district-wide professional development programs than low-performing districts. Similarly, D'Amico et al. (2001, as cited in Leithwood, 2010) describe the positive impact of professional development on student outcomes, when focused on adopting instructional approaches that aligned with an existing district literacy program.

- **Integrating evidence and research:** System leaders can involve researchers in coaching and professional development to allow educators to connect theory with practice, improving the quality of instruction and fostering a culture of continuous improvement (Leithwood, 2010). System leaders can build schools' capability in using evidence to enact change – for example, through evidence-related training (Vanlommel & van den Boom-Muilenburg, 2024). University partnerships can be used to develop targeted programs that relate to system reform initiatives. Such programs can ground the reform in current research, translate it to practice, and build teachers' change leadership skills (Gomez Johnson et al., 2019).
- **Intensive support from system leaders:** System leaders working directly with school teams and principals can also lead to meaningful change (Robinson, 2011). In one international example, system-level coaches were placed at schools to support teachers' adoption of new standards (Daramola et al., 2023).
- **Opportunities for cultural reflexivity:** System leaders must ensure that teachers have time, space and support to develop cultural reflexivity to enable them to implement evidence-based practices in culturally responsive ways. Effective cultural responsiveness programs create safe spaces for participants to reflect on their beliefs and challenge their assumptions, build knowledge of and connections with First Nations peoples, and develop culturally responsive resources and methods for classroom use (Anderson & Riley, 2020). Teachers also need opportunities to adapt professional development and strategies to their own culture (McLure & Aldridge, 2022), noting that most professional learning in the Australian sector reflects Western perspectives and ways of learning.
- **Professional learning communities (PLCs):** System leaders can create PLCs as a collaborative environment where educators can refine their practices and continue their professional learning. Setting up networks and communities for sharing effective practices aligns with research that emphasises interprofessional collaboration as a conduit for implementing evidence-informed change (Leithwood, 2010; McLure & Aldridge, 2022; Vanlommel & van den Boom-Muilenburg, 2024). In these settings, teachers can engage in professional inquiry, observe formative teaching practices, and collaboratively analyse student learning data (Wilkinson et al., 2019). A cohesive PLC structure helps to establish a shared vision for improvement and creates opportunities for mutual support among staff, contributing to sustained, collective growth (Leithwood, 2010).
- **School-based instructional coaching:** System leaders can be instrumental in establishing and supporting (or even providing) professional learning models that occur within the school site. School-based models embed professional learning in existing school structures to support teachers in the application of new practices. Instructional coaches, particularly those situated within schools in specialist positions, provide teachers with personalised guidance and actionable feedback (Daramola et al., 2023; Liang et al., 2021). For example, New South Wales has implemented school-based professional learning supports for teachers, such as appointing part-time literacy advisors (Wilkinson et al., 2019). Similar models have been used in other Australian jurisdictions (see section 3.1.3).

### 3.3.3 Effective knowledge sharing

#### **System leaders can effectively share knowledge to build capability across the system.**

System leaders have a knowledge-sharing role in translating evidence-based practice to local contexts (Calnan & McHugh, 2024; Clark et al., 2024; Tetroe et al., 2008). A limited set of studies highlight how system leaders work to transfer knowledge across stakeholders. Effective system leaders seek out evidence from multiple sources, including from the system's own schools, communities and cultural leaders (Leithwood, 2010), and facilitate knowledge flows in multiple directions within and beyond the systems that they support.

#### **Knowledge flows to schools**

System leaders share knowledge with schools about current policies and initiatives from a system-wide perspective, as well as the evidence and data that support practice change. The research identifies elements of effective knowledge-sharing from systems to schools:

- **Knowledge brokering or translation** involves ‘communication and framing’, recognising that the narrative associated with an initiative influences how it is received (Baan et al., 2023, p. 67). Clear communication and framing can mitigate barriers to successful implementation that schools may encounter (Fullan, 2016), whereas poor framing can obstruct success. One cited example is a New Zealand literacy initiative where the government’s desired outcomes were not achieved, as they were ‘understood differently by those responsible for initiating the change and those responsible for implementing it’ (Timperley & Parr, 2005, p. 231).
- **Leveraging influence at multiple levels** can ensure messages are appropriately adapted and reinforced. School-facing, frontline or middle-level system leaders can play a key role in bridging differing understandings of evidence between policymakers and those implementing it in schools and classrooms. Capability building for administrators has been identified in the research as potentially ‘crucial to the development of coherent and complementary conceptions of evidence-based practice’ in systems (Coburn & Talbert, 2006, p. 491).
- **Timely communication** about evidence-informed change involves sharing knowledge with relevant stakeholders in a timely manner (Vanlommel & van den Boom-Muilenburg, 2024). Just-in-time communications can guard against overwhelming schools with more information than they can readily absorb.
- **Tailoring messages to school contexts** requires deep insight into specific contextual challenges and the attitudes and beliefs of those involved. Pilot programs can inform this adaptation, and ‘increase understanding of program operation and performance for different school types and student groups, expected benefits of the program and the school support needed to achieve these benefits across the state’ (Victorian Auditor General’s Office, 2024, p. 2).
- **Supporting schools to engage communities** involves sharing knowledge to generate community support for a program and its prioritised action (Meyers, 2020). System leaders have a role in educating the community, either directly or by supporting school leaders to communicate effectively with parents and local communities. This involves stepping into situations where tensions may exist between community preferences and educational or economic effectiveness. Examples include

requests for specialist programs that raise concerns of equity, or language teaching policies that maintain ‘vested interests of schools and parents at the expense of effective teaching and learning’ (Tam, 2012, p. 118).

## Knowledge flows across the system

High-performing systems actively reduce teacher isolation and strengthen opportunities for schools to learn from one another (Leithwood, 2010). The best way to build system-wide connections and clear, multi-directional information flows across the district (Ford & Ihrke, 2020, p. 600) is ‘through strengthening collaboration within schools, between schools and beyond schools’ (Ainscow, 2016, p. 159). Facilitating school collaboration may involve:

- **establishing teacher and school leader networks** to create pathways that enable the movement of ideas (Coburn & Talbert, 2006, p. 491). School clusters or networks can engage in structured mutual learning, such as facilitated learning walks at schools (Louis & Robinson, 2012). They can also be organised around shared issues, interests or collaborative problem-solving opportunities, building vertical and lateral ‘morally driven, focused, relentless partnerships’ (Fullan, 2016, p. 201).
- **delivering shared professional learning**, such as intensive district-wide professional development with all instructional leaders, as opposed to ‘regional roadshows’ (Hunter, 2021). This must include reducing barriers to participation, particularly for rural and remote staff who may struggle to participate in centralised in-person events or smaller schools with limited relief options.
- **sharing practice insights across schools**, such as specific illustrations of practice, ‘exemplars ... [of effective instruction across] districts, schools, and classrooms’ (Leithwood, 2010, p. 264), or insights into school-specific implementation factors (Hannay et al., 2006b)
- **monitoring schools’ knowledge access and understanding of initiatives**, implementing additional communication and networking opportunities where required (Coburn & Talbert, 2006)
- **applying system-wide knowledge management practices** (McLure & Aldridge, 2022), to ensure that learning is systematically captured and disseminated.

## Engagement beyond the system

System leaders may need to engage in reciprocal knowledge-sharing outside their immediate system context to build capability within schools. This includes:

- **sharing knowledge across governance layers within the system** – for example, supporting information flows across different agencies within an education system with responsibility for different levers that can influence practice. Without effective communication and coordination, governance layers and institutional complexity can hinder clear policy implementation (Leach, 2024).
- **collaborating across departments and organisations** to support effective promotion and school-level implementation of evidence-based practice, requiring strong networks and inter-organisational relationships (Bullock et al., 2021). Health sector organisations may have particular expertise and insight into possibilities for knowledge translation in complex organisational contexts (Tetroe et al., 2008).
- **seeking out independent research institutions** for expert support (Clinton et al., 2018; Malin & Altowajri, 2020), to fill gaps or ensure timely delivery of advice.

# 4. Leveraging system functions to support schools to implement evidence-based practices

This study has shown that there are key strategies that systems can utilise to support schools in implementing evidence-based practices, using the levers within a system's sphere of responsibility to build opportunity, motivation and capability. This section summarises key findings from the previous sections according to common operational functions that education system leaders may perform, to help staff in different roles determine which strategies are most relevant.

This section does not provide an exhaustive list of all education system functions but rather presents high-level themes, providing examples of how the findings from the literature relate to core responsibilities and common functions of education systems. It is important that systems consider key questions alongside these strategies to promote cultural reflexivity when supporting the implementation of evidence-based practices in schools.

## 4.1 System policy frameworks

Education systems have a range of formal policy statements, frameworks, strategies and programs that define key priorities and expectations for all schools, teachers and the broader community. Examples of these formal policy frameworks include national reform initiatives, literacy programs, teaching and learning frameworks, and school improvement frameworks. System policy frameworks also include a range of policies that are more granular and outline expectations of teachers and schools for specific elements of practice such as behaviour management frameworks and curriculum, reporting and assessment policies.

