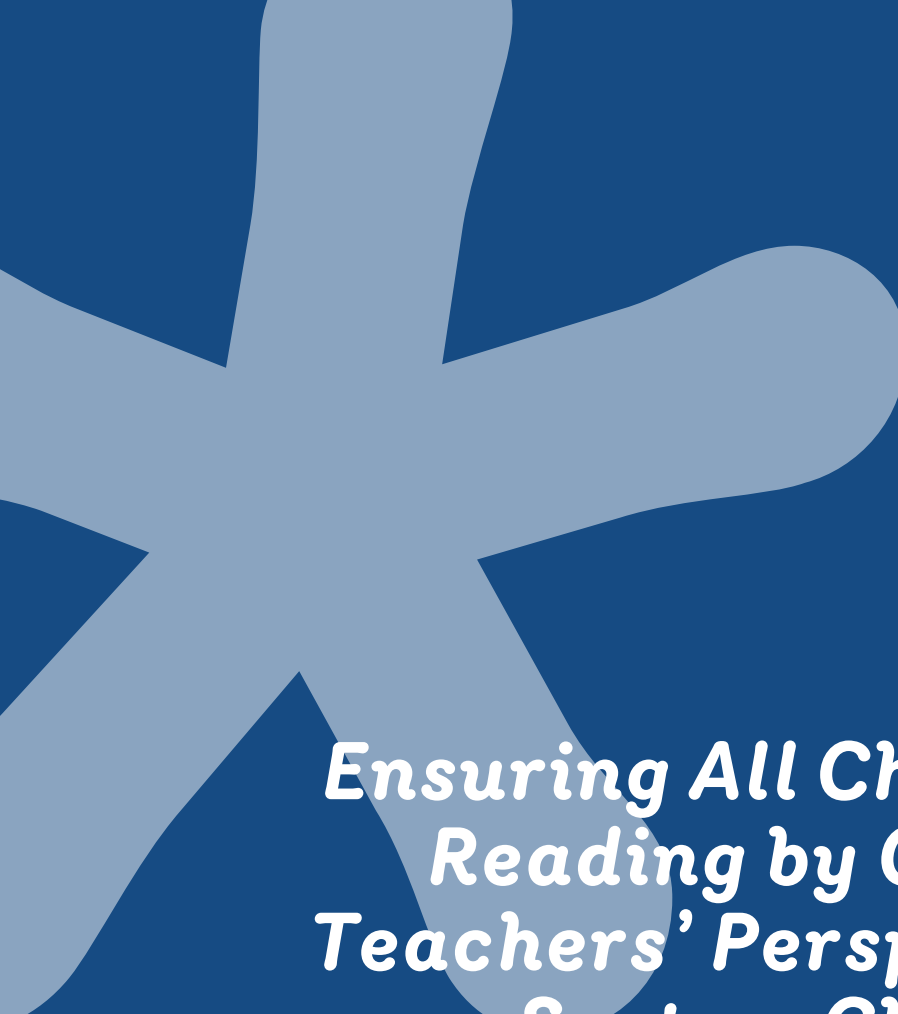




Ensuring All Children Are Reading by Grade 3: Teachers' Perspectives on System Change

Research Report

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Thank you to the teachers who shared their stories and helped us to understand the complexities of the systems where they work to support all students in learning to read.

Land Acknowledgement

Our home at Mount Royal University is situated on an ancient and storied land steeped in ceremony and history, which, until recently, was occupied exclusively by people indigenous to this place. With gratitude and reciprocity, we acknowledge the relationships to the land and all beings, and the songs, stories and teachings of the Siksika Nation, the Piikani Nation, the Kainai Nation, Îyethka Stoney Nakoda Nation (consisting of the Chiniki, Bearspaw and Goodstoney Nations), the people of the Tsuut'ina Nation, and the Métis.

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The Issue

The Ontario Human Rights Commission (2022) published the “Right to Read Report” recognizing that learning to read is not a privilege but a basic and essential human right, a report that has sent ripples into literacy instruction in the rest of the country (Sinclair et al., 2025). **Literacy is integral to learning across the curriculum and a contributor to equitable social, health, and economic outcomes (Kern & Friedman, 2008; Cree et al., 2023).** People with low literacy skills are more likely to experience poor educational outcomes, to be less engaged in their communities, to live in poverty, to suffer from addiction and other mental health challenges, to be incarcerated, and to be unemployed or underemployed (Castles, et al., 2018).

In a knowledge economy, adults face increasing demands for strong literacy skills. While Alberta has strong literacy scores overall (Council of Ministers of Education, [CMEC], 2023), there are still many students who fail to read and write proficiently (Lane, 2023). Calgary Board of Education Annual Results Report (Calgary Board of Education [CBE], 2025) showed that 32.9% of grade 1 students were at-risk on the Letter Name-Sound Test (LeNS) at pre-test; this number dropped to 22.6% by spring and just 10.3% by the end of grade 3. These improvements are important because knowledge of letter names and sounds is a strong predictor for learning to read (Foulin, 2005). The Castles and Coltheart assessment requires students to read regular, irregular and non-words; CBE’s pre- and post-test results on this assessment showed significant declines in the percentage of students requiring additional support (RAS) on their ability to read regular, irregular, and non-words (declining from about 25% to 15% for grade 1, 2, and 3 students). Despite these promising reductions, many students continue to require additional support. If a child lacks reading proficiency by the end of Grade 3, they are likely to encounter significant obstacles for the rest of their educational journey

(Livingston et al., 2018).

Teacher education, complex student needs, outdated assessment tools, and conflicting pedagogical approaches to teaching reading are all significant factors in the literacy challenge. However, literacy does not develop in isolation nor is it restricted to the educational system. Covid-19 learning loss has put many children behind and struggling to catch up (Lane, 2023). Childhood trauma, domestic violence, poverty, and lack of access to books and the internet all affect a child’s ability to learn (Lloyd, 2018; McNally et al., 2023). As new immigrants and refugees are welcomed into our communities, more and more children are entering the school system with a range of language skills and varying educational needs. **Systemic inequities also contribute to the literacy challenge. Black, Indigenous and children of colour from underserved communities have been subject to a persistent gap in reading outcomes relative to white and more affluent peers (James & Turner, 2017).** Educational systems often lack the data, the training, the evidence base for effective literacy instruction, and the flexibility to adapt instructional approaches for the children and families most vulnerable to being left behind. Research demonstrates that teachers can improve the achievement of even the most disadvantaged students when they use evidence-based strategies and high leverage practices that contribute optimally to student achievement (Hattie, 2008; Aceves & Kennedy, 2024; Miller et al., 2025). Teachers require significant knowledge and professional development to enact these practices putting the onus on pre-service and in-service education to build teacher capacity.

The childhood literacy challenge is urgent and complex.

The Literacy Lab

Recognizing the complexity underlying childhood literacy challenges, the “Literacy Lab” was formed in the hopes of addressing these challenges in Calgary, Canada.

Facilitated by the Institute for Community Prosperity at Mount Royal University, in collaboration with Arete Initiative, the Literacy Lab was a multiyear social lab that brought together diverse community participants from across traditional boundaries, backgrounds, and sectors. These participants brought different perspectives and lived experience to the issue of literacy. Together, the Lab examined the patterns, structures and mindsets entrenching low literacy in the community. It sought to uncover root causes, identify systemic interventions, and design and test new ideas for addressing this issue.

Early stages of the lab gathered educators, nonprofits, reading interventionists, newcomer-serving organizations, Indigenous communities and other relevant stakeholders to more fully examine the Lab's convening question:

How might we collectively ensure all children in Calgary are reading by the end of Grade 3?

Lab participants shared their lived experiences and perspectives through a series of workshops, one-on-one interviews, and sharing circles in

order to more fully reveal the patterns, mental models (values, beliefs, norms, and assumptions), and structures contributing to childhood illiteracy. These challenges were mapped through a systems lens in order to better understand the complexity and interconnected nature of issues contributing to the childhood literacy challenge. Thematic categories of identified factors included the home environment, various social factors, a child's internal environment (e.g., self-efficacy), challenges within teaching, school systems and classrooms, and isolating barriers specific to Indigenous communities.

This paper describes one aspect of the Literacy Lab involving interviews with teachers. Because teachers are central players in children's reading progress, these interviews aimed to discern their perspectives on the convening question of the Literacy Lab. Specifically, it sought teachers' lived experiences in the school system that may perpetuate barriers to literacy for the students they teach, and to understand their views on key opportunities that might address the challenge.

The research questions were:

- What are the barriers and challenges to ensure that all children learn to read by the end of grade 3?
- What opportunities and recommendations do local K-3 teachers offer to help all children learn to read by the end of grade 3?

