

**Supporting Using Data for Instructional Decision-Making in British Columbia Middle
Schools**

by

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With respectful acknowledgement that Vancouver Island University is located on the unceded traditional territories of the Coast Salish Peoples and that this research was conducted on the territories of the Songhees Nation and ləkʷəŋən people. VIU appreciates and respects the lands of Snuneymuxw First Nation, Tla'amin First Nation, Cowichan and Snaw-naw-as First Nation.

We accept this Graduate Applied Project as conforming
to the required standard.

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Abstract

This project focuses on supporting teachers in the middle years to adopt the practice of using standardized oral reading fluency assessments and planning reading interventions in British Columbia. By examining the historical context of literacy assessment and initial teacher training, we see why this is currently not a common practice. However, recent developments of the three provincial human rights commissions' reports on the injustice of reading failure across Canada, and the British Columbia Ministry of Education and Child Care's 2025 kindergarten screening mandate, there is a fresh interest in the practice. This project hopes to seize the moment of this public conversation by outlining the benefits to screening for reading difficulties in Grades 6,7, and 8. Informed by considerations of effective professional development, the project provides evidence-based strategies to implement screeners, data-mobilization, and interventions in middle years classrooms across British Columbia.

Keywords: Literacy in British Columbia, Middle School, evidence-based methods

[After The Screener](https://sites.google.com/view/literacyinbc/using-data)

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Chapter One: Introduction

In 2024, the Ministry of Education and Child Care of British Columbia (BCMECC) announced a \$30 million investment in early literacy screening as a result of lobbying by dyslexia advocates and growing public pressure in the wake of the wave of human rights reports in Ontario first, then Saskatchewan, and Manitoba that assert that literacy is a human right, and that students have a right to access quality instruction (BC, 2024c; Dyslexia Canada [DC], 2025b; MHRC, 2025; OHRC, 2022; SHRC, 2023). These reports go further than just asserting that students have a right to read; they follow a wave of research and reforms across the English-speaking world that point to specific strategies, like screening, to identify risk and implementing equitable targeted interventions as part of an effective education system (Castles et al., 2015). As British Columbia (BC) implements universal screening in kindergarten in the 2025/2026 school year, then Grades 1, 2, and 3 in the following year, there is a groundswell of professional conversations, both enthusiasm and criticism, on how to get ready to use screeners to improve reading achievement (BCMECC, 2025b; BCTC, 2023; BCTF, 2025b; BCTF, 2026; Hyslop, 2024). This project aims to support teachers to usher in new-to-BC evidence-based literacy strategies beyond the primary years and into the upper intermediate and middle school years by seizing the moment to increase teacher efficacy throughout our system.

Project Justification

Reading instruction is having a moment in popular discourse, sometimes sensationalized “Reading Wars”, as newspapers and popular podcasts use their platforms to invite the public into classrooms as armchair experts (Hanford, 2023). Somewhat parallel to the public conversation in the US, public, professional, and legal developments in Canada are coming to the same

conclusions: a) literacy is a human right; and b) there are better ways to instruct reading and writing. In British Columbia, this issue has gained momentum through key legal and policy developments, beginning with a 1997 Supreme Court of Canada decision affirming students' rights to equitable access to education, followed by human rights commission reports in three other provinces that have challenged instructional approaches that may undermine equity. Recently, the provincial government has committed to early literacy screening mandates and the development of a made-in-BC early reading screener (BC, 2024c; BCMECC, 2025b; Fong, 2012). The British Columbia Teachers' Federation published their own report that shares that current teachers feel that there are gaps in initial teacher preparation for teaching literacy effectively, and lacking supports to stay up to date with new mandates (BCTF, 2025b). The success of any policy or tool may likely be shaped by teacher capacity and teacher cultures of collaboration and engagement with professional learning more than mandates (Fullan et al. 2024).

The story of reading reform in Canada started in November 2012 when the Supreme Court of Canada ruled against a BC school district, citing that closing a Diagnostic Center and defunding specialist services to support reading was an infringement on human rights and that their difficult funding choices constituted discrimination. The ruling stated that "...children are entitled to an education (because) a healthy democracy and economy require their educated contribution. Adequate special education, therefore, is not a dispensable luxury" (Supreme Court of Canada, 2012, pp. 361-362).

While this ruling received attention in international newspapers and specialist journals, there are few signs of implications in BC schools today. The British Columbia Curriculum was redesigned and released in 2016 around "deep understanding and application of knowledge ... as

opposed to the memory and recall of facts that previously shaped education around the globe for many decades” (BCMECC, 2020, para. 3). Reading screeners, such as the ones that the diagnostic centre would have used had it not been defunded, do not feature in British Columbia’s current curriculum or assessment guidance (BCMECC, 2016). As such, assessment tools, initial teacher preparation, and professional development are focused on supporting the curriculum-as-printed, and there are no further standards that ensure that teacher candidates are trained in screening for dyslexia or developmental reading milestones, and instead advocate for their right to use judgement (BCTC, 2025a; Dyslexia Canada, 2025a; Hyslop, 2024).

The British Columbia Ministry of Education and Child Care explicitly leaves screening and assessments to the districts, apart from Foundation Skills Assessment, and literacy and numeracy assessments in Grades 10 and 12 that are designed to monitor system health and graduation readiness rather than provide actionable instructional data for teachers (BCMECC 2024a; BCMECC, 2024b). The British Columbia School Act states that school boards are responsible for “evaluating all of the educational programs and services provided by the board”, which has led to a patchwork of local assessment guidance and policies (BC, 1996, p. 62). It is very difficult to make a statement about the current prevalence of reading screeners in BC, as individual school districts make pedagogical decisions including literacy instruction models, special education programming models, assessment tools for identification and progress monitoring of supports, and funding decisions to create, train, and support all of these policies (Brethour, 2025; Dyslexia Canada, 2025a).

In 2024, Dyslexia Canada awarded the Cowichan Valley School District the Educational Excellence Award because they stand apart from the rest for their exemplary practices such as introducing screeners, creating collaborative teams, and providing evidence-based resources to

respond to screening data (Dyslexia Canada, 2024). While this is fantastic news in terms of reading instruction, this award points out that the Cowichan Valley School District's unified, concerted, and supportive approach to standardized assessments, screening, and intervention is the exception rather than the rule within British Columbia school districts.