Successful delivery of system initiatives relies on effective integration and alignment of advice provided to schools across all policy frameworks and initiatives. Ensuring that these documents reinforce and support one another, and, importantly, are relevant to schools, drives a narrative of strategic clarity for the intended audience. These documents make up the coherent, technical core (outlined in section 3.1.2) and should clearly articulate and align with what the evidence tells us is the most effective. These policies need to be agile and balance consistency across schools with school autonomy to adapt to their context. To this end, it is important that these policies include enough detail to provide schools the information necessary to implement them within their context.

For example, when systems develop or review classroom practice frameworks (including learning and teaching, behaviour management, wellbeing and inclusion) the evidence suggests that they need to consider:

- the strength of the evidence that underpins any position or advice

- how these policies impact differently on First Nations communities and how First Nations communities lead policy design for First Nations students and contexts
- the integration and alignment of advice to schools across all frameworks
- insights from consultation with schools about how policies to support practice will work in their context
- the implementability of these frameworks throughout their development.

## 4.2 Centralised school implementation resources and support

Education systems are also responsible for a range of direct support services to schools – for example, curriculum and assessment resources, coaching and mentoring, and professional learning. These functions comprise the universal system support to all schools. This universal offering needs to be agile and provide differentiated support for individual schools, to account for the different contexts and needs of school communities.

High-quality centralised resources should be created to facilitate quality implementation, allowing schools to adapt them to their specific needs. While schools are responsible for implementing and driving change, the role of the system is to provide guidance, clarity, and assistance to schools to move through a clearly defined, phased implementation process.

All advice and guidance provided by the system should align back to the coherent, technical core to provide consistent direction to schools. They must be based on rigorous and robust evidence-based practices and resources and materials must be created in a way that reduces the burden on schools and cognitive load on leaders and teachers.

For example, when systems develop high-quality centralised materials, there should be consistency in the style, messaging and types of support available across subject disciplines and year levels. These materials should consistently promote and integrate cultural reflexivity into their guidance. This could look like developing curriculum materials that consistently promote the practices detailed in the technical core, such as formative assessment, shown to be effective across disciplines. For a primary school or teacher, this would mean that materials to support the teaching across key learning areas would look and feel similar, would be easy to navigate and would use the same language to describe practices and techniques to drive fidelity in the implementation of evidence-based practices. In a similar way, access to system-produced professional development should be consistent in mode of delivery. That is, should a school or teacher want to further develop in any one practice, there is a consistent set of materials that are easily implemented, such as demonstration videos, peer observation tools, and subject- and year-level vignettes of practice.

Similarly, when systems develop assessments of student learning, they should design the assessments to promote evidence-based practices, including cultural reflexivity, to support the connection between such practices and educational outcomes. The design process should consider how assessment processes demonstrate the strengths of First Nations students and the impact of culturally responsive practices on student learning and engagement.

## 4.3 School reviews, planning and performance monitoring

All education systems have school-level accountability measures in place – for example, school improvement plans, a process for undertaking school reviews, regular performance reviews of principals, or regulation mechanisms like audits, inspections, and lines of reporting. There is also a broader range of data analysis and reporting functions that provide insights on the performance within schools and across networks and the overall system.

Education systems should consider how they design accountability processes to promote evidence-based practices at the school and system levels. These processes must be seamlessly integrated with the technical core to provide a clear, well-aligned and easy-to-navigate process for school and regional leaders. This shifts the administrative load of school leaders from spending time and effort seeking out solutions, documentation, professional learning and resources to support their improvement plans, to focus on building knowledge and capability to execute a deliberate and structured approach to the implementation of evidence-based practices in their context to meet their goals.

Systems could also consider how data are used to monitor the impact of evidence-based practices on improved student outcomes. This information can also be used more broadly across the system to build motivation and case for the adoption of evidence-based practices. For example, when systems design school monitoring processes and undertake school reviews, they should consider what measures provide information on the implementation and use of evidence-based practices within schools. These review processes should consider how accountability processes might incorporate First Nations views on school performance and practice.

## 4.4 Systems' operational structures

There are also a range of general operational functions that systems are responsible for delivering for and to schools. This includes but is not limited to digital infrastructure, procurement, centralised communications, and school leadership recruitment and development.

While these are operational functions, they have a key influence on schools' opportunity and capability to implement evidence-based practices. For example, effective data and information systems are essential for schools to access and use disaggregated data to understand and monitor the impact of evidence-based practices on their students, including for different cohorts. Similarly, central communications have a key role in spreading and sharing information across an education system about evidence-based practices, so that schools are provided with the information they need when they need it.

Systems can also use leadership development as an opportunity to embed instructional leadership as a core capability across all school leaders. The recruitment of leaders is a key lever for systems to directly influence schools. This includes consideration of succession planning to support continual improvement. For example, systems' recruitment pipeline can identify capability gaps in current and potential future school leaders. This can include underrepresentation of First Nations school leaders and models of First Nations leadership, expertise in instructional leadership for evidence-based practices or understanding how to successfully implement change within their schools.

# 5. Conclusion

**Driving evidence-based practice in schools requires system leaders to recognise that the school is the site of implementation and that their role is to influence and support school leaders and teachers to adopt new practices.**

As the work of schools and system leaders is complex and context-dependent, simply making quality evidence available is insufficient. System leaders must create an environment where teachers and school leaders have the opportunity, motivation and capability to engage with evidence-based practices meaningfully. Clear, system-wide strategies, coupled with school autonomy, allow schools to experiment and tailor evidence-based practices to their unique contexts. By prioritising strategies to build opportunity, motivation, and capability, system leaders create conditions for incremental, durable change that resonates across diverse school communities.

## 5.1 Opportunities for further research

This review found limited research into system leadership outside the United States, and a distinct lack of studies within an Australian context. This is compounded by a very low rate of research and publication by system leaders, meaning their perspective and voice are missing from reviews. While system leaders as public servants do not generally have publication or research as part of their core responsibilities, they do commission external agencies to evaluate policy implementation. The output from such commissioned work, if made publicly available – even in adapted or summary form – would add significant value to the current Australian system leadership research landscape. A further opportunity exists for such research to focus on the interconnected components of school systems, rather than on isolated strategies (input) and the effect on teachers' practice (output), in acknowledgement of schools as complex adaptive systems.

In many of the studies that were reviewed, it was challenging to identify findings that could be translated directly into guidance for system leaders' actions. This indicates a need for further research that better links actions from system leaders to their effects on the adoption of evidence-based pedagogical practice. In addition, more research is needed to draw connections between system leader actions, school-level implementation of evidence-based pedagogical practice, and a wider range of outcomes (beyond test scores) for a broader range of students, including First Nations students and students with disability.

More opportunities for First Nations researchers to collect, examine and report on First Nations experiences of, and perspectives on, system leadership would also make a substantial contribution to the evidence base. Few studies internationally meaningfully incorporate the voice of First Nations stakeholders or show evidence of co-design of research that concerns them, although more such studies are now emerging that incorporate First Nations perspectives in non-discriminatory ways, in recognition of Indigenous Data Sovereignty, and support a strength-based research narrative. Such research would support cultural reflexivity in system leadership, as well as strengthening the evidence base for cultural reflexivity in applying evidence-based practices in schools.

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# Appendix A: Methodology

This section describes the methodology of the systematic literature review, including the search strategy and PRISMA diagram. This methodology was supplemented by extended searches to capture highly relevant grey literature, policy documents, and works that encompassed First Nations methodologies and knowledge systems.

## Systematic search

Research librarians developed and tested systematic search strategies on 4 English-language education specialist databases, adapting the search syntax to the thesaurus specific to each database. Use of thesaurus-based searching ensures a high level of precision in search results and thus keeps the number of studies at a realistic level for screening and reviewing. It relies on literature being well-indexed. The syntax for each database is outlined in Table A1. Results of the searches are stored in Zotero.

To mitigate against highly relevant studies being missed in database searching, we tested an equivalent search in Google Scholar using keywords. We captured and screened the first 30 results from the Google Scholar search for the systematic review.

The initial systematic review produced 305 results in total, of which 5 studies were duplicates across these databases. Removing the duplicates left 300 studies as shown in Table A1.