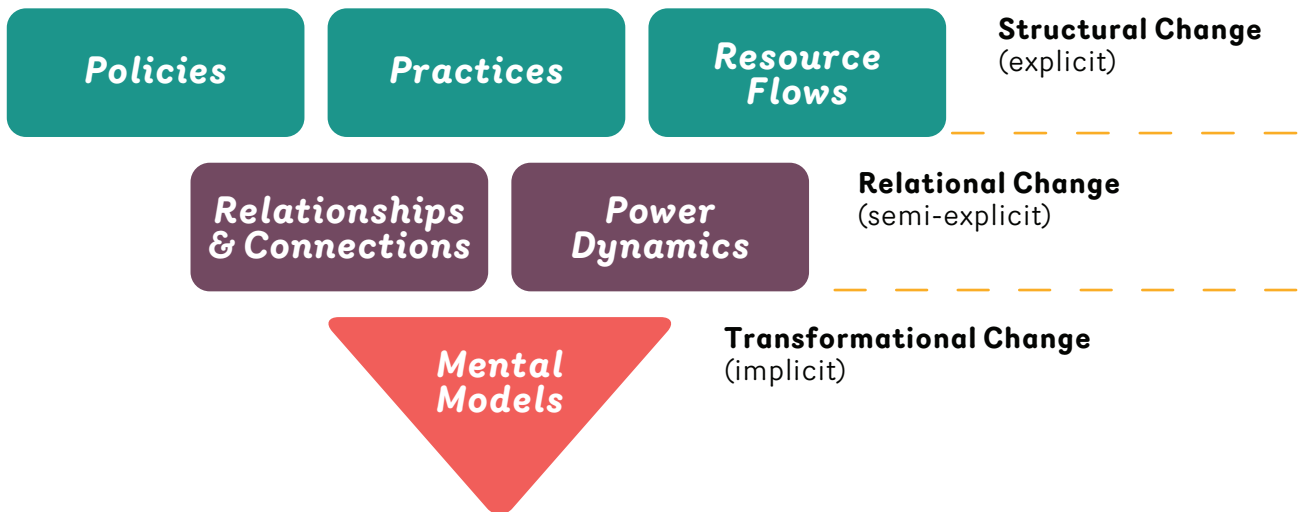


Conceptual Framework

Systems change has increasingly become a promising framework to address complex social problems. *Approaching complex problems through the lens of systems change allows social innovators to explore systemic forces at play within a given challenge and to “shift the conditions that are holding a problem in place” (Kania et al., 2018, p. 2-3).* Using this approach requires looking beyond single issues or actors and “exploring the relationship among these actors, the distribution of power, the institutional norms and constraints within which they operate, and the attitudes and assumptions that influence decisions” (Kania et al., 2018, p. 2).

The Six Conditions of Systems Change is a framework developed by John Kania, Mark Kramer and Peter Senge (2018) and is informed by extensive research on systems thinking, including the iceberg model by Peter Senge (1990) and the work of Foster-Fishman and Watson (2012).

Six Conditions of Systems Change



Source: Kania, J., Kramer, M., Senge, P. (2018) The water of systems change. FSG. https://www.fsg.org/wp-content/uploads/2021/08/The-Water-of-Systems-Change_rc.pdf

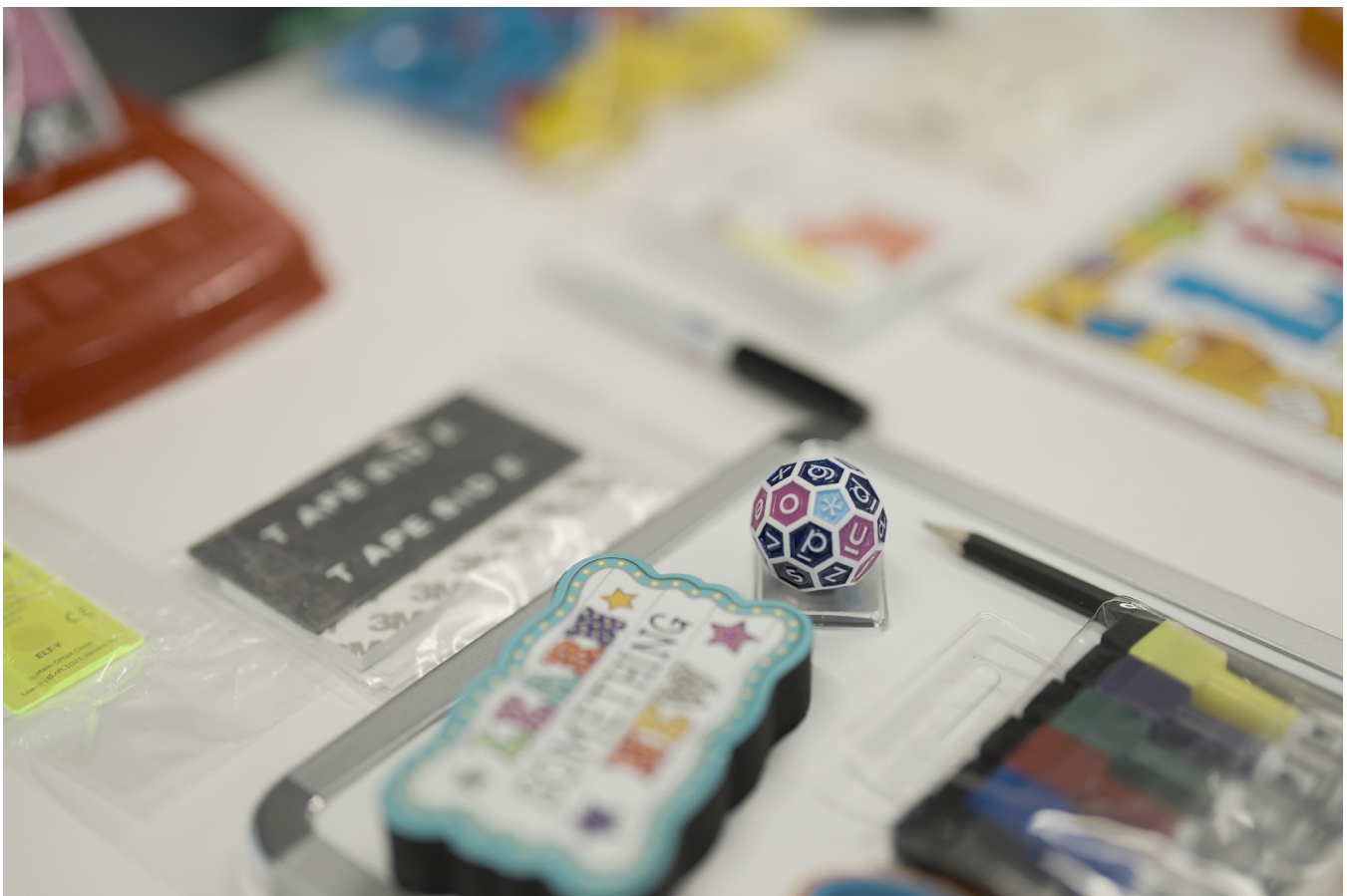
This framework outlines the six interdependent conditions that hold complex challenges in place. Though each level of change will be independently defined, all levels are interrelated and reciprocally influential.

Intervention within existing policies, practices, and resource flows can facilitate explicit structural change. New policies often mandate adjustments to practice and, consequently, can include shifts in resource flows. However, without sufficient attention to the implicit aspects of the challenge, efforts may not be sustained.

Relational change considers both the relationships between actors in a system and the differences in power that they hold. Change is facilitated through shifts in power dynamics and evolving relationships.

Mental models form the basis for transformative change and include the values, beliefs, norms, and assumptions that impact decision making in all other dimensions of change. These intangible but powerful conditions influence individual actors in a system and have the potential to enhance or undermine desired changes.

Our team used these six conditions to code the interviews which helped us to better understand various elements of Calgary's educational systems. The framework was used to analyze the current structural, relational, and transformational factors supporting systems change, as well as to identify what specific elements of the system may be in need of reform.



Literature Review

Reading Wars

The “reading wars” that have persisted for some decades represent differing perspectives on approaches to literacy instruction. On one side of the debate, “balanced literacy” is characterized by holistic and indirect instruction premised on the view that children learn to read when immersed in rich language environments. Opportunities to use reading for authentic purposes are prioritized, often through readers’ and writers’ workshops (Spear-Swerling, 2019) with mini-lessons and teacher conferences (Kurtz, et al., 2020; Stouffer et al., 2026). Phonics instruction is often emergent and embedded as needed in these reading and writing activities. Early readers are often placed in guided reading groups by reading level. When readers encounter an unknown word, they are encouraged to use the three-cueing system which involves drawing upon semantic cues (meaning), syntactic cues (structure), and visual cues (letter-sound or graphophonic) (Goodman, 1967). Teachers might invite students to look at the picture or the first letter of the word (semantic cues), or skip the word and come back to it by guessing based on context (syntactic cues). The Fountas and Pinell (2010) Benchmark Assessment System (F&P BAS) using levelled books is a common assessment practice in balanced literacy pedagogy. The earliest levels include repetitive and predictable texts, and students use picture cues to help read the text. Teachers listen to students read and code the type of miscue—whether the error was meaningful, structurally accurate, or visually similar to the actual word.