The Supreme Court verdict that reading is a human right may not have had observable results in British Columbia classrooms, but it was quietly having ripples across the country. In 2022, the Ontario Human Rights Commission released *the Right to Read Report* stating that “Ontario is not fulfilling its obligations to meet students’ right to read” (OHRC, 2022a, p. 2). This report hit the ground with a thud in Canada as well as Ontario. Since the release of the Truth and Reconciliation Commission’s *94 Calls to Action* in 2015, which gave educators marching orders to acknowledge the horrors of residential schools and make changes to course correct education more broadly, educators and policy makers have been starkly aware that more needs to be done to meet the needs of indigenous students (BC, 2024a; TRC, 2015). *The Right to Read Report* provided bitter medicine in the form of specific data on unjustly disparate outcomes for indigenous and other under-served students, and recommendations on how to build equity through better, more targeted reading instruction (OHRC, 2022b). Saskatchewan and Manitoba have followed suit and responded to similar advocacy with their own reports: *Equitable Education for Students with Reading Disabilities*, and *Supporting the Right to Read in Manitoba* (Dyslexia Canada, 2025a; MHRC, 2025; SHRC, 2023). With this shifting public awareness of reading as a human right, and the mounting documentation of what should be done instead, British Columbia has started to make changes.

In 2024, the Province of British Columbia announced \$30 million in additional funding to implement universal screeners, including professional learning opportunities and “evidence-

based approaches to literacy instruction and supporting students with disabilities” (BC, 2025a, p. 1). The details of the screening roll out have changed slightly with subsequent media releases; however progress has been made in the form of the release of *the K-4 Foundational English Language Arts Learning Progressions* that provide the curriculum undergirding for this movement towards the explicit, systematic instruction that the human rights inquiries called for, and the *Early Literacy Screening Tools Resource* that push the mandate of universal screening into the end zone of classroom implementation (BCMECC, 2025a; BCMECC, 2025b; OHRC, 2022). As of September 2025, the BC Ministry of Education is planning to create the only made in Canada reading screening tool (Dyslexia Canada, 2025b).

British Columbia is moving rapidly to create the context, if not a mandate, for districts to unify their approaches to assessment. The British Columbia Teacher’s Federation’s (BCTF) position on testing has also been in flux. The BCTF is outspoken about their opposition to the only current standardized assessments before graduation requirements, the Foundation Skills Assessments, and goes so far as to implore parents to withdraw (BCTF, 2025a) Their website states that instead “teachers use a wide range of curriculum-based assessment tools to monitor and support student learning” (BCTF, 2025a, para. 4). Carole Gordon, the president of the BCTF as of July 1, 2025 was quoted in *The Tyee* (2024) as saying “a standardized test isn’t what we look at for how an individual student is doing”, and in 2025 the same publication stated that she shared that the union supports screening (Hyslop, 2024, para. 52; Hyslop, 2025). It is unclear if the change in opinion from BCTF leadership signifies a more nuanced view of the place for standardized assessments or a pivot of approach, but there are signs of whole-hearted support of screening from some membership within its magazine (Cherry & Trotter, 2024).

What the BCTF is resoundingly consistent is in its advocacy for increased funding and the need for more resources to support teachers. The BCTF conducted an internal focus-group driven research titled *Let's Talk About Literacy* in the spring of 2025 as kindergarten teachers started to look ahead to training to prepare for screening (BCTF, 2025b). Along with continuing to shine a spotlight on funding struggles, the report highlighted that “new teachers can feel unprepared to teach reading...(and that teachers spend) a considerable amount of personal time and funds to build knowledge and capacity in literacy instruction” (BCTF, 2025b, p. 1). This is consistent with national research that shows that teachers are not adequately prepared to teach literacy, and that Canadian initial teacher training does not include enough evidence-based methods to prepare teachers to screen and intervene in literacy (BCTC, 2023; Coombs et al., 2020; Dyslexia Canada, 2025a). Teacher ill-preparedness is especially compounded in middle schools where general classroom teachers may have high school training with a single subject specialization (BCTC, 2025). The challenge presented to the teaching workforce to upskill is so daunting it is shaking- but not cracking- the foundation of the BCTF’s culture of autonomy itself.

Research also shows that teachers have a lot to gain from re-tooling to be able to use the evidence base to implement structured literacy for more effective teaching (Dueker et al., 2024). Locally, the BC Association of School Psychologist and the Canadian Paediatric Society have both declared support for reform towards structured literacy as the most effective approach for the most students (BCASP, 2023; CPS, 2024). English-speaking countries that have started this journey sooner offer compelling evidence that structured literacy can improve teacher efficacy by removing guesswork with structures for identifying student needs faster, and support teachers in systematic decision-making (Barrett et al., 2024; BCMECC, 2025b; Biancarosa, 2024; Castles et al., 2015; Stu-McCarthy, 2023). Critically, standardized assessment and interventions within

structured literacy can also support teachers making difficult instructional decisions for students with diverse needs (Barth et al., 2012; Burns et al., 2023; Cho et al., 2021; Denton, 2021; FNEC & FNCA, 2024).

This context of the urgency outlined in the human rights commission reports sweeping the country, development of screening practices in British Columbia, and the need for rapid teacher re-tooling creates a rich space and urgent time to build teacher capacity to adopt structured literacy. While the mandates and policy developments in BC haven't explicitly impacted middle school teachers, neither has the professional development, supports, training, or specific materials. As teachers make these changes at their own pace in a context of professional autonomy, compelling resources are needed to achieve the potential for increased literacy equity.

Personal Context

This thesis-based project follows completion of the Literacy, Language, and Learning Graduate Diploma in 2024, and a Bachelor's of Education in 2011. I have had the privilege of working in an independent tribal school, and in various schools in England. Ten years ago, I returned to work in the same town and district that I grew up in, attended k-12 school, college, university. I have worked as a classroom teacher in middle schools specifically since 2017.

While we proudly open our meetings acknowledging the traditional territories of the Esquimalt and Songhees Nations, we are learning that the area was traditionally known as territory of the Xwsepsum, the Cheko'nein, the Chilkowetch, the Swenghwung, the Hwyuwmlith, and the Teechamitsa peoples. The opportunity to live here and relearn and build this address is a privilege and highlights the strength of the Coast Salish peoples in asserting their heritage and rights. It also highlights the ongoing work required of a predominantly European-

ancestry education workforce to deepen their learning in order to more effectively support students and the communities they serve.

I have been enriched by professional development organized by my peers in our union, universities in the province, non-profits with agendas, the school district's experts, and most recently and richly, a graduate diploma in Literacy, Language, and Learning that focused on structured literacy. What drives me to keep learning about literacy, more than any of the aforementioned professional learning, is the candid conversations where teachers share what is working for them, what they are struggling with, and they tragically frequently lament that there must be better ways to meet the needs of students. In this way, this project is informed by years of observations and deep conversations about the gaps between what's possible in research and what's achieved in schools. In other ways, this personal experience could be a potential detractor because it may have limited relevance to other districts that may have different levels of assessment literacy or already have systematic data collection. The resulting project is offered as a contribution to these ongoing conversations and an iteration towards the elusive goal of job satisfaction and fulfilment that comes from supporting true success in reading.