**Table A1: Search strategy for education databases**

Source	Search syntax	Results
<b>Australian Education Index</b> on Informit Database of policy and research about Australian education or by Australian authors, indexed using the Australian Thesaurus of Education Descriptors	“Education systems” OR Departments OR “School districts” OR “School systems” OR “State agencies” OR “State departments of education” [in Subjects] AND “Change agents” OR “Change management” OR “Evidence based practice” OR “Curriculum implementation” OR “Policy implementation” OR “Program implementation” OR “Strategic planning” OR "Teaching process" [in Subjects] AND NOT "higher education" [in All fields] AND NOT "preschool" [in All fields] AND NOT post-secondary [in All fields] AND [2004-2024] [Peer reviewed]	38

Source	Search syntax	Results
<b>British Education Index</b> on EBSCO Index of largely UK education journals described using British-specific education thesaurus	AND "School Districts" OR "State Boards of Education" OR "State Departments of Education" OR administrators OR "department heads" OR inspectors OR "district officers" OR "catholic education" [All fields] AND "Change agents" OR "Evidence Based Practice" OR "Curriculum Implementation" OR "Program Implementation" OR "strategic planning" OR "instructional improvement" [All fields] NOT "higher education" [All fields] AND [2004-2024] [Peer reviewed]	44
<b>Education Research Complete</b> on EBSCO Database of education journals and conference papers with international coverage	"School Districts" OR "State Boards of Education" OR "State Departments of Education" [All fields] AND "Change agents" OR "Evidence Based Practice" OR "Curriculum Implementation" OR "Program Implementation" OR "strategic planning" OR "instructional improvement" [SU Subject Terms] AND ON: Apply related words; Apply equivalent subjects NOT "Higher education" [All fields] AND [2004-2024] [Peer reviewed] [English]	34
<b>ERIC</b> on <a href="http://eric.ed.gov">eric.ed.gov</a> Index of international sources relevant to the United States and OECD countries, described using the ERIC thesaurus	(descriptor:"school districts" OR descriptor:"state boards of education OR descriptor:"state departments of education") AND (change OR "evidence based practice" OR descriptor:"strategic planning" OR descriptor:"instructional improvement") NOT "higher education" AND [2004-2024] [Peer reviewed]	154
<b>Google Scholar</b>	implementation AND (school OR "K-12") AND ("district administrators" OR "catholic education office" OR "department of education" OR "regional office") AND [2004-2024]	30
<b>TOTAL</b>		<b>305</b>

## Extended searches

The systematic search was supplemented in 2 ways to identify and evaluate relevant evidence and commentary from grey literature and other non-indexed resources. Seminal works on school policy reform, high-performing education systems, and implementation science were collated by both AERO and ACER team members. This literature assisted with the framing and definitional work of the review.

Practising cultural reflexivity throughout the project was a priority for the team of non-Indigenous researchers. We used several strategies to centre First Nations perspectives in the literature searching process, starting with the specialist Indigenous Education research database, Learning Ground. We benefited from key references identified by ACER and AERO from previous research, and in particular, we acknowledge the valuable input from consultation with AERO's First Nations ERG via the AERO team.

The ERG recommendations included:

- broadening the search **for cultural responsiveness to health contexts**, given the recognised paucity of specific research in the education sector
- key **Aboriginal and Torres Strait Islander researchers and organisations**
- going beyond research literature to publications created or promoted by **First Nations education consultative bodies**.

Table A2 summarises the extended search sources and strategies. A subset of the research identified through the extended searches met the criteria for the systematic review, and is included in the PRISMA diagram in **Appendix B**.

**Table A2: Extended search sources and strategies**

Source	Search syntax	Results
<p><b>Learning Ground</b> on <a href="https://acer.org/LearningGround">acer.org/LearningGround</a></p> <p>Research about Indigenous education written by Indigenous and non-Indigenous education researchers</p>	<p>Subject="School systems"</p> <p>AND [2004-2024]</p> <ul style="list-style-type: none"> <li>• Anderson, L., &amp; Riley, L. (2020). Crafting safer spaces for teaching about race and intersectionality in Australian Indigenous Studies.</li> <li>• Australian Education Research Organisation. (2024). Cultural responsiveness in education.</li> <li>• Burgess, C., Tennent, C., Vass, G., Guenther, J., Lowe, K., &amp; Moodie, N. (2019). A systematic review of pedagogies that support, engage and improve the educational outcomes of Aboriginal students.</li> <li>• Carey, M. (2015). The limits of cultural competence: An Indigenous Studies perspective.</li> <li>• Lowe, K., Harrison, N., Tennent, C., Guenther, J., Vass, G., &amp; Moodie, N. (2019). Factors affecting the development of school and Indigenous community engagement: A systematic review.</li> <li>• Morrison, A., Rigney, L.-I., Hattam, R., &amp; Diplock, A. (2019). Toward an Australian culturally responsive pedagogy: A narrative review of the literature</li> <li>• Woods, D., &amp; Fredericks, B. (2019). Addressing the gap between policy and implementation: Strategies for improving the educational outcomes of Indigenous students.</li> </ul>	7

Source	Search syntax	Results
<p><b>CINAHL</b> on EBSCO</p> <p>Global Index to Nursing and Allied Health Literature</p>	<p>evidence based practice implementation AND ( "cultural responsiveness" OR "cultural competence" OR "cultural awareness" OR "transcultural care" ) AND ( Australia or Australian or Australians )</p> <ul style="list-style-type: none"> <li>• Burgemeister, F. C., Crawford, S. B., Hackworth, N. J., Hokke, S., &amp; Nicholson, J. M. (2023). Implementation of evidence-based programs within an Australian place-based initiative for children: A qualitative study.</li> <li>• Clark, E. C., Burnett, T., Blair, R., Traynor, R. L., Hagerman, L., &amp; Dobbins, M. (2024). Strategies to implement evidence-informed decision making at the organizational level: A rapid systematic review.</li> <li>• Doyle, K., &amp; Hungerford, C. (2014). Adapting evidence-based interventions to accommodate cultural differences: Where does this leave effectiveness?</li> <li>• Kilcullen, M., Swinbourne, A., &amp; Cadet-James, Y. (2018). Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology.</li> <li>• Luke, J. N., Ferdinand, A. S., Paradies, Y., Chamravi, D., &amp; Kelaher, M. (2020). Walking the talk: Evaluating the alignment between Australian governments' stated principles for working in Aboriginal and Torres Strait Islander health contexts and health evaluation practice.</li> <li>• Thompson, S. C., DiGiacomo, M. L., Smith, J. S., Taylor, K. P., Dimer, L., Ali, M., Wood, M. M., Leahy, T. G., &amp; Davidson, P. M. (2009). An assessment of CR Services across Western Australia.</li> </ul>	<p>6</p>

Source	Search syntax	Results
<b>Aboriginal and Torres Strait Islander researchers and organisations</b>	<p>Professor Lester-Irabinna Rigney, Professor of Education, UniSA and colleagues</p> <ul style="list-style-type: none"> <li>• Toward an Australian culturally responsive pedagogy (Morrison et al., 2019)</li> <li>• Addressing the gap between policy and implementation: Strategies for improving educational outcomes of Indigenous students (Woods &amp; Fredericks, 2019)</li> </ul> <p>Professor Peter Buckskin, PSM a Narungga educator from South Australia, experienced and influential former Ministerial Adviser, Superintendent of Schools, and Senior Executive</p> <ul style="list-style-type: none"> <li>• More Aboriginal and Torres Strait Islander Teachers Initiative (2019)</li> </ul> <p>Stronger Smarter Institute</p> <ul style="list-style-type: none"> <li>• Position paper: A strength-based approach to Aboriginal and Torres Strait Islander education (2020)</li> </ul> <p>NSW Department of Education</p> <ul style="list-style-type: none"> <li>• Re-imagining evaluation: A culturally responsive evaluation framework (2023)</li> </ul>	5
<b>First Nations education consultative bodies</b>	<p>Aboriginal and Torres Strait Islander Education Advisory Group</p> <p>Provide professional learning for system leaders</p> <p>National Aboriginal and Torres Strait Islander Education Corporation <a href="https://natsiec.edu.au">https://natsiec.edu.au</a></p> <p>NSW Aboriginal Education Consultative Group <a href="https://www.aecg.nsw.edu.au">https://www.aecg.nsw.edu.au</a></p> <p>Queensland First Nations Education Consultative Body</p> <p>Victorian Aboriginal Education Association <a href="https://www.vaeai.org.au">https://www.vaeai.org.au</a></p> <p>Western Australian Department of Education Aboriginal Advisory Body <a href="https://www.education.wa.edu.au/aboriginal-advisory-body">https://www.education.wa.edu.au/aboriginal-advisory-body</a></p>	–

## Screening

The review team screened abstracts of all 305 studies resulting from the systematic search, coding whether they met inclusion criteria. In round 1, 149 studies were excluded. Table A3 shows against which criteria they were excluded, noting that many studies were excluded on more than one criterion. To avoid double counts, only the numerically lowest code has been reported in the table. The majority of studies were excluded because they did not depict actions from system leaders ( $n = 87$ ), followed by studies that did not focus on changing pedagogical practice ( $n = 51$ ). In round 2, the full text of prioritised articles (as described in the next section) were read in full and articles were assessed against the same criteria. This led to 19 additional exclusions, again predominantly because they did not focus on system leaders ( $n = 12$ ) or on pedagogical practice ( $n = 6$ ).

**Table A3: Inclusion codes and number of excluded studies**

Code	Inclusion criteria	Round 1 screening exclusions	Round 2 screening exclusions
1	Study focuses on P-12 school setting	12	0
2	Study is in English	0	0
3	Publication is not older than 20 years	0	0
4	Study focuses on system leader(s)	87	12
5	Study focused on changing pedagogical practice	51	6
6	Study is action-oriented (i.e., can usefully inform action)	4	0
7	Full text available	0	1

## Reviewing

As part of the reviewing process, we brought together studies included through the systematic search and studies from the extended searches that also met systematic inclusion criteria. We then prioritised studies that were:

- focused on Australia, using targeted keywords and scanning methods in Zotero
- focused on high-performing education systems, specifically focusing on countries listed by the National Center on Education and the Economy
- focused on First Nations or culturally diverse groups, as noted during the initial screening

- review studies with relevant keywords in Zotero
- highlighted by ACER subject matter experts as highly relevant
- provided by AERO
- recommended by AERO
- identified by ACER subject matter experts or through snowballing.