The other side of the debate, structured literacy, is informed by the science of reading, a body of research evidence grounded in a variety of disciplines, particularly cognitive psychology (The Reading League, 2022). Phonics instruction is systematic and explicit to help students unlock the code of print; it develops skills in phonemic awareness (manipulating individual sounds of speech) leading to orthographic mapping (connecting language sounds with letters). Research demonstrates that memorizing words is inefficient; instead, developing “a relatively small body of knowledge of how graphemes relate to phonemes provides children with the ability to decode most words in their language” (Castles et al., 2018, p. 12). Structured literacy is sometimes mischaracterized as phonics-first, perhaps because phonics was insufficiently addressed in balanced literacy. However, structured literacy goes beyond phonics to include explicit instruction in skills like vocabulary and comprehension. As students become proficient decoders, reading becomes less laborious and cognitive resources are freed up for comprehension (Gough & Turner, 1986; Hasbrouck, 2020).

To address the reading wars, a panel of experts was assigned to review reading research. They released the National Reading Panel (NICHD, 2000) which identified five broad instructional pillars that should be evident in strong reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Balanced literacy was a proposed compromise between the two sides in the reading wars and aimed to provide skill instruction in the context of authentic literacy experiences (Pressley & Allington, 2014). This

became the most prominent approach in Canadian schools for the last two decades (Metsala, 2024). However, balanced literacy was criticized for the use of leveled texts and recommending the three-cueing system for early readers. When using the three-cueing approach, early readers may resort to guessing and fail to use the graphophonic information that skilled readers use proficiently (Ehri, 1998, 2020; Foorman et al., 2016). Using levelled books as indicators of text difficulty, as well as assessing using these levelled texts, has been widely discredited (Burns et al., 2015; Burns, 2024). Many now acknowledge that balanced literacy, at least in past iterations, provided insufficient instruction in word recognition (Burkins & Yates, 2021); further, embedded skills instruction was often too piecemeal leaving gaps in students' understanding (Seidenberg, 2017).

While research for evidence-based reading instruction was challenging balanced literacy practices for many years, the Right to Read Report published by the Ontario Human Rights Commission (2022) offered 157 recommendations on how to address systemic issues that affect

reading. The report has received both enthusiastic support (Ontario Human Rights Commission, 2026) and criticism (Cummins, 2022, 2023). Further, media reports may have contributed to a reductionist view of the science of reading (Hanford, 2023) that privileges phonics over other important elements of reading instruction (Alexander, 2020). According to Scarborough's (2001) Reading Rope, skilled reading requires both word recognition skills and language comprehension skills. Read alouds of authentic literature, characteristic of both balanced literacy and structured literacy instruction, has tremendous potential for fostering language comprehension (background knowledge, vocabulary, language structures, verbal reading and literacy knowledge), particularly when those skills are explicitly highlighted. Teachers today seem to embrace a broad range of instructional practices acknowledging the reciprocal relationship between word recognition and language comprehension to produce confident and competent readers (Bright et al., 2026; Kurtz et al., 2020).



Literacy Reform in Schools

Like all systems change, it is challenging to achieve reform in schools. Often driven by changes to curriculum and assessment practices, school reform also requires strong leadership, resources, and professional learning to improve teaching (Cohen & Mehta, 2017). According to Fullan (2010), reform can succeed if critical elements are in place. First, educators and leaders must believe that all children can learn. “It is the actual experience and corresponding results that convince teachers that it can be done, not moral exhortations or mounds of evidence.... The best energizer is actually accomplishing something significant and then building on it - what I call realized moral purpose” (Fullan, 2010, p. 25). Fullan recommends reformers focus on a small number of core priorities and develop resolute leadership to stay the course on those key priorities. Leaders should foster collective capacity by supporting educators to develop robust instructional practices through sustained collaborative learning. He recommends “intelligent accountability” (p. 26)—precise and targeted support for low performing schools—so that all may succeed.

Cohen and Mehta’s (2017) analysis of school reforms demonstrates how successful reforms meet the felt needs of educators and address a problem of practice they were struggling to resolve. Often the reforms satisfy the demands of strong popular pressure and offer practical tools to address the challenge. Finally, they align with the values of the educators, parents, and students affected by the reforms.

When comparing these elements of effective school reform to literacy instruction in North America, it appears that many of the conditions for reform are evident. For teachers who worried about the students who were not learning to read with balanced literacy approaches, structured literacy met a felt need. A Facebook group called, “The Science of Reading: What I Should Have Learned in College” exploded with nearly 250 000 members sharing their excitement over new knowledge that clearly “illuminated a problem of practice and offered a solution” (Cohen & Mehta, 2017, p. 646). New programs such as University of Florida Literacy Institute (UFLI) (Lane & Contesse, 2022) provided practical guidance to achieve the reforms. Further, the reforms responded to strong popular pressure such as the influence exerted by the Ontario Human Rights Commission’s (2022) [Right to Read](#) report. Spurred by families who argued that students with reading challenges were not adequately supported, the report explored how Ontario schools and teacher education programs failed to address students’ right to learn to read. The report advised more systematic and explicit instruction in foundational skills as well as meaning-focused instruction. As our data will demonstrate, many local teachers embraced reforms to their literacy practices and recognized how these shifts can help all children learn to read. They also continue to embrace holistic approaches, including read alouds of authentic texts, play-based learning, and student choice.

Provincial Context

Literacy instruction in Alberta has undergone significant shifts in recent years concurrent with the release of the Right to Read report (Ontario Human Rights Commission, 2022). ***Alberta’s new English Language Arts and Literature (ELAL) curriculum for K-3 was implemented in 2022 with grades 4-6 the following year. It includes nine outcomes based upon the five pillars of the National Reading Panel (NICHD, 2000): phonological awareness, phonics, fluency, vocabulary, and comprehension, and adds text forms and structures, oral language, writing, and conventions.***

Unlike the previous curriculum (Alberta Learning, 2000), it specifies distinct orthographic skills students should learn (e.g., r-controlled vowels, long vowel combinations, and silent letter patterns). Mandatory screening assessments focused on foundational literacy skills are required for all K-3 students to “provide information to ensure children and students who require additional supports will be identified early so

appropriate interventions can be put in place” (Alberta Education and Childcare, 2023). Changes to curriculum and assessment practices are two significant policy changes that have influenced practice.

A three-week teachers’ strike in fall 2025 centred particularly on classroom size and complexity challenges. As a result of recommendations in the Aggression and Complexity in Schools Action Team: Final Report (Alberta Education and Childcare, 2025), 456 K-6 schools were provided with complexity teams in spring 2026, consisting of one teacher and two educational assistants, to assist classroom teachers. However, dire teacher shortages have made it difficult to fill these complexity positions and still maintain a sufficient roster of substitute teachers to fill normal vacancies (Stolte, 2026). Large class sizes with complex needs create additional challenges for teachers aiming to provide sufficient support for students who struggle in learning to read.



Methodology

Once consent was obtained from the university's Human Research Ethics Board, a digital recruitment poster was circulated at a teachers' convention, through members of the Literacy Lab team, and on social media. Snowball sampling was encouraged but it is not obvious this yielded any participants. Table 1 lists the participants' pseudonyms and other contextual details, including the socioeconomic status (SES) of their current school.

The interview protocol was adapted from the Impact Gaps Canvas (Papi-Thornton, 2016) to explore specific issues that may hold the literacy challenge in place, to reflect on possible solutions already being considered, and finally, to posit potential solutions that might address the challenge.

Table 1: Details of teacher participants

Pseudonym	Grade	School Context	~Number of Years Teaching
Alicia	1	Public, urban, middle SES	20
Mandy	K-2	Private, urban, high SES	10
Maya	3	Private, urban, high SES	8
Kira	4	Public Catholic, urban, low to mid SES (previously taught grade 2-3)	10
Caitlin	1	Public, suburban, low to middle SES	19
Emily	1	Public Catholic, urban, middle SES	8
Jasmine	2-3	Public, urban, high SES	2
Shay	K	Public, urban, high SES	30

After immersion in the data to understand potential patterns and themes, the research team analyzed the interviews using the six conditions of systems change (Kania et al., 2018). This was deemed to be an appropriate analytical tool because the interviews were embedded within the larger Literacy Lab's purpose of examining systems change. To develop a common language, the research team examined each of the six conditions and together generated examples that applied these conditions to literacy, education, and to this particular set of interviews.