I had previously taken an interest in standardized literacy assessment because I have seen it work within a BC context at the direction of the First Nations Schools Association, and at the service of struggling students in mixed-grade classes. In 2011, the year I certified as a teacher, I taught at a small tribal school on a remote reserve in coastal BC. The learning support teacher had been supported by the First Nations Schools Association (FNSEA) to learn and use the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) system to monitor the achievement and plan for appropriate supports and differentiation. This system supported planning that can be immediately implemented, but also the broader goal of equity for First Nations students enrolled

in independent and public schools across the province to use a norm reference to monitor and support their achievement (FNESC & FNSA, 2024).

While this type of screener and practice is a very common and even mandated practice in many jurisdictions around the world, standardized reading assessments and screeners were not part of my initial teacher training and, until very recently, not a mandated practice in most public school districts in BC. The challenge of teaching classes with such an array of skills and needs wouldn't have been fathomable for a new teacher if not for these systems.

Then, I taught in West Yorkshire from 2012 to 2016 as a supply teacher in short and medium contracts, and as a member of staff. Their standardized reading assessment schemes were not just designed to inform teachers about a student's progress, but part of a nationwide system of accountability to assess school impact and efficacy, which came with high-stakes staffing and funding implications that can have long-lasting effects for teachers and whole communities (Gregori, 2022). The pressure of school performance targets meant that Head Teachers were desperate to implement new programs to revolutionize instruction on an almost yearly basis in an effort to find the miracle cure that they imagined would erase the effects of being situated in one of Europe's most deprived communities (West Yorkshire Combined Authority, 2025). The schools that I worked in did not just have screeners to monitor student progress and assess programming, they had regular pupil progress meetings to discuss data (without offering solutions), regular mandatory professional development where new initiatives such as in-class teacher surveillance, regional council meetings where student workbooks were scrutinized for previous instructional decisions and quantity of student feedback in books, and drills to prepare teachers for a looming surprise inspection from the Office of Standards in Education (Ofsted). These inspections threatened the status of the school, and therefore staffing

and funding were either affirmed and Good or even Outstanding or deemed Requires Improvement or Inadequate (Ofsted, 2016). The situation of high stakes, high pressure, and whiplash-speed initiatives was the recipe for burnout, where I was able to find an abundance of work by stepping through rotating doors into schools and classrooms where there was a consensus that improvement was needed, but solutions and staffing were dire (Clark, 2025). This experience painted a clear picture of the assessment precautions and scenarios that unions in Canada fight tooth and nail to avoid.

When I returned to Canada and started working in middle schools, I faced the opposite challenge. It was plain to see that students were struggling with reading tasks, but there was no universal assessment system to track, plan for, or communicate the details of student needs. Teacher autonomy and judgement were the only tools universally wielded, which were sometimes barriers to collaborating for improving outcomes when there is not enough common understanding. In opposition to standardized testing, the British Columbia Teachers' Federation states that "teachers use a wide range of curriculum-based assessment tools to monitor and support student learning", but it does not suggest any particular assessments and seems to overlook the utility of universal assessment to support teacher collaboration (BCTF, 2025a, para. 4). I felt abandoned and left on my own to figure out how to triage student needs based on my intuition and judgment. In 2025 the BCTF's released *Let's Talk About Literacy Report* that affirmed my feeling of being ill-prepared to teach reading as an issue throughout the province (BCTF, 2025b). It begs the question that if BC teachers knew about specific tools that they could be implementing to support their literacy instruction by backing-up their judgements and taking pressure off of intuition, would they be asking for training with these tools, or maintain the line that standardization is a threat to autonomy?

Purpose of Project

Currently, the province of British Columbia is rolling out screening requirements, with plans to develop a mandated kindergarten screener that eventually expands to other grades (BCMECC, n.d.). While BC teachers and districts have been making choices to use or not use these tools on an individual or staff-level for years, this change in policy creates a rich space to build capacity in assessment literacy more broadly. Teachers in BC largely have autonomy to choose assessment methods, yet research states they are not adequately prepared to choose to use evidence-based methods (Coombs et al., 2020; Friesen & Hennessy, 2024).

This project aims to both support teachers' capacity to gather appropriate and actionable data on reading achievement and make instructional choices based on the data collected. Research shows there is not currently the capacity within the teaching profession in terms of assessment literacy and implementing interventions in response to data (Coombs et al., 2020; Friesen & Hennessy, 2024). Yet, there is a growing selection of professional development on the matter, not just in the US, but also in Ontario, that teachers in BC are not choosing to connect with. Informed by personal experiences and professional conversations, I feel that this resource needs to be enticing and compelling to attract interest and support peer conversations, encouraging teachers to make the conscious choice to adopt evidence-based assessment and instructional practices. The form of this project is a website that introduces teachers to classroom-level assessments that can be implemented as an individual teacher within the realities of BC classroom composition, contract preparation time, collaboration structures, and resources. Using the classroom instruction planning adage of creating a "low floor and high ceiling", this website links to well-resourced, well-researched, professional development resources that offer nearly limitless opportunities for future learning.

Guiding Questions

This project arises from two questions that keep coming up in staffrooms, copy rooms, and graduate work: a) How can standardized assessments be implemented without challenging or reducing the benefits of professional autonomy? and, b) How can teachers be empowered to work within current structures in BC public school districts to collaborate to make decisions and choices based on data? While my personal hope is for the province to move towards creating structures and supports that are more conducive to collaborating for the implementation of data, there is a current interest and momentum with the topic that requires urgency, and creative pragmatism. This project is offered as perhaps a first iteration of a resource to bridge evidence-based practices with classroom practice in the particular limitations and opportunities in British Columbia classrooms.

Project Overview

This project aims to take advantage of the momentum of investment in screeners and the media attention on the Science of Reading by promoting the evidence-based practice of extending screening practices into the middle years. By creating an accessible online resource that is both attuned to current teacher knowledge and workable within existing BC school structures, the resource aims to serve the short-term goal of generating interest and dispelling myths around screening, and the long-term goal of building capacity by pointing to well-researched and well-resourced professional development.