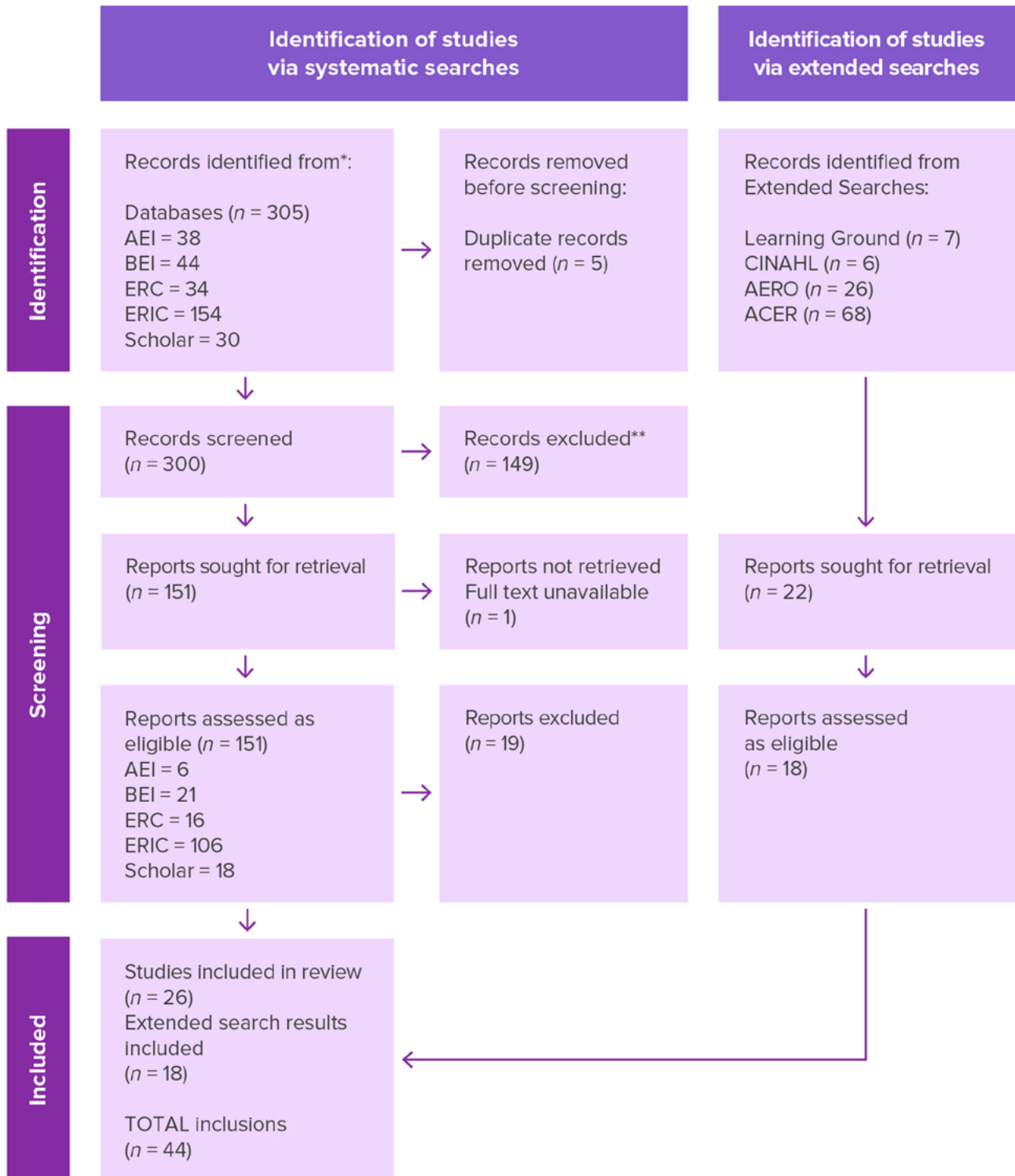
This prioritisation process led to the inclusion of 44 articles in the systematic part of this review, comprised of 26 articles from database searches and 17 articles from extended searches. Additional relevant studies from the extended searches that did not meet systematic review criteria but did align with the prioritised characteristics outlined in this section were used to frame systematic review findings.

Before reading the full text, we generated customised abstracts using ChatGPT4o (closed loop) to orient ourselves to the literature. We then read all prioritised publications in full, highlighting key points in Zotero and transferring highlighted text to a Word document. Key findings for each publication were recorded in Excel, which were thematically analysed using the 3 elements of the COM-B model. Deeper analysis then enabled the generation of subthemes. The report is grounded in those themes and subthemes, with narrative synthesis guided by the highlighted literature in the Word document.

# PRISMA

Figure A1 illustrates the selection process of studies included in the systematic and extended searches, following the PRISMA 2020 guidelines.

**Figure A1: PRISMA diagram**



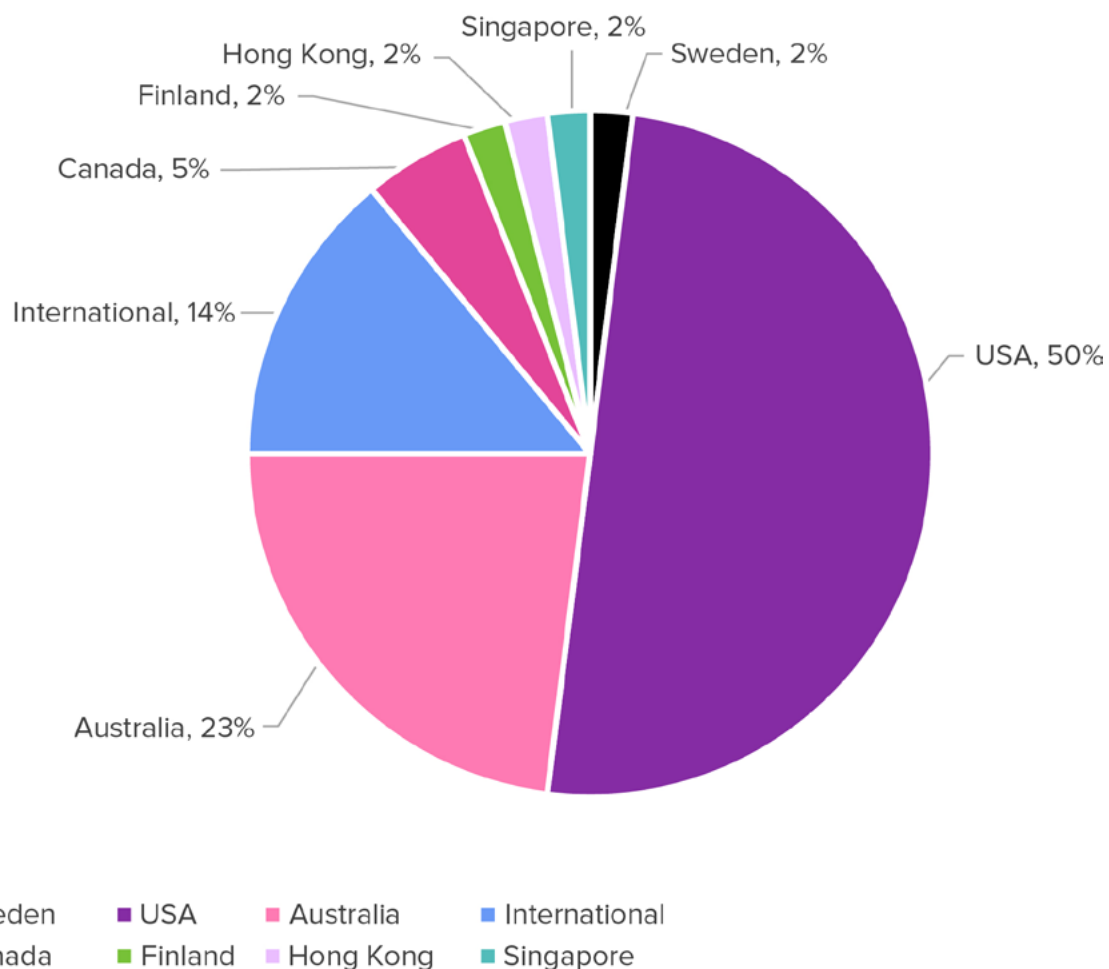
Source: [PRISMA template](#) by Page et al. (2021). Used under a [CC BY 4.0](#) licence.