The following interpretations of the six conditions guided analysis:

- **Policies** - Curriculum, provincial assessments
- **Practice** - Key resources and classroom practices, preservice education, and pedagogical decision making frameworks
- **Resource Flows** - Government funding for class size, teacher resource funds, influx of funds for literacy support, and materials
- **Relationships and Connections** - Community connections, principals and teachers, colleagues, mentors, parents
- **Power Dynamics** - Teachers' union, school board mandates, principals' mandates, what gets recognized
- **Mental Models: Literacy** - Structured Literacy vs. Balanced Literacy
- **Mental Models: Societal Changes** - Impact of technology and other social factors on children's development

Three researchers deductively coded all eight interviews using these six conditions. Key quotes representing each of the conditions were copy-pasted into separate tabs. The team met to compare these quotes, reconciled differing interpretations, and used the quotes sorted into each of the conditions to generate the key messages.

The analysis of these teacher interviews explores ways in which the conditions for reform have been evident in schools and how teachers have been supported to ensure “all children in Calgary are reading by the end of grade three” (Literacy Lab, 2026). Further, it explores the barriers that prevent reform.

Findings

Policies

The policies most influential for Alberta teachers are the mandated curriculum and the assessment requirements. Unlike many American jurisdictions where curricular decisions are made at the board level, and teachers must follow mandated programs, Alberta teachers have significant autonomy to choose their instructional materials and pedagogical decisions provided they meet the outcomes in the provincial curriculum. Of the four school jurisdictions represented in this data set, only the large urban board required teachers to follow a provided scope and sequence for phonics instruction (CBE, 2025).

Alicia appreciated that the new curriculum “makes it more explicit what’s to be taught” and “what teachers are teaching everyday is becoming more aligned...you could go into a grade one or two or three classroom and see similar things happening.” Similarly Jasmine observed, “We all use the same language from K-3 which I think is really helpful for the kids. They don’t have to relearn something new next year.” Mandy, a private school teacher, worried that too much autonomy with instructional sequencing put students “at the mercy of their teacher” if some teachers neglect to teach phonics patterns in a systematic way.

Caitlin was very frustrated that the curriculum had not translated into consistent practices across her school division. She stated emphatically, “Structured literacy K-3 needs to be in the classroom. You don’t get a choice. Maybe you could choose your program, but you have to have something. Because I work so hard on these kids and then they go to grade two and do guided reading.” UFLI Foundations (Lane & Contesse, 2022) has become a popular and widely used

program by almost all of the participants, but Caitlin had to fight to use it in her school to deliver explicit phonics instruction.

Most participants acknowledged the importance of early screening to identify students with reading challenges but had some reservations about the implementation of the screeners. Alicia asserted, “I’m very glad that they exist and that they’re mandatory....There’s no waiting until November to have a child fly under the radar.” Shay agreed, “Those children with learning disabilities..have been flagged, [...] so we are having those specific conversations [...] those collaborative team meetings around those sorts of friends (students).” However, Shay felt a previously used phonological assessment was a better fit for her kindergarten students because the current screener requires “assessing on things I haven’t covered yet. It’s frustrating for them and it’s frustrating for me.” Teachers consistently lamented the inordinate amount of time required to complete the screeners, the lag time in receiving results, the lack of guidance on next steps, and the limited resources to support those identified as needing support. Caitlin was angry that her school division continued to expect her to assess using the discredited Fountas & Pinnell BAS (Burns et al., 2015) in addition to provincial assessments.

In response to criticism of the screeners from the local teachers’ union (Alberta Teachers’ Association, 2025), Decoding Dyslexia Alberta (2025) issued a statement supporting early screening but called upon the government to address shortcomings. Specifically they recommended providing more release time for teachers, professional learning on screening,

intervention funding, and greater accountability from teacher education programs to prepare teachers for screening assessments and the use of evidence-based literacy practices. These recommendations paralleled research by Tatel et al. (2025) that examined the barriers to effective implementation of a new literacy screener. They found that effective implementation depended

upon understanding of the tool, implementation ease, trust in the data, and potential use for instructional decisions. Further, Tatel et al (2025) found that reading specialists were essential for overcoming barriers such as time constraints, technology issues, and building understanding of the specific subtests.

Practices

Teaching practices are shaped by the values and mental models of the individual teachers, but they are also informed by policies that shape practice. Balanced literacy has been a prevalent approach to teaching reading in the past 25 years, which was evident in the teachers' descriptions of their historic practices, including teaching with themes, memorizing sight words, and using levelled books. Most teachers spoke with pride about ways their practices had evolved in recent years in response to new knowledge.

Most teachers described using systematic and sequential programs for foundational skills, namely UFLI Foundations (a phonics and spelling program), Heggerty (a phonological awareness program), and two writing frameworks: *The Writing Revolution* (Hochman et al., 2024) and *Empowering Writers* (Mariconda, 2010) that begin by teaching students to craft effective sentences. They infused fun into phonics with songs and techniques like Emily's "magic pointer of wisdom (for reading words during games)...and googly eyes for tracking print... and they have to high-five the sight words of the week on the wall" as they enter the classroom. Emily admitted that she was previously "very heavy into sight words... and the new curriculum came out with this huge list of words and I went... but so many of them are decodable. Why am I making them memorize them when I could just teach them the sounds?" Maya described how using whiteboards for her whole

class phonics lessons helped her to quickly "scan and tell you who's gonna struggle and who's not." Caitlin regularly shared the weekly phonics skill through email and an Instagram page so families could practice at home.

As an advocate for place-based learning, Shay took literacy and numeracy outdoors, explaining, "When we go out on a walk, Heggerty (phonemic awareness) comes with us. Whatever letters we have become the sounds that go on the rocks or things that we're finding." In recent years, she has become a champion for oral manipulation of sounds to develop phonemic awareness. "I've had friends (students) who had a real struggle with pencil to paper. But they could segment, they could blend. If you can take those skills ... you can take any word and try to write it." Mandy, who had also taught kindergarten, described herself as "Reggio-inspired – more art and nature based and playful but now...I am a little bit more systematic and it's nice to make it more interactive as we're learning those sounds." Both Shay and Mandy appeared to seamlessly integrate skills instruction into interactive and playful activities perceiving no dichotomy between seemingly divergent approaches.

Critics may allege structured literacy prioritizes phonics at the expense of comprehension and authentic reading experiences (Stouffer et al., 2026). On the contrary, the participants spoke

about storybook read alouds with tremendous enthusiasm. Maya admitted that the rigorous phonics curriculum she experienced while teaching in the UK may have squeezed out “enjoyment of literature”; however, she values the autonomy afforded in Alberta to choose her approaches. She declared, “Fostering the love for reading is really important to me.” She expressed pride in her classroom library of over 1000 books and her efforts to choose books “with rich vocabulary (that are) really engaging.” Her grade 3 students do regular “community work” when they read to kindergarten students, which “helps them with reading aloud and expression.” Emily described interesting questions students generated during read alouds; for example, a picture book by Malala Yousafzai prompted astonishment that girls could not go to school in Pakistan. Alicia often embedded read alouds in science and social studies. She admitted her “focus really in grade one was just those lower strands of the reading rope” (skills related to word reading), but “I can’t imagine that the teachers are going to start reading stories without any discussion about it or going deeper or connecting it with students’ lives.” Jasmine considered whether she was prioritizing phonics over comprehension, but reported that she reads stories everyday and was conducting whole class novel study at the time of the interview.

Emily spoke at length about her explicit, and personalized, writing instruction using a program called *Empowering Writers* (Mariconda, 2010), which teaches sentence parts and then invites students to create their own sentences. “I got some Taylor Swift books and they have started making their own books and they’re wanting to be authors.” Her class wrote a prayer together that was selected by her Catholic school district for inclusion in a published book, which is now proudly showcased in her classroom. Shay described building writing stamina for her kindergarten students through

a gradual release of responsibility model and by methodically increasing the length of timed writing sessions.

Kira was the only participant who seemed unfamiliar with structured literacy practices. By her description, the teacher-created program she adopted suggested the use of balanced literacy practices, such as morning messages with random errors to correct and word work focused on vocabulary that emerged from classroom texts or phonics games rather than systematic selection of spelling patterns. When referring to intervention for students with lagging literacy skills, Kira relied on small group work to “get them on the right track” with writing assignments. However, targeted intervention to remediate skill gaps was not indicated. In the absence of clear guidance from her school board, she relied upon a self-purchased teacher-created program, a departure from the research-based programs the other teachers indicated.