While the science of reading movement benefits from researchers who also concern themselves with the growing field of implementation science, many of these models and strategies require a top-down approach, which BC may not be ready to fully embark on (Breakspear et al., 2024, Zwaagstra, 2025). Implementation often requires leader-initiated

changes, selecting specialists, resource allocation, or at the very least are organized around the premise of an outside actor effecting change on a system rather than practitioner-led change (Bauer et al., 2015). While BC has taken steps along the path to implementing province-wide systems of data-informed instruction, it has a long way to go, and many indicators point to the likelihood that districts are not currently ready to make structural changes (BCTF, 2026; Brethour et al., 2025; Dyslexia Canada, 2015). This project aims to equip British Columbia teachers to make immediate changes within their current realities and situations at the individual level of the classroom, and at the team level of collaborating teachers within the same school. For this reason, the resources focus mostly and, a) collecting quality student data within the classroom; and, b) making instructional choices at the classroom and team level. This project is informed by data-led, data-informed, data-driven, Response to Intervention, Multi-Tiered Systems of Supports, and other structures that support strategic and standardized assessment for learning but contributes to this cohort of structures by offering classroom-based resources.

This project also embraces the principle of teacher autonomy in professional development by providing accessible entry-level information for anyone to browse, as well as a robust quantity of information that connects with professional organizations and further learning. The format of a website invites and entices teachers to make the choice to start a journey of learning. Should a teacher choose to invest their professional learning time in this topic, the resource points to well-researched and resourced platforms for in-depth and transformative professional learning.

Definition of Terms

Curriculum-based assessment. Curriculum-based assessment “refers to a set of procedures that link assessment directly to instruction and evaluate progress using measures taken from the students' own curricula. Among the many different CBA models, the most fully developed is curriculum-based measurement (CBM)” (Rathvon, 2004, p. 9).

Curriculum-based measurement (CBM). Curriculum-based measurements (CBM) are a specific way to approach assessments where a skill is tested and retested to track progress. This can be done with a variety of skills in a curriculum including math facts, words written per minute, and correct words read per minute (Mclane, n.d.).

Curriculum Based Tools. The term “curriculum based tools” features in one quote in this study, but unlike CBA and CBM, there is no specific approach or tool that this term refers to (Hyslop, 2024). This was likely used as a general term for any tool or technology that teachers use or create to assess student performance in the skills being taught, while the other two terms are nearly proper nouns. This is used in contrast to assessments that are not specifically linked to the prescribed curriculum such as international assessments and Foundation Skills Assessments.

Data-Based Decision Making. The (US) Institute for Education Sciences defines this term as referring to “teachers, principals, and administrators systematically collecting and analyzing various types of data, including demographic, administrative, process, perceptual, and achievement data, to guide a range of decisions to help improve the success of students and schools. Other common terms include data-driven decision making, data-informed decision making, and evidence-based decision making” (Hamilton et al., 2009, p.46).

DIBELS. “DIBELS ® (Dynamic Indicators of Basic Early Literacy Skills) is a set of procedures and measures for assessing the acquisition of literacy skills. They are designed to be short (one minute) fluency measures that can be used to regularly detect risk and monitor the development of early literacy and early reading skills in kindergarten through eighth grade” (DIBELS, n.d., para. 1).

Middle School. In the province that is the focus of this project, middle schools serve students in Grades 6, 7, and 8, or from the year they turn 11 to the year they turn 14. These may also be considered the “middle years”, as the unique needs of this age group are acknowledged, but a dedicated school for these years isn’t always seen as necessary or feasible. Middle schools may look to American models for guidance on educational models or create their own mix of elementary and high school structures of team teaching, teacher training background, learning support, and block schedules that define the middle school experience.

Oral Reading Fluency (ORF). Because progress in oral reading fluency can be measured by counting correct words per minute, testing, retesting, and tracking progress, oral reading fluency (ORF) is a Curriculum Based Measurement (CBM). There is discussion in the literature about whether reducing fluency to a number that only reflects speed is appropriate or valid. A score for accuracy is also collected when an ORF is performed, and teacher observations on expression can be recorded, but do not account within the score.

Science of Reading. The science of reading is a body of cross disciplinary research in literacy instruction that concerns itself with high-effect size strategies and high quality evidence for preventing and addressing reading failure. The fields of speech and language pathology, cognitive science, and child development psychology contribute to this cannon. The term differentiates itself from education research that uses philosophical approaches, teacher-

participant models of research, and qualitative methods with small sample sizes. Organizations like the Institute of Education Sciences review studies based on a hierarchy of evidence. These types of studies constitute the “evidence” in “evidence-based” practices.

Screener. “A Universal Reading Screener is a tool designed to assess students’ foundational reading skills through a series of targeted measures. These assessments help educators identify students who may be at risk for future reading difficulties, allowing for timely and effective intervention” (Perry, 2025, para. 2). Reading screeners, or just “screeners” in some contexts, often include reading indicators such as phonemic awareness, word reading fluency, and text reading fluency. They are often similar to CBMs in practice, but what makes them a “screener” is that the measure has established norms and cut-points that are used to determine intervention plans, or consideration for special education services.

Standardized Test. Troublesomely, there are two definitions of “standardized test” in the American Psychological Association’s Dictionary of Psychology:

1. an assessment instrument whose validity and reliability have been established by thorough empirical investigation and analysis. It has clearly defined norms, such that a person’s score is an indication of how well they did in comparison to a large group of individuals representative of the population for which the test is intended.
2. an assessment instrument administered in a predetermined manner, such that the questions, conditions of administration, scoring, and interpretation of responses are consistent from one occasion to another. (2023)

The first definition of standardized testing is most used to refer to psycho-educational assessments that school psychologists would perform such as the KTEA-3 (Kaufman Test of Educational Achievement, Third Edition), or Wechsler Individual Achievement Test (WIAT). A BC example of the second definition of a standardized test is the Foundation Skills Assessment (FSA) tests created by the Ministry of Education and Child Care for students in Grades 4 and 7 to complete as a measure of system health.

The trouble is that the FSAs are considered controversial and opposed by the British Columbia Teachers' Federation (BCTF), but cautiously supported by First Nations Education Steering Committee (FNESC) and continue to be mandated and published by the Ministry of Education and Child Care (BCMECC, 2024b; Steffenhagen, 2008). Therefore, while teachers are not often equipped or even tasked with either definition of standardized testing, there is an unqualified sense in the teaching workforce that standardization is a negative infringement on autonomy.

Structured Literacy. Structured literacy is an evidence based structured approach to both instructional delivery that is systematic and cumulative, explicit, and diagnostic and with a curriculum that includes phonology, sound-symbol association, syllables, syntax, and semantics.

Chapter Two: Literature Review

The historical developments unfolding currently in the British Columbia K-12 school system are rapidly changing over the course of this project. As such, the project has been approached with urgency to capitalize on the momentum, but also with an eye to creating a product that can be adapted as specific applications within British Columbia classrooms evolve.

As the goal of this project is to create a resource that is immediately practical, the theoretical framework is not the focus of a section. Instead, theories are interwoven throughout the sections as they relate to practice. In particular, the Active View of Reading (2021) provides a construct of literacy and framework of literacy acquisition and intervention that is pertinent and actionable in the intermediate and middle school contexts.