# Appendix B: Types of literature

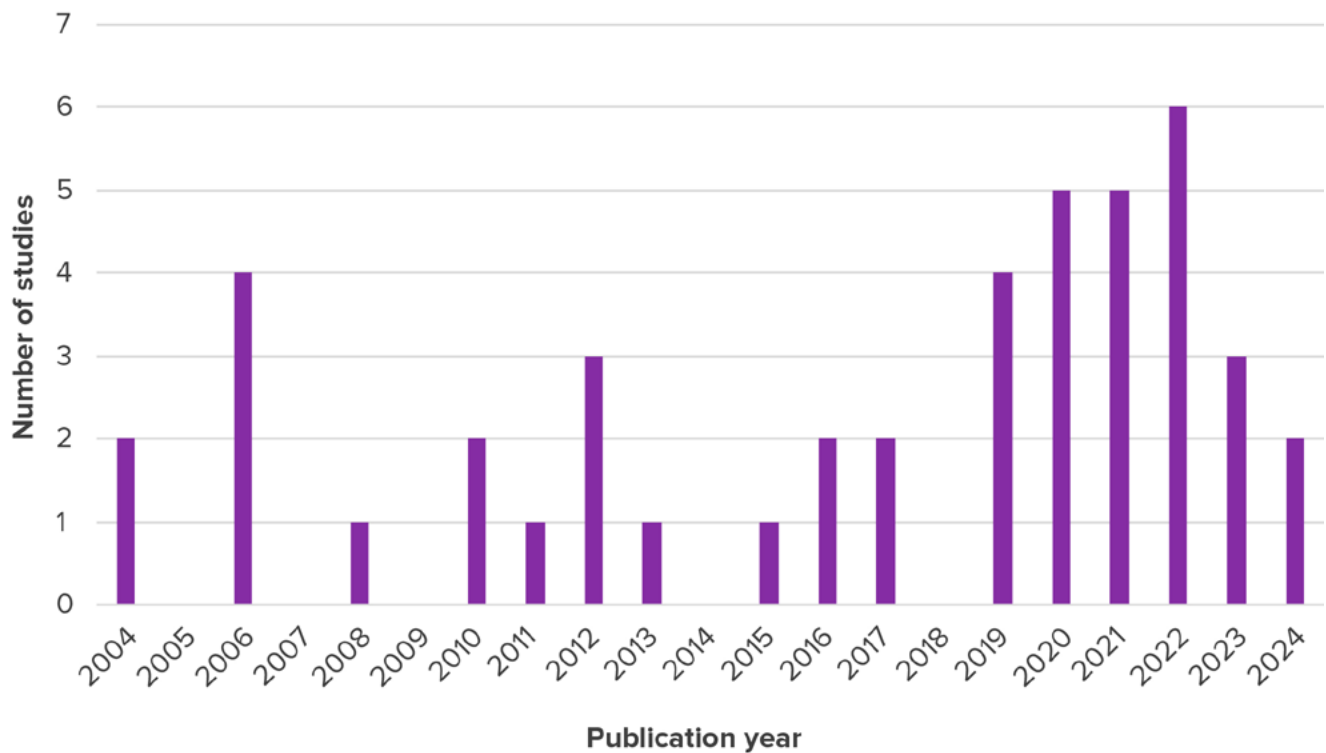
This section discusses the nature of studies found in the systematic literature review. An overview of the included studies and their characteristics is provided in Appendix C.

The studies ( $n = 44$ ) have predominantly been conducted in the United States ( $n = 22$ ), followed by studies from Australia ( $n = 10$ ), international (i.e., a range of countries;  $n = 6$ ), and studies undertaken in Canada ( $n = 2$ ), Finland ( $n = 1$ ), Hong Kong ( $n = 1$ ), Sweden ( $n = 1$ ) and Singapore ( $n = 1$ ) (see Figure B1). Recent studies were prioritised in the review, leading to 48% of studies included that were published from 2020 onwards (Figure B2).

**Figure B1: Geographic focus of research**



**Figure B2: Publication year**

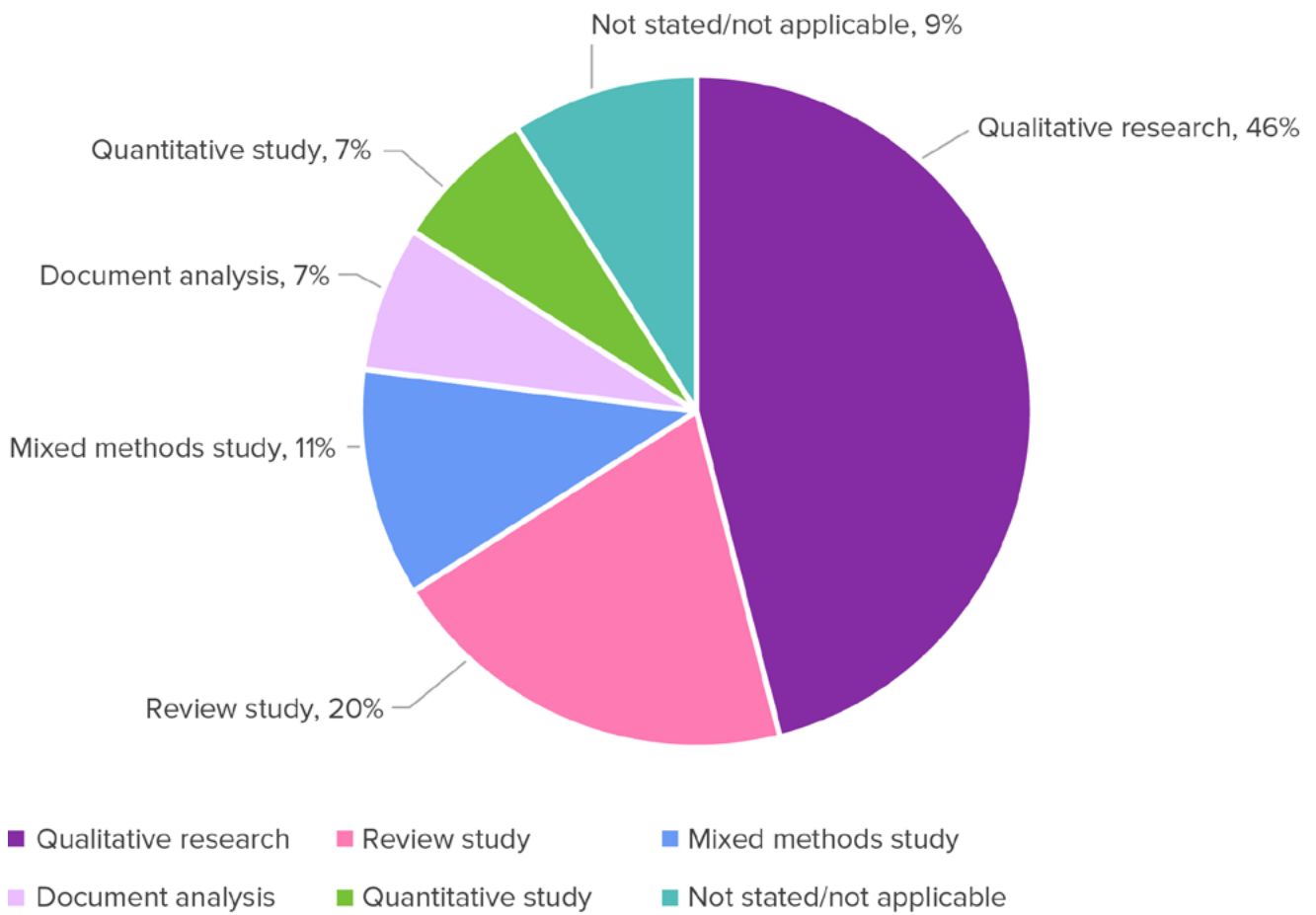


The literature on driving evidence-based practice in schools commonly focuses on professional development, data-informed practices, collaborative networks, and the roles of intermediaries who facilitate evidence-based practice within school settings. Additionally, many American articles examine high-performing or turnaround districts as case studies. These outliers are used to illustrate effective strategies to inform system-wide approaches to evidence-based practice. While the education system in the United States is different to Australia, many system leader actions are relevant to the Australian context. The importance of alignment, coherence, capability building and a shared purpose transcends borders. However, the literature has a very limited focus on First Nations people, with only 2 studies incorporating First Nations perspectives (see Appendix C).

The majority of studies reviewed adopted a qualitative case study ( $n = 20$ ), often using a combination of interviews with system and school leaders and policy analysis (see Figure B3). Literature reviews ( $n = 9$ ) included scoping and systematic reviews. A smaller number of studies used a mixed methods approach ( $n = 5$ ), engaged in document analysis ( $n = 3$ ), or used quantitative methods ( $n = 3$ ). Four studies did not specify a methodology or were a commentary study.