Resource Flows

Participants overwhelmingly reported that the primary resource they lacked was time, and this was often constrained by large class sizes. The majority of teachers reported class numbers ranging from 27 to 31 students. Kira lamented, “There’s just not enough support. The classes are huge. There’s just not enough time in the day. I’m lucky. This year I *only* have 29... It’s sad that that’s the way it is.” Alicia agreed, “Having such a wide range... [is] a really big challenge” and many do not get the “personalized, targeted, repeated opportunities to practice with the teacher [...] especially those kids who are dysregulated. They’re missing instruction.” Two teachers described a category of overlooked students they both called the “bottom middle” – students who struggled to learn but whose needs were not as significant as the neediest learners who required more teacher time.

Many teachers felt they did not have the capacity to sufficiently support every student on a day-to-day basis. Caitlin shared, “There’s not usually a point in my day where I’m meeting everyone’s needs all at once.” This lack of time prevents teachers from pulling children aside to work one-on-one, from working with support staff to align priorities, and from learning how to use new resources and frameworks recommended by their school boards. When asked, “If you could have a magic wand and have anything to help with the early readers in your class that you worry about, what would help you?” all but one participant immediately responded, “Lower class size.” Teachers reported feeling overwhelmed, worried, and certain that students with reading difficulties “didn’t get what they needed” (Jasmine).

Educational assistants (EA’s) and intervention specialists were lacking in the public school system. Even when specialists were present in a school, they were not always optimally engaged. Because the schools have too few substitute teachers, “a lot of times reading support people can be flagged to cover a class, and then they’re subbing” (Mandy). Conversely, Jasmine’s school had an EA working with a small group of her students 4 days out of 6; she pulled groups to offer extra support with reading decodable texts during daily silent reading of self-chosen books.

When the new curriculum was implemented, the government provided some funding for updated training and resources. Teachers like Alicia, who were employed in schools that spent the money strategically, reported receiving “excellent PD... and purchases that [aligned] with the new curriculum.” This included access to adequate decodable and trade books, professional development (PD), manipulatives, instructional manuals, and technological support to meet student needs. However, gaining the physical resources (i.e., books, manuals, manipulatives, etc.) and training needed to successfully teach was a barrier for several participants. Alicia further explained, “Forty percent of my PD was through [my school division] and the other sixty percent or even more was me looking outside through personal reading or courses.” Similarly, Caitlin shared, “I spend my own money, I’ve gotten nothing from my division.” Conversely, Kira, a teacher in the Catholic system, resented “being thrown a million things to try because it’s overwhelming. Try this program. No, try this program. That’s very frustrating.”

Caitlin expressed a unique resentment with her administrative team who had recently used funding inefficiently, purchasing outdated resources that were not targeted for intervention. Caitlin believed these sunk costs prevented change:

They have to justify that they spent millions of dollars training us all on Fountas and Pinnell at a time when they should have known better. I think they're scared to admit they were wrong, and I think the division is feeding it to the support teachers because it's cheaper to not change.

Emily reluctantly admitted that she continued to use levelled books for her home reading program: “It’s not working, but I’ve put so much time and money into it. I bought all the books myself, and I’m holding on to it for dear life.”

In contrast, Maya’s private school funded her classroom library; she shared, “We have over 1000 books... we also just got a parent donation of probably, like, \$400 worth of books.” With their unique funding model, her private school was able to keep class sizes small. She explained, “I think what’s working is small class sizes, for sure, because I know my students, and I can tell you exactly what a student is struggling with, exactly what they need, because I have that opportunity.” She was grateful for a literacy specialist that provided additional support for struggling readers in her class. When comparing herself to public schools, she acknowledged that “students would get overlooked as a whole, I would imagine, in schools with few resources.”



Relationships and Connections

Teachers highlighted the benefits of collegial collaboration with individuals and school-wide cooperation. Emily shared, “I think a lot of what’s working is our community, and going to each other saying ‘This is what I’m doing... What are you doing?’” Maya agreed, “We’re able to bounce ideas off each other, we’re able to discuss what works and what doesn’t.” As a relatively new teacher, Jasmine was grateful to follow the lead of her more experienced colleagues and the UFLI program which she found to be “very structured, [and] if I did not have it and I was doing this my way, these children might never learn to read.”

Seeing students as “our students” rather than “my students” increased meaningful teacher collaboration for some interviewees. Shay remarked, “When we are a whole team, we are stronger.” Alicia and Shay both recommended regrouping students into cross-class instruction groups organized by skill level. Shay explained, “The caretaker, the admin, everyone was reading, and it was only 30 minutes out of everyday, but it was a super focused 30 minutes [...] these are not my babies. These are *our* babies, right? How do we collectively, collaboratively address that?”

Many recalled the importance of relationships built with mentor teachers during their preservice practicum. This mentorship provided Mandy with a sense of support as she “[struggled] through the [realities] of teaching.” Furthermore, principals who acted as instructional leaders rather than just administrative heads determined the culture of the school community and the strength of intervention. Shay commended her principal’s encouragement for educators to be in one another’s classrooms to offer occasional advice and support, and Kira described her administrators as “phenomenal”.

Some participants felt they did not have adequate time to coordinate plans for student success. Alicia shared, “There’s no time allotted for teachers to work with EA’s, help mentor them, or even look at curriculum...it would be helpful for them to have a better understanding of what to do.” This lack of connection made it difficult for teachers and support staff to become united on student learning plans and solutions. Caitlin noted her school had a “literacy expert with no training whatsoever in literacy” which made it challenging to coordinate and align intervention. For Mandy, in her well-resourced private school, collaborative time with her EA helped them to get on the same page: “I was like, can you come into my class? And we scheduled it so she came into our literacy instruction [...] and she was very open to it.”

The teachers listed several ways they stay connected with parents, including regular emails, platforms like Google Classroom, and classroom social media accounts. Shay implored educators “to embrace that ‘parents as first teachers’ idea.... I’m a huge believer, if there’s even an inkling of anything that we might be concerned about, having parents in.” Others described helpful parent volunteers. Emily was grateful for parents who offered, “‘Send it home and I can do it on a weekend.’ Like cutting out, laminating, it doesn’t need to be done sitting in the classroom.” Conversely, Kira noticed that with busy households, “parents just don’t have time to read with their kid.”

Power Dynamics

The most significant power dynamics at play for teachers were the mandated curriculum and assessment requirements previously discussed in the policies section. No participants described pressure from colleagues or administrators except for Caitlin who taught with the suburban division. She escalated her advocacy for the right to use UFLI to the associate superintendent. The school's "reading expert basically flat out said 'this is terrible. Anybody else who's interested in using this is a terrible teacher. She's bad, she teaches structured literacy.'" Caitlin was grateful for the curriculum changes because it allowed her to implement UFLI in her classroom: "They would have flat out not allowed me to use it before." Just the day before the interview, her school division announced that teachers were no longer required to use the F&P BAS. She noted, "They're saying it's just because they want to decrease workload on teachers. They will not admit there's a problem with it." Caitlin also explained that when she raised possible learning disabilities with parents,

I'll have an administrator come in who kind of discourages them from exploring that. I've seen parents ready to get help and then kind of go 'oh well maybe we should just wait this out.' And of course that kid in grade three is now in the hallway, a behavior problem. It never has gotten better.

Intervention at her school was "push-in" so "[those] kids are getting nothing." Caitlin acknowledged that teachers want to have autonomy and "you can't teach something you're not passionate about. But if teachers were educated on it, they'd be all over it. When they see what my kids are doing in the classroom, they get excited and they want to try and then they get talked out of it by the learning support team." The tensions in Caitlin's school demonstrate how power dynamics can curtail new ways of thinking about literacy instruction.

Though teachers and leaders at Mandy's school were generally pulling in the same direction, one fellow teacher was nervous to use the new UFLI resource. Mandy tried to persuade her that aligning with the other classes would ensure all students had a common foundation, something her own daughter missed when her teacher insisted on using the outdated practice of memorizing the shape of sight words. Mandy was grateful that the curriculum changes contributed to common language amongst staff and "a sense of progression" for most of her colleagues.



Mental Models: Literacy

The reading wars that persist amongst educators exemplify the deeply entrenched—and differing—mentalities held on how literacy should be taught. All but one of the teachers expressed excitement about the potential of structured approaches to reach all students. Maya described a realization when she began teaching grade one: “Okay, I love that. I find that I’m really a big fan of systematic teaching, because I’ve seen so much success in my students.”