Part of the historical context of this project is the specific idiosyncrasies of professional autonomy in BC, which shapes the ways that teachers both interact with professional development and conceptualize standardized assessments as external imposition rather than a tool to empower professional decisions. Autonomy shapes how professional development is offered and structured, it effects the structures of decision making and reform, and also empowers teachers to advocate for their needs and perspectives. This context is explored in order to create a project that appeals to teachers rather than imposes, and understands their starting point in order to support development.

The first research topic explores the current state of teacher knowledge of literacy and assessment strategies. This review will discuss particularities of the skillset of the Canadian and British Columbia teaching workforce, and initial teacher training.

The second topic of the literature is reading constructs relevant to middle schools, in particular the role of fluency. Fluency is not only one of the most accessible reading constructs to

measure. This section explores British Columbia-based perspectives on standardized fluency assessments to better understand the nuances.

The third topic is a discussion of interventions to change the dial. Assessment without intervention is redundant at best, so strategies mobilizing assessment data will be a large aspect of the project.

Finally, the last topic is a brief discussion of considerations in implementation and project design. As building teacher capacity in data-based decision has been the goal of education reformers across the globe for decades with varying success, it's important to design the project with both previous efforts, and current BC realities in mind (Datnow & Hubbard 2015).

Foundational Knowledge About the Educational Context in British Columbia

This section provides foundational knowledge about the curriculum, and professional roles in British Columbia to situate the themes explored in the literature. It then considers the role of teacher professional autonomy within the BC context, highlighting both the opportunities and responsibilities this creates for teachers. Finally, it explores the professional implications of standardization, with particular attention to tensions between autonomy and accountability in policy and instruction.

Historical Development & Curriculum Policy

The Truth and Reconciliation Commission's report *Calls to Action* was published in 2015 to bring the 165-year history of Canada's residential school's brutality into the public record and consciousness (TRCC, 2015a). The problematic colonial history and issues of inequity and injustices for Indigenous Peoples were absolutely not news to Canadians or educational professionals, but this report set out Calls to Action that launched the issues into the center of educational discourse and policy at all levels of government (TRCC, 2015b). The public

conversation of equity in literacy outcomes also includes increased newcomer populations with diverse language identities represented within classrooms, poverty struggles, and advocacy for increased neurodiversity training (BCMECC, 2024c; BCSTA, 2024). Funding and programming to ensure opportunities for indigenous students is also a central consideration in the historical context of BC (BC, 2026).

The Ontario Human Right's Commission's *Right to Read Report* (2022) was the first of its kind in Canada to consolidate empirical research findings in literacy and compare the body of evidence to current practices (OHRC, 2022). It was not flattering. Each province has its own separate jurisdiction in education policy, curriculum, and funding, but already, this report has been followed by two more: Saskatchewan in 2023, and Manitoba in 2025 (Brethour et al., 2025; MHRC, 2025; SHRC, 2023). All reports come to the same conclusion that reading instruction and assessment are not currently evidence-aligned (Brethour et al., 2025). The British Columbia Association of School Psychologists and the Canadian Paediatric Society have joined the conversation by issuing statements advocating for structured literacy that includes screening and intervention such (BCASP, 2023; CPS, 2024).

The recent situation in BC has been changing almost monthly starting with the announcement of additional education funding for screening in 2024, K-4 Foundation Learning Progressions as a supplement to the curriculum in 2025, the guidance on which screeners to use in the autumn of 2025, and the province's announced made-in-BC screeners is underway without a release date announced yet (BC, 2024c; BCMECC, 2025a; BCMECC, 2025b; Dyslexia Canada; 2026). Responses from union and advocacy groups continue to roll-in at the time of writing (BCTF, 2025b; Dyslexia Canada, 2025b).

The Province expected kindergarten teachers to implement universal screening in the 2025/2026 school year, and Grades 1, 2, and 3 in the following 2026/2027 school year (BC, 2025a). This is in line with recommendations from dyslexia advocates and human rights reports to prevent inequity in service delivery (Dyslexia Canada, 2025b; OHRC, 2022). While the provincial investment is intended mainly for K to Grade 3 classrooms, evidence also suggests that screening using a measure of oral reading fluency (ORF) to continue to monitor progress is valid and effective in supporting students as reading complexity escalates over the years up to at least Grade 8 (Biancarosa, 2024). Thanks to mandated screeners, teachers are learning to re-think automatic processing theory's foundational assertion that readers need to be able to decode with ease, as indicated by fluency, in order to have cognitive capacity available for concurrent comprehension (LaBerge & Samuels, 1974). There is currently no discussion from the Province on expanding screeners to be used in all grades where they can be effective, but the conversation has not been precluded.

The Context of Professional Autonomy in British Columbia

The British Columbia Teacher's Federation is a closed-shop union that represents every public-school teacher in British Columbia, excluding teachers employed in independent schools. This includes learning support teachers but excludes educational assistants and administration—even if they have teaching hours. BCTF define and defend professional autonomy as “the freedom for teachers to exercise their professional judgment to meet the diverse needs of students, determine their pedagogical approach, and decide the instructional and assessment strategies to deliver the curriculum” (BCTF, 2023, p. 2). This covers not just day to day decisions, but also selection of curriculum resources in many districts, assessment decisions, professional development priorities, and providers (BCTF, 2023).

The teacher's right to make decisions in their classrooms is limited only by "the local collective agreement, local policies and procedures, school district by-laws and policies, BCTF Code of Ethics, BC Teaching Standards, the School Act, Ministerial Orders, Freedom of Information and Protection of Privacy Act (FOIPPA), and the BC Human Rights Code" (BCTF, 2023, p. 2). This creates a context where teachers hold a substantial amount of decision-making responsibility and puts the onus on school innovation initiatives and professional development providers to appeal to teachers as allies, rather than collaborate with districts or administration to mandate changes upon them.

The only caveat to professional autonomy in assessment is the Foundation Skills Assessment (FSA). The FSA is the main source of data for British Columbia Ministry of Child Care and Education (BCMECC), described on its website as a province-wide assessment of academic skills for all students in grades 4 and 7, to provide information for parents, teachers, schools, school districts and the ministry on student progressing in Literacy and Numeracy (BC, 2025a). Before the implementation of kindergarten screeners in 2025, the FSAs were the only standardized assessment (BC, 2025a).

Aside from the FSAs, assessment choices are explicitly delegated in the BC Public School Employer's Association Arbitration stating that "Teachers must teach the curriculum defined in educational programs and assess students on prescribed learning outcomes. They have the autonomy to decide the instructional and assessment strategies to do that" (BCPSEA, 2009, p. 1). The School Act places the responsibility of program assessment with districts with no specific resources allocated to this task (Brethour et al., 2025; British Columbia, 1996). The curriculum itself and ministry document *Assessment Information for Students and Parents* do not include mention of "screener" (BC, 2024b).