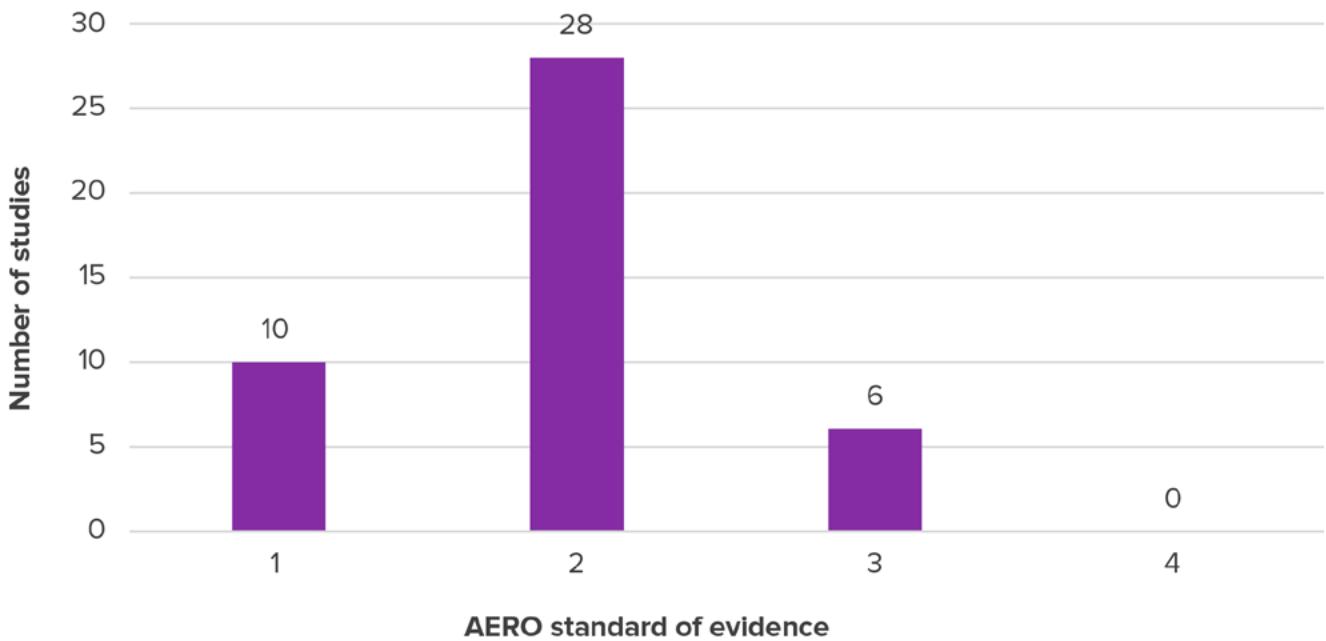
Many studies in this review ( $n = 32$ ) listed a theory or framework of implementation and/or change. Coding revealed a large diversity of theories and frameworks with varying levels of explanation of each theory or framework. Due to the versatility of these results, we decided to use the COM-B model to guide our analysis.

**Figure B3: Research methodology**



Research was rated against AERO's (2022) Standards of Evidence. In line with the dominance of qualitative methods, the majority of studies were rated as medium confidence ( $n = 28$ ). Ten studies were rated as low confidence, and 6 studies were rated as high confidence. No studies were rated as very high confidence (see Figure B4).

**Figure B4: AERO Standard of Evidence ratings**



A minority of studies distinguished culturally diverse groups ( $n = 18$ ), with slightly fewer studies taking account of participants' cultural perspectives and highlighting cultural responsiveness and/or reflexivity (both  $n = 15$ ).

# Appendix C: Overview table of included studies

This appendix provides an overview of the included studies that met systematic review criteria. Table C1 presents the geographic focus of each study, the source type, and a brief description of the methodology. It also lists authorship, and whether the study references First Nations and culturally diverse perspectives to consider the positioning of each study.

**Table C1: Reviewed studies meeting systematic review criteria (n = 44)**

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Citation (author date)	Country, state/region	Journal article, report, thesis	Research method, population, context	Researcher perspective	Australian First Nations perspective	Includes
Andersson, K., & Liljenberg, M. (2020). 'Tell us what, but not how' – understanding intra-organisational trust among principals and LEA officials in a decentralised school system. <i>School Leadership &amp; Management</i> , 40(5), 465–482. <a href="https://doi.org/10.1080/13632434.2020.1832980">https://doi.org/10.1080/13632434.2020.1832980</a>	Sweden	Journal article	Case study of one municipality that has improved between inspections  Semi-structured interviews with local education authority officials (n = 3) and principals (n = 8)	University researchers	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Barr, M. D. (2006). Racialised education in Singapore. <i>Educational Research for Policy and Practice</i> , 5(1), 15–31. <a href="https://doi.org/10.1007/s10671-005-5692-8">https://doi.org/10.1007/s10671-005-5692-8</a>	Singapore	Journal article	Content analysis of Singaporean textbooks used to teach English in primary school '70s to '00s	University researcher analysing textbooks	No	Chinese, Malay, and Indian students in Singapore
Blazar, D., & Schueler, B. (2023). Effective school district policies and practices: Synthesizing theoretical frameworks and empirical findings across disciplines. <i>Journal of Research on Educational Effectiveness</i> , 1–40. <a href="https://doi.org/10.1080/19345747.2023.2269923">https://doi.org/10.1080/19345747.2023.2269923</a>	United States	Journal article	Systematic review of quantitative studies and theoretical frameworks from various disciplines (e.g., organisational behaviour, political science, economics) to understand how district-level policies influence educational outcomes	University researchers undertaking a review	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Clay, K. L., & Broege, N. C. R. (2022). Searching for Amistad in two school districts: A case study of Black history curriculum implementation in New Jersey. <i>Educational Administration Quarterly</i> , 58(5), 718–745. <a href="https://doi.org/10.1177/0013161X211026962">https://doi.org/10.1177/0013161X211026962</a>	United States (Newark and Hoboken, New Jersey school districts)	Journal article	Qualitative study – exploratory case study model focusing on 2 districts in New Jersey  Two 1.5 hour interviews with district administrators (superintendents and assistant-superintendents), review of district-level curriculum materials and policy documents	University researchers interviewing district leaders	No	Yes (student populations were majority Black and/or Latinx)

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Coburn, C. E., & Talbert, J. E. (2006). Conceptions of evidence use in school districts: Mapping the terrain. <i>American Journal of Education</i> , 112(4), 469–495. <a href="https://www.journals.uchicago.edu/doi/full/10.1086/505056">https://www.journals.uchicago.edu/doi/full/10.1086/505056</a>	United States	Journal article	Mixed methods – survey, interviews (top district administrators ( $n = 10$ ), frontline administrators ( $n = 14$ ), principals and teachers ( $n = 8$ schools)), observations, document analysis	University researchers engaging with schools and districts	No	Yes. ‘The district serves approximately fifty thousand students, the majority of whom were poor students of color and one-fourth of whom were classified as English language learners at the time of the study during 2003–2005’ (p. 473)

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Daramola, E. J., Allbright, T. N., & Marsh, J. A. (2023). 'Are you saying that we're racist?': Comparing normative, political, and technical dimensions of instructional and disciplinary policies. <i>Teachers College Record</i> , 125(4), 3–38. <a href="https://doi.org/10.1177/01614681231176921">https://doi.org/10.1177/01614681231176921</a>	United States (California)	Journal article	Qualitative, comparative, embedded case study. It compares the implementation of 2 distinct policies: Common Core State Standards (CCSS) and Positive Behavior Intervention and Supports (PBIS)  Data collection: interviews, focus groups, observations, and document analysis over 2 phases, with district leaders and school-based staff	University researcher collecting data from school district/schools	No	White, Black and Latinx students

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Fletcher, M., Wyatt-Smith, C., Bartlett, B., & Kearney, J. (2004). Weaving accounts of literacy through the official curriculum: Stitching policy to practice. In B. Bartlett, F. Bryer, & D. Roebuck (Eds.), <i>Educating: Weaving research into practice</i> (Vol. 2, pp. 81–93). Griffith University.	Australia (Queensland)	Conference paper	Qualitative study: 7 interviews with senior department staff members responsible for literacy policy development	University researchers interviewing system policy makers	No	No
Ford, M. R., & Ihrke, D. M. (2020). School board member strategic planning prioritization and school district performance. <i>Leadership &amp; Policy in Schools, 19</i> (4), 597–609. <a href="https://doi.org/10.1080/15700763.2019.1638420">https://doi.org/10.1080/15700763.2019.1638420</a>	United States (Michigan)	Journal article	Quantitative study. Survey of American school board members ( $n = 206$ ) and analysis of district-level student performance data	University researchers surveying school board members	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Gomez Johnson, K., Nebesniak, A. L., & Rupnow, T. J. (2019). District-university collaborations to support reform-based mathematics curriculum implementation. <i>Journal of Mathematics Education at Teachers College</i> , 10(1), 17–20.	United States (Nebraska)	Journal article	Not stated Study is a description of university-school district partnerships to improve and reform mathematics curriculum	2x state universities (maths faculty members, district curriculum leader); working with district elementary teachers	No	Not stated
Hamilton, L. S., Schwartz, H. L., Stecher, B. M., & Steele, J. L. (2013). Improving accountability through expanded measures of performance. <i>Journal of Educational Administration</i> , 51(4), 453–475. <a href="https://doi.org/10.1108/09578231311325659">https://doi.org/10.1108/09578231311325659</a>	United States	Journal article	Literature review, consultation with a panel of 5 test-based accountability experts, review of state and district documentation, and 10 semi-structured interviews with staff at state and local education agencies and research institutions	Research organisation	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Hannay, L. M., Manning, M., Earl, S., & Blair, D. (2006a). Leaders leading and learning (Part 1). <i>Management in Education</i> , 20(2), 20–23. <a href="https://doi.org/10.1177/089202060602000206">https://doi.org/10.1177/089202060602000206</a>	Canada (Ontario)	Journal article	Qualitative study: open-ended interviews with 6 supervisory officers (director, executive superintendents, school superintendents) and one open-ended focus group to discuss senior administrators' role in facilitating school improvement	Supported by government research organisation – university researcher and district superintendent	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Hannay, L. M., Manning, M., Earl, S., & Blair, D. (2006b). Leaders leading and learning (Part 2). <i>Management in Education</i> , 20(3), 5–30. <a href="https://doi.org/10.1177/08920206060200030401">https://doi.org/10.1177/08920206060200030401</a>	Canada (Ontario)	Journal article	Qualitative study: open-ended interviews with 6 supervisory officers (director, executive superintendents, school superintendents) and one open-ended focus group to discuss senior administrators' role in facilitating school improvement	Supported by government research organisation – university researcher and district superintendent	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Hitt, D. H., & Meyers, C. V. (2021). Examining three school systems' actions linked to improving their lowest-performing schools. <i>Leadership and Policy in Schools, 21</i> (2), 959-983. <a href="https://doi.org/10.1080/15700763.2021.1894454">https://doi.org/10.1080/15700763.2021.1894454</a>	United States	Journal article	Qualitative study: document analysis of district-level resources (not collected specifically for this study), including district readiness for turnaround assessment, site visit reports (based on non-recorded interviews), 90-day plans with problems of practice for 3 districts	University researchers	No	No
Hopkins, M., & Woulfin, S. (2015). School system (re)design: Developing educational infrastructures to support school leadership and teaching practice. <i>Journal of Educational Change, 16</i> (4), 371–377. <a href="https://doi.org/10.1007/s10833-015-9260-6">https://doi.org/10.1007/s10833-015-9260-6</a>	United States	Journal article – special issue paper introducing articles included in the issue	n/a (discussion of articles in journal)	University researchers	No	Somewhat – mentions one article that focuses on diverse cultural needs