Regarding professional development, Alicia expressed excitement about her own learning and teachers’ eagerness to learn:

It’s been a priority because of the joy I got out of it, and the lightbulb going on, and... seeing the path of being an effective teacher [...] teachers are kind of eager to learn more, to improve their practice. [They’re] more aware of what they don’t know than they once were.

She believed support for structured literacy was ubiquitous amongst her colleagues, explaining, “I don’t know of anybody who is clinging to their Fountas and Pinnell books. From what I see, teachers are making the shift.” Alicia admitted that, before learning about structured literacy,

*I’m not sure I pedaled back to the extent that I should have to meet students where they were. And when I read *The Writing Revolution* I think that was a real ‘ah-ha’ for me, where I realized that I was asking grade 3 students to write a paragraph and then a five paragraph little short essay, and that they couldn’t yet write sentences. Explicit teaching and systematic teaching and needing to meet them where they are has been a shift for me.*

Shay was the most experienced of all the teachers; when asked to describe her practice and how it has changed, she used the term “intentional” sixteen times. She recalled her own childhood experience struggling to read by memorizing words as well as

the lightbulb moment she had when first exposed to explicit instruction in phonemic awareness and phonics as a teacher: “It was a lot of frontloading but then the children could do so much more. And I thought, ‘I need to be teaching this more intentionally.’” Reflecting on her previous use of the three-cueing strategies and subsequent shifts in her practice, Shay exclaimed, “I’m really of a belief that as long as you are willing to learn as a teacher, we will get better and better.”

Mandy described one colleague who was resistant to try UFLI because she said, “I don’t want to learn a new thing”, but the colleagues down the hall were delighted: “UFLI is perfect. This is what I was missing.” Mandy reminded her colleagues, “Don’t forget the love of learning. Make it creative. UFLI could be very regimented so I’d say UFLI with a little playfulness added as well would be my ideal world.” Integrating new resources for phonics instruction with her own mental model of playful teaching created an “ideal world” for Mandy.

Kira was the only teacher who seemed somewhat frustrated and perhaps lacked the excitement evident in the other interviews. She described language arts assessments as “so subjective” and claimed “for me, the more you read, the more the spelling improves.” Although this is a common perception amongst teachers, research demonstrates that the English language does have predictable patterns and that teaching those patterns to students improves spelling (Bear et al., 2023). She described some phonics games where students had to “make as many words as they can” from one scrambled mystery word and find mistakes in her morning message; these instructional ideas, known as embedded phonics, lack the efficacy of explicit and systemic phonics instruction (Foorman & Torgeson, 2001). Kira reflected, “Having some kind of guidance in learning it would be nice, or seeing it more in practice would be nice.” She seemed left to her own devices and lacked support from literacy leaders who could provide resources and direction.

Mental Models: Societal Changes

Many times teachers expressed concern about how “kids have changed.” The researchers struggled to identify the most appropriate condition to analyze these examples. Was the condition captured by mental models because they represent teachers’ views, or are societal trends actually shifting? Every participant referred to some combination of the following issues: poor attention span, lack of oral language and reading, the prevalence of special needs, reliance on technology, and the hectic schedules of modern families.

Maya was vocal about her students’ apparent decline in attention span and its possible relationship to their privilege. “They lack rigour and persistence and that growth mindset. Specifically my population of students, there’s a lot of, like, instant gratification in their life. So they’re not used to working for something and kind of persisting and, you know, I do see that students kind of give up and say something is hard when it’s really not hard.” She described using a timer to build their stamina for focused reading and writing tasks. Jasmine used nearly identical language: “(Students say) this is too hard, I don’t want to do it! And then they’re gone....I can’t keep their attention if it’s something that they’re not interested in and a lot of them aren’t interested in reading.” Caitlin admitted the research does not show an increase in the number of students with ADHD but she perceives an increase. She shared, “I don’t know if having a smaller class, maybe that’s why it didn’t seem as bad [in the past]. Is it the screens? I’m just not as exciting as Grand Theft Auto.”

Emily speculated on an interesting link: “We’re seeing more behaviours. It’s hard to learn to read when you’re dysregulated. These are literal COVID babies. They didn’t have the socialization.”

Most of the teachers believed there was limited reading at home. Emily described herself as a struggling reader who didn’t read until she was

eight, but in her household “there would be a time when the TV was turned off every night and everyone had a book. And we would go to the library. I don’t know if a lot of families are accessing those resources.” Jasmine had similar childhood experiences where reading in the car was expected, but, “I think now it’s, ‘here’s your iPad’... so I think there’s just less opportunities for kids to read.” Caitlin taught in a school with many ELL students and said “School is a huge priority for a lot of the families that I teach.” Even so, she felt parenting had “totally changed. Kids aren’t coming in with the oral language. I don’t think reading is a huge priority,” perhaps because access to books in their first language was limited.

Shay was particularly concerned about children’s limited oral language experiences including the nursery rhymes and singing she recalled in her own childhood:

Kids nowadays don't have that. They're not playing with language, and in many cases, they're not hearing as much language, right? Parents are incredibly busy, and children are gaming. When people are in the car, sometimes you'll see the device come out. Whereas before, you'd be driving and singing the name game or rhyming songs or, you know, different things like that.

All those interviewed from publicly-funded schools noted the high enrollment and levels of complexity in their classrooms created barriers to learning. Alicia shared, “By the end of the year I had 26 students. [It was a] complex class, students with autism, ADHD (and) someone with a traumatic childhood background.” It seems possible the social context of teaching is changing or that the untenable classroom sizes have amplified the impact of classroom complexity on teachers’ work and ultimately on their ability to teach all of their students how to read.

Discussion and Implication

The following diagram places the above findings into their respective sections of the Six Conditions of Systems Change. This has been done to further anchor our exploration in Kania, Kramer, and Senge's (2018) conceptual framework.

Policies

- Mandated curriculum and screening assessments
- School board guidelines (i.e. scope and sequence or lack thereof)

Practices

- Teaching practices
- Structured literacy vs. balanced literacy
- Individual teachers implement different practices—leading to inconsistencies in learning

Resource Flows

- Government funding for class size and in-class supports (EAs, literacy specialists, etc.)
- Professional development
- Inefficient use of funding
- Disparities between public and private school resources

Relationships & Connections

- Collegial collaboration
- Sharing resources, tips, and knowledge
- “Our students” vs “my students” mentality
- Mentor relationships
- Engagement with support staff
- Relationships with and beliefs about parents

Power Dynamics

- Structural dynamics: provincial curriculum and mandates
- Hierarchies within schools dictating practices (from administrators or colleagues)

Mental Models

LITERACY MENTAL MODELS

- Entrenched and differing positions on how literacy should be taught in the classroom

SOCIETAL MENTAL MODELS

- A shift from literacy-centered culture to digital culture
- Prevalence of technology has deeply affected learning and literacy outcomes

Six Conditions of Systems Change Lens

Kania and colleagues (2018) argue that “systems change is about shifting the conditions that are holding the problem in place” (p. 3). When analyzing the perspectives of these teachers through the lens of the six conditions of system change, the new Alberta curriculum and assessment requirements represent influences at the first level. The curriculum and assessment mandates prompted school systems and teachers across the province to adjust their practices to comply with mandatory assessments and to teach students to meet the outcomes that were included in these assessments. Teachers may resist change, especially if mandated changes conflict with their values and previous mental models. However, teachers in this data set were largely supportive of the curriculum because it identified specific skills, something they believed was integral for addressing reading challenges. Further, they valued mandates that brought consistency across classrooms so students had a common foundation. **Cohen and Mehta (2017) suggest that educational reform efforts are often more successful when they address a need teachers perceive**; for almost all of the participants, structured literacy represented a welcome change to their prior practice. Relationships and power dynamics were also conditions that facilitated system change; teachers frequently used phrases like “pulling together (for) our kids” to describe their administrators and the collegial relationships in their schools. However, there was one exception: Caitlin’s colleagues exerted unwelcome power, perhaps due to their mental models which conflicted with her own.

Resource flows were the top challenge that constrained systems change, according to the participants. Nearly every challenge the teachers described came back to insufficient resources. They valued screening data that was essential

for early identification of reading challenges, but they had very limited release time to conduct these time-intensive screeners alongside regular instruction. They valued targeted intervention but lacked time and additional human support to facilitate differentiated intervention groups and provide support to the most needy students. They accepted that some children with complex needs may require additional support but felt they were seldom able to provide it, even with creative scheduling and grouping of students with similar needs. There was also some skepticism about whether resources would flow to those identified as requiring support once identified by the screeners. The policy changes reflected in the new curriculum aligned with evidence-based practice for reading instruction, but the overloaded public system made the implementation unwieldy. This points to not only the need for more resources in the system, but also to the interconnection of resources with policy, power, relationships, and mental models.