While teachers largely enjoy the choice to assess curriculum as they see fit, they are limited by demonstrably inadequate initial teacher preparation and by gaps in their knowledge of standardized assessments and interventions (BCTC, 2023; BCTF, 2025b).

Professional Implications of Standardization

Beyond the BCTF, the Canadian Federation of Teachers warns against the potential of standardized testing, as the “general public, politicians, and measurement specialists see large-scale assessment as a tool for surveillance and accountability” (CFT, 2025; Slomp, 2020, p. 106). The connections between the teacher autonomy that we enjoy and standardized tests that we resist are a two-way street. Davis & Vehabovic state that

...as policies continue to link teacher evaluation, student promotion, and school accountability ratings to reading achievement measures, pressures to see quick changes in test performance only increase. Teachers do not always have the power to determine how their schools will respond to these pressures. (2018, p. 586)

Unfortunately, the implicit accountability potential of teachers to collect their own data on the effectiveness of their instruction to improve outcomes is less publicly discussed (Filiarov & Sweetman, 2022).

However, the BCTF is not altogether stalling reform in literacy instruction. No other article paints such a vivid picture of the current realities and challenges in BC classrooms than the BCTF Teacher Magazine article “The Future of Literacy Instruction” by describing what’s to come, it infers what currently exists (Cherry & Trotter, 2024). For many BCTF members, this was a first introduction to the term “Science of Reading” and, therefore, can help inform the complexity of the information needed for this project to best serve the same population.

The BCTF's 2025 report titled *Let's Talk Literacy* also threads a clear connection between the gaps in initial teacher training and literacy knowledge and with apprehension about whether teachers can retrain themselves to better teach literacy (Arrow, 2015; BCTF, 2025b; Coombs et al., 2020). The report goes on to say that what teachers would need is a) strengthened pre-service teacher literacy preparation, b) funding for ongoing and accessible professional learning opportunities, c) universal access to vetted literacy resources, d) increased preparation, collaboration, and administrative time provisions, e) critical conversations about teachers' professional autonomy, and, f) collaborative leadership and transparent communication (BCTF, 2025a). This list was the result of focus groups with teachers, but is also consistent with school change plans developed by prominent leadership writer Michael Fullan (Fullan & Rincón-Gallardo, 2024).

This project will be not only informed by but designed around the context of professional autonomy, as it shapes the conversation and landscape by putting the onus on the resource to appeal to teachers who are apprehensive of standardization, rather than create policy to be mandated. Next, the review will explore the literature on four main themes that are pertinent to better contextualize the project within current research, policy, and instructional practice.

Assessment Literacy and Reading Assessment Cultures in British Columbia

State-funded decrees of the unequivocal research support for structured literacy have spanned the English-speaking world in the last 25 years, yet teacher colleges in Canada and the US are not yet implementing the changes needed to prepare teachers to use literacy assessment data effectively (Coombs et al., 2020; Datnow & Hubbard, 2015; MHRC, 2025; NRP, 2000; OHRC, 2022; Rose, 2009; SHRC, 2023). More broadly, the body of knowledge known as the science of reading is not being inculcated sufficiently to impact the trajectory of reading

instruction in classrooms, and many point to the need for ongoing professional development and support after qualification (Binks-Cantrell et al., 2021; Harper et al., 2021; Wasburn et al., 2016).

While “literacy is the one assessment topic found in virtually every state, provincial, national, or international assessment program”, one thing that compounds the challenge of developing the workforce towards structured literacy is that the language around these terms “standardized assessment” and “screeners” are not uniform (Slomp, 2020, p. 106).

In Canada, where state-mandated standardized assessments do not comprise a significant amount of instructional time and do not even appear in most grades, teacher education programs do not spend instructional time on the concepts or skills of administering standardized assessment either. The concept of “using standardized tools” at all was only present in 2% of course outlines for courses pertaining to assessment (Coombs et al., 2020, p. 17). The situation that brought us here today is that “historically, assessment has been an isolated and relatively neglected discipline within teacher education programmes, with many Canadian teacher education programmes traditionally not having an explicit course in assessment for pre-service teachers” (Coombs et al., 2020, p. 10). Rather than move towards structured literacy, teacher preparation programs are “heavily invested” in assessments that support balanced literacy such as running records and levelled readers (Friesen & Hennessy, 2024, p. 2).

Without comprehensive assessment literacy, discussion and awareness of standardized assessments are often relegated to the narrow example of the Foundation Skills Assessment in British Columbia. This narrow understanding of assessment that focuses on the single example on the Ministry of Education website and curriculum page paradoxically feeds resistance to all standardization (BCTF, 2025a; BCMECC, 2024a).

The Right to Read reports lay bare that teachers are not equipped with knowledge and skills in using screeners to identify struggling students and implement interventions (MHRC, 2025; OHRC, 2022; SHRC, 2023). Responding to the Ontario report, Friesen and Hennessy (2024) found that teachers are aware of the shortfalls of their initial teacher training and that their instruction was insufficient. Teachers “expressed concern”, and “broadly endorsed the need for more initial teacher education on all topics proposed by the report” (Friesen & Hennessy, 2024, p. 12). Since these skills are outside of the training of most teachers, unless a student is already designated, general education students do not benefit from data-informed teaching (Coombs et al., 2020).

The same current workforce that was shown to be ill-equipped are being relied upon as mentors to new teachers as part of the mentor structure that universities rely on in initial teacher training (BCTC, 2023). Teachers, including mentor teachers, “generally do not receive adequate training in this area, and experience does not improve their understanding of how to teach reading” (Fernandez Conde et al., 2021, p. 5). These studies make a case for investing in professional development and in-service training, but the Ministry of Education and Child Care has not indicated that this is on its way.

Possibly the best current data on the shortfalls of teacher preparedness for teaching literacy in British Columbia is the BCTF’s report *Let’s Talk About Literacy* (2025). The report echoed the Ontario study saying that teacher participants lament the decrease in student skills and attainment in reading and writing, but also that teachers are sharply self-aware of the insufficient skills to meet the needs and address concerns (BCTF, 2025b). The report paired concerns with solutions, asking for better pre-service education in literacy, increased professional learning opportunities, vetted resources, and even including some critical words on

teacher autonomy as not realizable without education on structured literacy (BCTF, 2025b).

While many resources and reforms focus almost exclusively on early years, this study noted that teachers “were seeing students at the intermediate and secondary levels struggle too” (BCTF, 2025b, p. 4). This report was prompted by the introduction of screeners, but “teachers also hoped screening would serve not as an empty exercise in data collection, but as a process for driving appropriate support to students” (BCTF, 2025b, p. 2). These statements underscore the need for additional resources to support the implementation of structured literacy in middle school classrooms in British Columbia. The current project aims to design a teacher support website with the understanding that it cannot address all these needs.