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Hunter, J. (2021). <i>Alternative approaches to governing street-level work in the classroom: Australian tales of entanglement and distance</i> [Doctoral dissertation, The University of Melbourne]. <a href="https://hdl.handle.net/11343/279360">https://hdl.handle.net/11343/279360</a>	Australia	PhD thesis	Multi-level comparative case study focusing on enactment of 2 recent policies in 2 states (New South Wales and Victoria) and 6 primary schools. Data included 128 semi-structured interviews with staff at department ( $n = 18$ ) and school level ( $n = 44$ ), 63 participant observations and policy and school documents	PhD candidate	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Iatarola, P., & Fruchter, N. (2004). District effectiveness: A study of investment strategies in New York City public schools and districts. <i>Educational Policy</i> , 18(3), 491–512. <a href="https://doi.org/10.1177/0895904804265020">https://doi.org/10.1177/0895904804265020</a>	United States (New York City Districts)	Journal article	Qualitative study. Interviews with district administrators and principals in 2 low-performing and 2 high-performing districts	University researchers interviewing practitioners	No	Yes (Districts' descriptions includes details on immigrant population within the districts) – white students, immigrant students, EAL/D students, Black students, Asian students, Hispanic students

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Jackson, J., Matthews, H., Ryan, J., Macklin, S., & Brown, C. (2022). <i>Reinvigorating and reimagining our schools: A vision for post-pandemic schooling in Australia</i> . Mitchell Institute, Victoria University. <a href="https://content.vu.edu.au/sites/default/files/media/reinvigorating-reimagining-school-education.pdf">https://content.vu.edu.au/sites/default/files/media/reinvigorating-reimagining-school-education.pdf</a>	Australia	Report	Not stated	University researchers	No	Yes
Jimerson, J. B., & Childs, J. (2017). Signal and symbol: How state and local policies address data-informed practice. <i>Educational Policy</i> , 31(5), 584–614. <a href="https://doi.org/10.1177/0895904815613444">https://doi.org/10.1177/0895904815613444</a>	United States (Texas, 60 school districts)	Journal article	Policy review	University researchers	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Koh, G. A., & Askeff-Williams, H. (2021). Sustainable school-improvement in complex adaptive systems: A scoping review. <i>Review of Education</i> , 9(1), 281–314. <a href="https://doi.org/10.1002/rev3.3246">https://doi.org/10.1002/rev3.3246</a>	International	Journal article	Scoping review on sustainable school improvement (16 articles)	University researchers	No	No
Leach, T. (2021). <i>System reform: An exploration of policy interpretation and translation through the enacted role of Regional Education Officers</i> [Doctoral thesis, University of Southern Queensland]. <a href="https://research.usq.edu.au/item/q75yz/system-reform-an-exploration-of-policy-interpretation-and-translation-through-the-enacted-role-of-regional-education-officers">https://research.usq.edu.au/item/q75yz/system-reform-an-exploration-of-policy-interpretation-and-translation-through-the-enacted-role-of-regional-education-officers</a>	Australia (Queensland)	PhD thesis	Qualitative case study: document analysis, qualitative surveys, semi-structured interviews with regional education officers	Practitioner-researcher who worked as a regional education officer in the Queensland Department of Education	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. <i>Leadership and Policy in Schools</i> , 9(3), 245–291. <a href="https://doi.org/10.1080/15700761003731500">https://doi.org/10.1080/15700761003731500</a>	United States and Canada	Journal article	Review study: 31 studies (previous 10 years) on school districts, ‘characteristics of school districts making exceptionally positive contributions to their students’ achievement  Largest proportion of these districts served a majority of disadvantaged, minority, or otherwise at-risk children, or had chosen to focus their improvement efforts especially on those children in their districts’ (p. 283)	University researcher reviewing research	No	Brief description of studies including disadvantaged, low-SES or minority students, but no specifics

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Liang, J., Mitchell, T., & Scott, J. (2021). Statewide school redesign: Integrating design thinking and the four disciplines of execution as a continuous school improvement process. <i>Journal of Cases in Educational Leadership</i> , 24(1), 15–27. <a href="https://doi.org/10.1177/1555458920975462">https://doi.org/10.1177/1555458920975462</a>	United States (Kansas, one school district)	Journal article	Case study: synthesis of actions that researchers witnessed  Methodology not clearly explained.	University researchers – deeply involved in the redesign and firsthand witnesses of the actions at both the system and local levels	No	Yes (75% of the students in the case study school were from culturally diverse backgrounds)

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Louis, K. S., & Robinson, V. M. (2012). External mandates and instructional leadership: School leaders as mediating agents. <i>Journal of Educational Administration</i> , 50(5), 629–665. <a href="https://doi.org/10.1108/09578231211249853">https://doi.org/10.1108/09578231211249853</a>	United States (9 randomly selected states)	Journal article	Mixed methods – survey among teachers ( $n = 3,900$ ) principals and assistant principals ( $n = 211$ combined p and a/p) from 9 states, 45 districts and 175 schools (all randomly sampled) and interviews with principals ( $n = 20$ ) with validity check of $n = 15$ superintendent interviews	University researchers engaging with schools and districts	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Lowe, K., Harrison, N., Tennent, C., Guenther, J., Vass, G., & Moodie, N. (2019). Factors affecting the development of school and Indigenous community engagement: A systematic review. <i>The Australian Educational Researcher</i> , 46(2), 253–271. <a href="https://doi.org/10.1007/s13384-019-00314-6">https://doi.org/10.1007/s13384-019-00314-6</a>	Australia	Journal article	Systematic review (32 articles)	University researchers	Yes	First Nations students
Malin, J., & Altowajri, M. (2020). Strategic planning and research-practice partnerships as a dynamic, generative duo? <i>Mid-Western Educational Researcher</i> , 32(1), 71–79.	United States	Journal article	Commentary/literature review  Authors draw on literature and personal experience	University researcher and graduate researcher reflecting on experience and literature (on research-practice partnerships)	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Matthews, P., Moorman, H., & Nusche, D. (2008). Building leadership capacity for system improvement in Victoria, Australia. In <i>Improving school leadership, Volume 2: Case studies on system leadership</i> (pp. 179–213). OECD Publishing. <a href="https://doi.org/10.1787/9789264039551-en">https://doi.org/10.1787/9789264039551-en</a>	Australia (Victoria)	Report	Qualitative methodology, grounded in document review, interviews and observations  Involved a study visit organised by the OECD, which included meetings with various stakeholders (e.g., school leaders, department officials, educators) and visits to selected schools  Study drew on policy documents, reports, and frameworks related to school leadership and capacity-building within the Victorian educational system	OECD researchers examining state education system	No	Study mentions Victoria’s culturally and linguistically diverse population. DEECD expects schools to address the needs of this increasingly diverse student population, and the Victorian strategy acknowledges the importance of inclusive educational practices to meet these students' needs

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
McCulloch, A. W., Mawhinney, K. J., Holl-Cross, C., Wilson, P. H., & Wonsavage, F. P. (2022). <i>Professional learning at scale: Designing a boundary object. North American Chapter of the International Group for the Psychology of Mathematics Education</i> . <a href="https://eric.ed.gov/?id=ED630428">https://eric.ed.gov/?id=ED630428</a>	United States	Journal article	Mixed methods – quant survey with an open question. $n = 346$ mathematics teachers and mathematics leaders from 85 districts responded to questions about their experience using research-practice briefs to support implementation of new mathematics standards (R-P Briefs). (total survey sample was 1,768)	University researchers who partnered with state and district leaders, mathematics education researchers, and classroom teachers. They do not directly implement the professional learning, but they co-design resources, such as the R-P Briefs, to support the educators involved in the implementation	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
McLure, F. I., & Aldridge, J. M. (2022). A systematic literature review of barriers and supports: Initiating educational change at the system level. <i>School Leadership &amp; Management, 42</i> (4), 402–431. <a href="https://doi.org/10.1080/13632434.2022.2113050">https://doi.org/10.1080/13632434.2022.2113050</a>	International (50% United States, 25% Europe)	Journal article	Systematic review of 160 empirical studies on barriers or supports to introduction of system-wide reforms/change in more than one school. 2000 to 2020, K-12 settings	University researchers undertaking a review	No	Yes, some studies are referenced that focus on culturally diverse groups. A key finding is also the need to be culturally responsive to students and teachers.