In Fall 2025, teachers were legislated back to work after a rancorous teachers’ strike fought primarily over the issue of funding to support classroom complexity. The perspectives of these teacher participants (collected prior to the strike) were echoed by other teacher accounts throughout the strike and in the recent report by the Aggression and Complexity in Schools Action Team (Alberta Education and Childcare, 2025). Detailed analyses demonstrated the disproportionate funding channeled to private schools over public and long term erosion of the public education system (Appel, 2025). School change expert Michael Fullan (2010) concludes his recommendations with the exhortation “all really does mean all. You can’t solve the problem of whole-system reform through piecemeal efforts.... There must be constant reminders that all schools,

and all districts, are part of the everyday focus of improvement” (p. 26). By limiting resource flows to public schools so severely, the government alienated public teachers and undermined the possibility of genuine systems change that might address the needs of the lowest performing readers.

Concurrent with changes to reading instruction has come increased use of digital technology in the lives of children. While systematic instruction may improve readers’ ability to decode written words, technology may be undermining the ability to deeply comprehend. Nicholas Carr (2011), author of the book *The Shallows: What the Internet is Doing to Our Brains*, argued that digital platforms encourage rapid shifts of attention, undermining focused engagement. Technology has become even more ubiquitous in the lives of children in the years since his book was published.

Prominent cognitive scientist and literacy expert Maryanne Wolf (2018) posits that our society is in transition from a literacy-based culture to a digital one and warns that this cognitive shift may have costly consequences. She explores research that indicates readers read less deeply in digital environments than in printed form (Mangen & van der Weel, 2016). Further, the explosion of knowledge available to learners means that “we no longer expend the necessary time to rehearse, make analogies, and store incoming information in the same way, which affects what we know and how we draw inferences” (Wolf, 2018, p. 121). Jonathan Haidt’s 2024 book *The Anxious Generation* explores the impact of technology on children’s well-being citing research regarding the erosion of free play so essential to the development of children’s emotional regulation and attention (Ahmed et al, 2023; Colliver et al., 2022). Finally, research suggests that “technoference” may be interfering with parent-child interactions and limiting the oral language environment in the home (Brushe et al., 2024).



Conclusion

Policy shifts comprise the most visible approach to systems change. However, two related provincial policies resulted in disparate mental models for these educators. The change to the provincial ELAL curriculum in 2022 prompted impactful instructional changes for many teachers supported by instructional materials (resource flows), teacher collaboration (relationships), and system alignment (power dynamics). However, the policy regarding mandated screeners was more troublesome. While most of the teachers interviewed supported the *idea* of screeners to identify readers requiring additional support, large class sizes, insufficient human support, the efficiency of mandated assessments, and limited material resources made it difficult for teachers to adequately administer the assessments and respond to the data (resource flows, relationships, and power dynamics).

This tale of two policies exposes the importance of accounting for all levels of systems change, especially given the connection between structural change (policy, practices, resource flows) and relational change (relationships and power dynamics) to affect transformative change (mental models). However, teachers and school systems cannot affect change alone. Without significant consideration of the deeper forces, cultural shifts, societal values and beliefs at play, schools' efforts may be insufficient.

The focus of our research was on the experiences of teachers within the classroom and school system; however, as is the character of complex problems, issues cannot be isolated to singular systems or environments. Multiple systems are interacting within the literacy landscape. It is evident that factors beyond the classroom and educational system are deeply influencing children and affecting how they show up to learn. Wolf's (2018) reference to a societal shift from a literacy-based culture to a digital culture points to deeply ingrained mental models that need to be considered.

As Kania et al (2018) explain, "changemakers must ensure that they pay sufficient attention... especially the underlying mental models embedded in the systems in which they work" (p. 5). These mental models and cultural norms are the waters in which we all swim and can pose a significant challenge to change efforts, particularly because they are less visible, but more powerful. Since mental models serve as the most fundamental, albeit most difficult, leverage point for systems change, understanding how to affect them is vital to answering the driving question,

"How might we collectively ensure all children in Calgary are reading by the end of Grade 3?"



References

- Aceves, T. C. and Kennedy, M. J. (Eds.) (2024). *High-leverage practices for students with disabilities, 2nd edition*. Council for Exceptional Children and CEEDAR Center. <https://dreamtacentor.org/wp-content/uploads/2025/05/1-High-Leverage-Practices-for-Students-with-Disabilities-2024pdf-min.pdf>
- Alberta Education and Childcare. (2025). *Aggression and complexity in schools action team: Final report*. <https://open.alberta.ca/dataset/8b0996ab-5993-4e6f-bec8-da65e1a7497f/resource/4b89b837-cf1b-473e-bb8b-50ef6bb3d74c/download/ecc-aggression-and-complexity-in-schools-action-team-final-report.pdf>
- Alberta Education and Childcare. (2023). *English language arts and literature, Final curriculum*. <https://curriculum.learnalberta.ca/curriculum/en/s/laneng>
- Alberta Learning. (2000). *English language arts program of study*. <https://education.alberta.ca/media/160360/ela-pos-k-9.pdf>
- Alberta Teachers' Association. (2025, January 14). *Alberta's teachers sound alarm on testing explosion*. Alberta Teachers' Association. <https://teachers.ab.ca/news/albertas-teachers-sound-alarm-testing-explosion>
- Alexander, P. A. (2020). What research has revealed about readers' struggles with comprehension in the digital age: Moving beyond the phonics versus whole language debate. *Reading Research Quarterly*, 55(S1), S89–S97. <https://doi.org/10.1002/rrq.331>
- Ahmed, S., Khan, D. S., & Mehmood, A. S. (2023). Let them play: A systematic review investigating the benefits of free play in emotional development of children. *Academy of Education and Social Sciences Review*, 3(4), 509–520. <https://doi.org/10.48112/aessr.v3i4.660>
- Appel, J. (2025). Budget 2025: Private school funding outpaces inflation and population growth while public system falls behind <https://www.theprogressreport.ca/budget-2025-increases-private-school-support>
- Bear, D. R., Invernizzi, M., Templeton, S., & Johnston, F. R. (2023). *Word study: For phonics, vocabulary and spelling instruction*. Pearson/Allyn and Bacon.
- Bright, R., Mattatall, C., & Browning, A. (2026). The art and science of teaching reading: Understanding teacher mindsets about teaching reading and salient influential factors. *In Education*, 21(2), 102-120. <https://journals.uregina.ca/ineducation/article/view/863>
- Brushe, M. E., Haag, D. G., Melhuish, E. C. Reilly, S., Gregory, T. (2024) Screen time and parent-child talk when children are aged 12 to 36 months. *Journal of the American Medical Association Pediatrics*, 178(4) 369-375. [doi: 10.1001/jamapediatrics.2023.6790](https://doi.org/10.1001/jamapediatrics.2023.6790).
- Burkins, J. B. and Yates, K. (2021). *Shifting the balance: 6 ways to bring the science of reading into the balanced literacy classroom*. Stenhouse.
- Burns, M. K. (2024). Assessing an instructional level during reading fluency interventions: A meta-analysis of the effects on reading. *Assessment for Effective Intervention*, 49(4), 214–224. <https://doi.org/10.1177/15345084241247064>
- Burns, M. K., Pulled, S. M., Maki, K. E., Kanive, R., Hodgson, J., Helman, L. A., McComas, J. J., & Priest, J. L. (2015). Accuracy of student performance while reading leveled books rated at their instructional level by a reading inventory. *Journal of School Psychology*, 53, 437-445. <https://doi.org/10.1016/j.jsp.2015.09.003>
- Calgary Board of Education. (2025). *Annual education results report, 2024-25*. <https://cbe.ab.ca/FormsManuals/Annual-Education-Results-Report.pdf>
- Cohen, D. K., & Mehta, J. D. (2017). Why reform sometimes succeeds: Understanding the conditions that reproduce reforms that last. *American Educational Research Journal*, 54(4), 644–690. <https://doi.org/10.3102/0002831217700078>