Whether resources and professional development can effectively change practice is also contentious and will be discussed later in this literature review (Datnow & Hubbard, 2016; Filiasov & Sweetman, 2022).

Current Assessment Practices in BC

One of the most prominent BC-based writers in the field of intermediate reading assessment is Faye Brownlie. In her 2016 chapter “Standard Reading Assessment” featured in the book *Student Diversity*, Brownlie outlines an assessment routine for whole class instruction that includes reading a text, either selected by the teacher or part of the program, and then answering questions connected to the skills and strategies in the BC curriculum, and uses a descriptive rubric based on the older BC English Language Arts Curriculum Performance Standards as well as teacher created coding to score tests and decide on follow-up goals and instruction (Feniak et al., 2016). This style of reading assessment can be found in many iterations as district literacy assessments across the province. It can be presumed that assessments that connect a reading task to the skills and strategies described in the curriculum, and use the

descriptive rubrics of the previous curriculum are the main assessment routine that teachers are familiar with, rather than norm-referenced or standardized tests that assess reading more directly than through the lens of curriculum outcomes.

The Fountas and Pinnell Benchmark Assessment System is also commonly used in BC and other jurisdictions. These assessments are popular as they communicate progress as delineated reading levels and connect the levels to books which draws a clear line between assessment to instructional decisions. Their appeal in BC might be due to their claims that they enable teachers to observe reading behaviour rather than rely on a single score (Pearson, 2026). However, these assessments have been criticized by researchers as having poor validity in terms of identifying struggling readers, inconsistent criteria for reading levels, and low utility in terms of poor relative efficiency for classroom teachers to use as progress monitoring (Barrett et al., 2024; Burns et al., 2015; Goldberg, 2019).

Further to the practical aspects of the assessment, the Fountas and Pinnell Benchmark Assessment System supports teaching and assessing “cueing” skills, “asking: Does it look right? Sound right? Make sense?” as a method of making sense of the written word (BC, 2026). While the method is listed as a reading strategy in the elaborations of the BC Curriculum, it has grown more and more contentious in over 50 years since it was proposed and research methods have advanced and now include sophisticated methods of observing readers such as brain imaging that negates effectiveness of the three cueing strategy (BC, 2026; Brem et al., 2010; Cohen et al., 2000; Moats, 2020; Walsh, 2019; Yablonski & Yeatman, 2025). Shanahan (2020) sums up the faults in the initial research that led to the wide-spread adoption of three-cueing eloquently, stating that while readers do use context clues to comprehend and self-monitor reading, “good readers recognize words by translating letters to phonemes, and poor readers are stuck relying on

pictures, and semantic and syntactic contexts to do the best they can under the circumstances” (Shanahan, 2020, para. 12). Further than stating it’s inefficient, dyslexia advocates are actively campaigning for the removal of three-cueing from the curriculum entirely as it’s at best a waste of instructional time, and at worst trains neural pathways that limit development for students with dyslexia (Dyslexia Canada, 2025a).

While three cueing assessment systems are familiar to most teachers, providing teachers with alternative assessment tools will be a focus of the project.

Assessment and Reading Constructs in BC Middle Schools

This section examines how reading constructs are conceptualized within British Columbia academic circles, and therefor initial teacher qualification and advanced training course content, then considers how greater clarity in defining these constructs can support more precise assessment and targeted intervention in middle school contexts.

Reading Constructs in British Columbia Academia

British Columbia has historically been a hotbed of whole language theory and advocacy. Often credited as a father of whole language, Frank Smith worked first at the Ontario Instituted for Studies in Education, then as the chair in Language and Education at the University of Victoria, authoring books and articles between 1973 and 2007. He wrote notable works that advocated for whole language such as *Unspeakable Acts, Unnatural Practices; Flaws and Fallacies in Scientific Reading Instruction*, available on the Heinemann catalogue.

Rob Tierney served as the Dean of the Faculty of Education at the University of British Columbia (UBC) and is currently Professor Emeritus of Language and Literacy Education, among other prestigious roles in literacy advocacy and research. His most cited contribution to reading theory is the article “Toward a Composing Model of Reading”, penned in 1983 and

decidedly constructivist, stating that “meaning is created as a reader uses his background of experience together with the author's cues to come to grips both with what the writer is getting him to do or think and what the reader decides and creates for himself” (Pearson & Tierney, 1983, p. 1). Tierney also played a role in expanding the research into the developmental skills of reading towards the broad notion of “literacy” that encompassed both reading and writing, as well as esoteric derivations that dilute the discussion of literacy to potentially include any form of understanding (McGinley & Tierney, 1989).

UBC also currently hosts Allan Luke as a professor within its Literacy Language Education program, a contributor to the New London Group’s iconic article “A Pedagogy of Multiliteracies: Designing Social Futures”, which Google Scholar claims is cited by 5968 other articles at the time of writing (The New London Group, 1996). Multiliteracies continues to be a current course topic at Simon Fraser University, and research topic in Education faculty members from Simon Fraser University, University of British Columbia, and the University of Victoria according to Google Scholar.

The whole language, constructivist, and multiliteracies concepts of reading have shaped initial teacher training in British Columbia in ways that would be impossible to either recount or over-estimate. These theories offer rich perspectives on socialization and cultural development. Yet, while Frank Smith was the most prominently hostile to the science of reading, these theories do not generally address instructional methods in word reading. Given this ubiquitous culture within teaching, discussing how to persuade teachers to consider models of reading in order to isolate skills that can be assessed, intervened, and ameliorated in the service of comprehending text is the challenge at hand.

Defining Reading Constructs for Assessment and Intervention

There is no research to suggest the saturation or even reception of evidence-based reading models in British Columbia's practicing teachers specifically, but Hollis Scarborough's Reading Rope (2001) is likely the most cited on Google Scholar at 3,000 and counting. The model expands on the with the Simple View of Reading's (Gough & Tunmer, 1986) which conceptualizes reading comprehension as the product of two core components, decoding (word recognition) and language comprehension. The models specify Language Comprehension as background knowledge, vocabulary, language structure, verbal reasoning, and literacy knowledge, and then Decoding, (or Word Recognition in some versions) as phonological awareness, decoding, and sight recognition (Gough & Tunmer, 1986; Scarborough, 2001). Anecdotally, however, while it is over 20 years old, it is not as ubiquitous as it deserves to be in all initial teacher education programs for classroom teaching.