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Meyers, C. V. (2020). District-led school turnaround: A case study of one U.S. district's turnaround launch for multiple schools. <i>Leadership and Policy in Schools</i> , 19(4), 710–729. <a href="https://doi.org/10.1080/15700763.2019.1637902">https://doi.org/10.1080/15700763.2019.1637902</a>	United States (one school district)	Journal article	Retrospective case study of a district's participation in the University School Turnaround Program, using documents that district and school leaders had prepared for participation, interviews ( $n = 15$ ), observations (conference, meetings) and field notes	University Researcher	No	African American students
Newton, X. A. (2016). Striking a balance: A mixed-methods approach to impact-oriented evaluation. <i>Studies in Educational Evaluation</i> , 51, 96–107. <a href="https://doi.org/10.1016/j.stueduc.2016.10.005">https://doi.org/10.1016/j.stueduc.2016.10.005</a>	United States (one school district)	Journal article	Mixed methods: observation of teachers ( $n = 61$ from $n = 29$ schools) with $n = 1023$ students in their classrooms, teacher survey, student test results	University researchers	No	African American, Hispanic/Latinx teachers and students

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Opfer, V. D., Kaufman, J. H., & Thompson, L. E. (2016). <i>Implementation of K–12 state standards for mathematics and English language arts and literacy</i> . <a href="https://www.rand.org/pubs/research_reports/RR1529-1.html">https://www.rand.org/pubs/research_reports/RR1529-1.html</a>	United States	Report	Quantitative study – survey from K-12 teachers about perceptions and practices about State Standards (over 4,000 teachers surveyed)	Researchers collecting and analysing data from teachers	No	Not stated
Pyhältö, K., Pietarinen, J., & Soini, T. (2012). Do comprehensive school teachers perceive themselves as active professional agents in school reforms? <i>Journal of Educational Change</i> , 13(1), 95–116. <a href="https://doi.org/10.1007/s10833-011-9171-0">https://doi.org/10.1007/s10833-011-9171-0</a>	Finland	Journal article	Qualitative content analysis based on semi-structured essays written by teachers ( $n = 193$ )  Grounded theory principles used to code data	University researcher analysing essays	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Rickinson, M., Walsh, L., De Bruin, K., & Hall, M. (2019). Understanding evidence use within education policy: A policy narrative perspective. <i>Evidence &amp; Policy</i> , 15(2), 235–252. <a href="https://doi.org/10.1332/174426418X15172393826277">https://doi.org/10.1332/174426418X15172393826277</a>	Australia (Victoria)	Journal article	Qualitative study: Document analysis (policy initiatives), interviews with department staff involved with policy development ( $n = 25$ ), verification workshop ( $n = 40$ ) and observations of meetings	University researchers partnering with department staff (co-funded research)	No	Not stated
Robinson, S. (2011). Diluting education? An ethnographic study of change in an Australian Ministry of Education. <i>Discourse</i> , 32(5), 797–807. <a href="https://doi.org/10.1080/01596306.2011.620760">https://doi.org/10.1080/01596306.2011.620760</a>	Australia (one state)	Journal article	Ethnography, situated within one department of education, drawing on field notes, observations, interviews, document analysis	Researcher describing Department of Education team's numeracy professional development program work with teachers/schools and incorporating teacher/principal perspective – data collected through 10-month intensive observation within the department	No	Not stated

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Rodwell, G. (2010). The Tasmanian Essential Learnings Curriculum (2000-06): Some aspects of the ecology policy metaphor in analysing a failed statewide curriculum innovation. <i>Curriculum Perspectives</i> , 30(1), 40–52.	Australia (Tasmania)	Journal article	Historical and policy analysis, including document, political discourse, interview data reported elsewhere, public reactions and media portrayal analysis	University researcher analysing documents retrospectively	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Ryan, A., Prieto-Rodriguez, E., Miller, A., & Gore, J. (2024). What can Implementation Science tell us about scaling interventions in school settings? A scoping review. <i>Educational Research Review</i> , 44, Article 100620. <a href="https://doi.org/10.1016/j.edurev.2024.100620">https://doi.org/10.1016/j.edurev.2024.100620</a>	United States, United Kingdom, Canada, and Australia (2/3 United States)	Journal article	Scoping literature review	University researchers undertaking a review	No	The study mentions studies conducted in developing nations like Botswana, Mozambique, Tanzania, and China, which encountered unique barriers due to contextual differences from developed countries like the United States and Australia

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Sherlock, R. R. (2020). <i>Leading for excellence: Behaviors and strategies of assistant superintendents of curriculum and instruction that support a high-achieving school environment</i> [Doctoral thesis, Brandman University].	United States	PhD thesis	Mixed methods, including quantitative survey and interviews ( $n = 5$ for both) to examine leadership behaviours and strategies of assistant superintendents in curriculum and instruction	University researcher examining system staff	No	No
Stoker, G., Arellano, B., & Hoon, D. L. (2022). <i>English language development among American Indian English learner students in New Mexico: Study snapshot</i> (No. REL 2022-135). Regional Educational Laboratory Southwest. <a href="https://ies.ed.gov/ncee/rel/Products/Region/southwest/Publication/100721">https://ies.ed.gov/ncee/rel/Products/Region/southwest/Publication/100721</a>	United States (New Mexico)	Report	Secondary analysis of state-wide student data (New Mexico, 2 cohorts of Year 4 students, $n$ ranges between 233 and 886 depending on research question and cohort	Researchers from a research institute	Yes	Yes

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Stornaiuolo, A., Desimone, L., & Polikoff, M. (2023). “The good struggle” of flexible specificity: Districts balancing specific guidance with autonomy to support standards-based instruction. <i>American Educational Research Journal</i> , 60(3), 521–561. <a href="https://doi.org/10.3102/00028312231161037">https://doi.org/10.3102/00028312231161037</a>	United States	Journal article	Multiple case study in 5 districts in 5 states, including 22 primary and secondary schools. Interviews with district officials (e.g., superintendents, assistant superintendents, directors of curriculum; $n = 20$ ), school administrators (e.g., principals, assistant principals; $n = 5$ ), coaches ( $n = 3$ ), and teachers (Grade 3, 4, 10; $n = 13$ ), as well as focus groups with teachers from other grades ( $n = 19$ ). Document analysis (policy documents, curriculum materials, professional learning materials).	University researchers	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Tam, A. C. F. (2012). Teaching Chinese in Putonghua in post-colonial Hong Kong: Problems and challenges for teachers and administrators. <i>Language, Culture &amp; Curriculum</i> , 25(2), 103–122. <a href="https://doi.org/10.1080/07908318.2011.626863">https://doi.org/10.1080/07908318.2011.626863</a>	Hong Kong	Journal article	Exploratory case study: semi-structured interviews ( $n = 13$ ), classroom observation ( $n = 13$ ), and document analysis	University researchers	No	Cantonese speakers (mother tongue)
Vanlommel, K., & van den Boom-Muilenburg, S. N. (2024). How can we understand and stimulate evidence-informed educational change? A scoping review from a systems perspective. <i>Journal of Educational Change</i> , 25(3), 605–634. <a href="https://doi.org/10.1007/s10833-024-09506-z">https://doi.org/10.1007/s10833-024-09506-z</a>	International	Journal article	Scoping literature review	University researchers undertaking a review	No	No

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Viennet, R., & Pont, B. (2017). <i>Education policy implementation: A literature review and proposed framework</i> (OECD Education Working Papers No. 162). OECD Publishing. <a href="https://doi.org/10.1787/fc467a64-en">https://doi.org/10.1787/fc467a64-en</a>	Non-specific	OECD Working Paper	Literature Review	OECD drawing on experts in the field	No	No
Wallace, M., & Arredondo, S. (2022). <i>A standardized, equitable, and transparent high-quality instructional materials review process</i> . Region 15 Comprehensive Center. <a href="http://files.eric.ed.gov/fulltext/ED628368.pdf">http://files.eric.ed.gov/fulltext/ED628368.pdf</a>	United States (Nevada)	Report	Description of process followed to review instructional materials - not a research study	University researchers reporting on a State Department of Education process	No	Yes – it mentions students who come from different experiences and backgrounds

Reference	Geographic focus	Source type	Methodology	Authorship	First Nations perspectives	Culturally diverse groups
Wilkinson, J., Edwards-Groves, C., Grootenboer, P., & Kemmis, S. (2019). District offices fostering educational change through instructional leadership practices in Australian Catholic secondary schools. <i>Journal of Educational Administration</i> , 57(5), 501–518. <a href="https://doi.org/10.1108/jea-09-2018-0179">https://doi.org/10.1108/jea-09-2018-0179</a>	Australia (New South Wales and Queensland)	Journal article	Multiple case study in 2 dioceses, involving interviews (district office staff, $n = 5$ ; school staff, $n = \text{unknown}$ ) focus groups (4 to 8 teachers, $n$ focus groups unknown) and observations ( $n = 5$ )	University researchers	No	No