- Council of Ministers of Education, Canada (CMEC) (2023). *Measuring up: Canadian results of the OECD PISA 2022 study The performance of Canadian 15-year-olds*. https://www.cmec.ca/Publications/Lists/Publications/Attachments/438/PISA-2022_Canadian_Report_EN.pdf
- Carr, N. (2011). *The shallows: What the internet is doing to our brains*. W.W. Norton.
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5-51. <https://doi.org/10.1177/1529100618772271>
- Colliver, Y., Harrison, L. J., Brown, J. E., & Humburg, P. (2022). Free play predicts self-regulation years later: Longitudinal evidence from a large Australian sample of toddlers and preschoolers, *Early Childhood Research Quarterly*, 59, 148-161, <https://doi.org/10.1016/j.ecresq.2021.11.011>.
- Cree, A., Kay, A., & Steward, J. (2023). The economic and social cost of illiteracy: A snapshot of illiteracy in a global context. Retrieved from <https://worldliteracyfoundation.org/wlf2019/1REPORTS-WLF/The-Economic-Social-Cost-of-Illiteracy-2023.pdf>
- Decoding Dyslexia Alberta. (2025, January 13). *Position statement: Provincial literacy screening assessments*. <https://sites.google.com/view/decodingdyslexiaab/take-action>
- Ehri, L. C. (1998). Grapheme-phoneme knowledge is essential to learning to read words in English. In J. L. Metsala & L. C. Ehri (Eds.), *Word recognition in beginning literacy* (pp. 3-40). Lawrence Erlbaum Associates.
- Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, 55(S1), S45-S60. <https://doi.org/10.1002/rrq.334>
- Foorman, B.R., & Torgesen, J.K. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice*, 16, 203 - 212. <http://dx.doi.org/10.1111/0938-8982.00020>
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008)*. National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: https://ies.ed.gov/ncee/wwc/Docs/practiceGuide/wwc_foundationalreading_040717.pdf
- Foster-Fishman, P. G., & Watson, E. R. (2012). The ABLe Change Framework: A Conceptual and Methodological Tool for Promoting Systems Change. *American Journal of Community Psychology*, 49(3-4), 503-516. <https://doi.org/10.1007/s10464-011-9454-x>
- Foulin, J. N. (2005). Why is letter-name knowledge such a good predictor of learning to read? *Reading and Writing: An Interdisciplinary Journal*, 18(2), 129-155. <https://doi.org/10.1007/s11145-004-5892-2>
- Fountas, I. C., & Pinnell, G. S. (2010). *Fountas & Pinnell benchmark assessment system 1, Grades K-2*. Heinemann.
- Fullan, M. (2010). The big ideas behind whole system reform. *Education Canada*, 50(3), 24-27.
- Goodman, K. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6, 126-135. [doi:10.1080/19388076709556976](https://doi.org/10.1080/19388076709556976)
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10. <https://doi.org/10.1177/074193258600700104>
- Hanford, E. (2023). *Hard words: Why aren't kids being taught to read?* APM Reports. <https://www.apmreports.org/episode/2018/09/10/hard-words-why-american-kids-arent-being-taught-to-read>
- Hasbrouck, J. (2020). An update to the National Reading Panel Report: What we know about fluency in 2020. *The Reading League Journal*, 1(3), 29-31.

- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Hochman, J. C., Wexler, N., & Maloney, K. (2024). *The writing revolution 2.0: A guide to advancing thinking through writing in all subjects and grades*. Jossey-Bass.
- James, C.E. & Turner, T. (2017). *Towards race equity in education: The schooling of black students in the Greater Toronto Area*. York University. <https://edu.yorku.ca/files/2017/04/Towards-Race-Equity-in-Education-April-2017.pdf>
- Kania, J., Kramer, M., Senge, P. (2018) The water of systems change. FSG. https://www.fsg.org/wp-content/uploads/2021/08/The-Water-of-Systems-Change_rc.pdf
- Kern, M. L., & Friedman, H. S. (2008). Early educational milestones as predictors of lifelong academic achievement, midlife adjustment, and longevity. *Journal of Applied Developmental Psychology*, 30(4), 419–430. <https://doi.org/10.1016/j.appdev.2008.12.025>
- Kurtz, H., Lloyd, S., Harwin, A., Chen, V., & Furuya, Y. (2020). *Early reading instruction results of a national survey of K-2 and elementary special education teachers and postsecondary instructors*. <https://epe.brightspotcdn.com/1b/80/706eba6246599174b0199ac1f3b5/ed-week-reading-instruction-survey-report-final-1.24.20.pdf>
- Lane, H., & Contesse, V. (2022). *UFLI foundations: An explicit and systematic phonics program*. Ventris Learning.
- Lane, J. (2023). *The case for literacy in Alberta: Life is hard when you can't read*. Canada West Foundation. <https://cwf.ca/wp-content/uploads/2023/04/CWF-The-Case-for-Literacy-in-Alberta-Report-April-2023-WEB.pdf>
- Literacy Lab (2026). The Literacy Lab Final Summary Report, 2024-2026. https://www.mtroyal.ca/nonprofit/InstituteForCommunityProsperity/_pdfs/LiteracyLabFinalSummaryReport.pdf
- Livingston, E. M., Siegel, L. S., & Ribary, U. (2018). Developmental dyslexia: Emotional impact and consequences. *Australian Journal of Learning Difficulties*, 23(2), 107–135. <https://doi.org/10.1080/19404158.2018.1479975>
- Lloyd, M. (2018). Domestic violence and education: Examining the impact of domestic violence on young children, children, and young people and the potential role of schools. *Frontiers Psychology*, 9. doi:10.3389/fpsyg.2018.02094
- Mangen, A., & van der Weel, A. (2016). The evolution of reading in the age of digitisation: An integrative framework for reading research. *Literacy*, 50(3), 116–124. <https://doi.org/10.1111/lit.12086>
- Mariconda, B. (2010). *A sentence a day*. Empowering Writers.
- McNally, S., Leech, K. A., Corriveau, K. H., & Daly, M. (2023). Indirect effects of early shared reading and access to books on reading vocabulary in middle childhood. *Scientific Studies of Reading*, 28(1), 42–59. <https://doi.org/10.1080/10888438.2023.2220846>
- Metsala, J. (2024, December 6). How structured literacy will upend Canadian education. *Macleans*. <https://macleans.ca/the-year-ahead/how-structured-literacy-will-upend-canadian-education/>
- Miller, E. K., Franco-Jenkins, X., Duncan, J. T., Reynolds Reddi, A., & Ward, C. (2025). Strengthening education through equitable and inclusive evidence-based teaching practices: A scoping review. *Education Sciences*, 15(3), 266. <https://doi.org/10.3390/educsci15030266>
- National Institute of Child Health and Human Development (NICHD). (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). U.S. Government Printing Office.
- Ontario Human Rights Commission (2026). *Right to read inquiry - Community support*. <https://www.ohrc.on.ca/en/right-read-inquiry-community-support>

- Ontario Human Rights Commission. (2022). *Right to read public inquiry into human rights issues affecting students with reading disabilities*. https://www3.ohrc.on.ca/sites/default/files/Right%20to%20Read%20Executive%20Summary_OHRC%20English_O.pdf
- Papi-Thornton, D. (2016). *Tackling heropreneurship: an “apprenticing with a problem” approach to move us from the social entrepreneur to social impact*. <https://tacklingheropreneurship.com/wp-content/uploads/2016/07/tackling-heropreneurship-daniela-papi-June2016.pdf> full citation?
- Pressley, M. & Allington, R. L. (2014). *Reading instruction that works: The case for balanced teaching* (4th ed.). Guilford.
- Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook for research in early literacy* (pp. 97-11)
- Seidenberg, M. (2017). *Language at the speed of sight: How we read, why so many can’t, and what can be done about it*. Basic Books.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday/Currency.
- Sinclair, J., Nickel, J., Fraser, A., Critch, T., Hope, L., McCallum, D., Norris, M., St. Croix, N., Viera, A., Worden, J. (2025). Teaching reading in Canada: Curriculum and assessment policy updates from the provinces and territories. *Journal of Teaching and Learning*, 19(5), 106-154. <https://jtl.uwindsor.ca/index.php/jtl/article/view/10423/6158>
- Spear-Swerling, L. (2019). Structured literacy and typical literacy practices: Understanding differences to create instructional opportunities. *Teaching Exceptional Children*, 51(3) 201-211. <https://doi.org/10.1177/0040059917750160>
- Stolte, E., (2026, May 20). Provincewide substitute shortage sees 200 teachers a day missing from Calgary public schools. CBC News, <https://www.cbc.ca/news/canada/calgary/substitute-teacher-shortage-alberta-9.7205157>
- Stouffer, J., Sutherland, K., & Matczuk, A. (2026). Broadening the conversation: Critical questions amidst narrowing views of classroom reading instruction. *Language and Literacy*, 28(1), 40-75. <https://doi.org/10.20360/langandlit29751>
- Tatel, S., Darcy, L.J., Solari, E.J. et al. (2025). Determinants to implementing a new early literacy screener: Barriers and facilitators. *Annals of Dyslexia*, 75, 524-546. <https://doi.org/10.1007/s11881-025-00333-2>
- The Reading League. (2022). Science of reading: Defining guide. <https://www.thereadingleague.org/what-is-the-science-of-reading/>
- Wolf, M. (2018). *Reader come home: The reading brain in a digital world*. Harper.

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