In 2021 Duke and Cartwright (2021) expand the components of reading further in their model- the Active View of Reading, which elaborates on both word recognition and language comprehension by incorporating additional processes, including bridging processes and self-regulation (Cartwright & Duke, 2021). This latter model will be used as the basis for the project as it encompasses previous aspects, and by adding self-regulation, it may appeal to traditions of empowerment and self-realization that are part of the culture of BC education. Critically, this model also integrates aspects of reading that are assessable with tools validated by assessment researchers and psychometry tests that are commonly used by learning support teachers and form part of considerations for referral to school psychologists such as the Wechsler Individual Achievement Test and Kaufman Test of Educational Achievement (Fuchs et al., 2001; Meyer & Reynolds, 2022).

Literacy Screening and Fluency Assessment: Standardization in the Service of Equity

This section examines the role of reading screeners and oral reading fluency assessment within literacy instruction, considers common critiques of these approaches, and explores how standardization in assessment can be understood as a mechanism for promoting greater equity in instruction practices.

Reading Screeners

Screening data is a vital first step in systematic tiered approaches designed to escalate intensity and duration of evidence-based reading interventions, recommended by several far-reaching structured literacy reform reports (Friesen & Hennessy, 2024; Rose, 2009; OHRC, 2022). Screening is not just a strategy for special education, but also general education, as adolescents with mild reading disabilities can be identified, and benefit from reading interventions, potentially more than previously designated students with more severe impairments (Galuschka et al., 2014). After students are identified by screeners, standardized assessments can also support decisions on programming, intensity, duration, and discharge from reading interventions (Rose, 2009).

Given the limited, but relevant constructs of reading that screeners can capture, many researchers suggest taking mitigating measures and emphasizing the importance of also taking care to center readers' strengths, understand individual funds of knowledge, support text selection, create opportunities to participate in discussions of text, and engage personal motivations as best practices to enrich the assessment experience (Amanti et al., 2009; Davis & Vehabovic, 2018; Corrigan et al., 2024, p. 295).

Assessing Oral Reading Fluency

Oral reading fluency is one of the strongest indicators of comprehension in elementary years, as supported by large meta-analysis demonstrating high correlations with other reading measures from Grades 1 to 6 (Betts et al., 2009). Oral reading fluency is supported as a measure of reading competence that it is part of the American National Assessment of Educational Progress as an indicator of reading attainment nationally (Bernstein et al., 2021). Through listening to a students' oral reading, teachers can assess their prosody, reading speed, and word recognition accuracy. Since prosody performance is difficult to index, Oral Reading Fluency (ORF) norms are based on measuring correct words per minute (CWPM), and accuracy rate (Fuchs et al., 2001; Hasbrouck & Tindal, 2006).

The correlation of success in an ORF passage and success in other comprehension assessments is less strong in middle school years than in primary, but it remains the most accurate and efficient tool for universal screening and progress monitoring for non-specialists (Barrett et al., 2024; Barth et al., 2013; Denton et al., 2011). Even the most notable researchers in oral reading fluency caution against relying on a CWPM score to provide a full profile of a reader's strengths and weaknesses, instead viewing it as a quick indicator that further investigation is needed (Hasbrouck & Tindal, 2006). It is also not advised to focus on intervening for fluency alone in order to improve on the measure, but instead use the measure as part of an investigation (Hasbrouck & Tindal, 2006). As literacy curriculum progresses through the grades to focus more on literature analysis and deeper reading, the correlation between CWPM and overall reading skill becomes less strong, yet, CWPM remains the most valid measure to identify students who do not yet have the basic reading skills to participate in the escalating complexity of reading (Fuchs et al., 2001).

Using a measure of speed as a proxy measurement to estimate concurrent thinking was first supported by the Theory of Automatic Processing in 1974 and then confirmed with Cognitive Load Theory's realization in 2011 (LaBerge & Samuels, 1974; Ayres et al., 2011). This practice and these theories are widely accepted by psychologists, but as mentioned previously, the speed of reading and word recognition have not been the focus of concepts of literacies in Education faculties in BC, so many teachers may need support or training to use the tool. Addressing teacher skills, as well as apprehension, will be a focus of the project.

Fluency and Assessment Criticism

David Slomp, a prominent Canadian researcher and writer on the topic of assessment is based in Alberta rather than BC, but his critiques of reading assessments mirror the culture of BC's concern for reading within a whole language if not whole person approach. He argues that large-scale assessments "almost always position reading as an efferent activity while ignoring the aesthetic dimension... from a validity standpoint, these design choices undermine the inferences and decisions that can be made from these assessments, while also promoting negative long-term outcomes for students" (Slomp, 2020, p. 107). Slomp doesn't take aim at fluency specifically, but by participating in critiques of large-scale assessments, he contributes to a culture of skepticism of standardization that trickles into staffrooms, orphaned from the context of a robust discussion of reading constructs.

In "Prioritizing Equitable Social Outcomes with and for Diverse Readers: A Conceptual Framework for the Development and use of Justice-Based Reading Assessment", authors (including Slomp) observe that fluency screeners do not evaluate "other important and essential aspects of reading ... such as motivation, engagement, executive functioning skills, strategy use, vocabulary knowledge...(or) deeper comprehension skills such as reasoning with evidence,

evaluation, and critique” (Corrigan et al., 2024, pp. 292-293). Unfortunately, rather than discuss how models like the Active View of Reading can place fluency assessment into a context that includes many of these aspects of reading, the article continues along similar a vein to Slomp’s (2020) previous broad social critique of standardized reading assessments, stating that “when only white, English, and neurotypical ways of reading and making meaning with text are assessed...it signals that these are the only ways of reading that matter” (Corrigan et al., 2024, p. 293; Duke & Cartwright, 2021; Slomp, 2020). The culture of the British Columbia education system is particularly sensitive to critiques of social equity, and sentiments like this resonate with teachers and within staffrooms as “concept creep” in ways that are impossible to cite.

Even more memorable for the strength of their language are two more articles on the topic of equity in assessment that Slomp contributed to titled “Disrupting White Supremacy in Assessment: Toward a Justice-Oriented, Antiracist Validity Framework”, and “Justice-Oriented, Antiracist Validation: Continuing to Disrupt White Supremacy in Assessment Practices” (Oliveri et al., 2022; Oliveri et al., 2024). Authors make the point that “traditional approaches to the validation of assessments maintain a white supremacist hegemony. This tendency to uncritically center whiteness exclusively has not gone unaddressed in assessment” (Oliveri et al., 2022, p. 171). The authors state, in with some variation between the articles, that validation of standardized assessment should be questioned when results reflect broader societal inequities, and position this as a detractor to the assessment design, rather than a validating indication that the assessment can accurately reflect an unequal society (Oliveri et al., 2022). While there may be nothing about assessments themselves that can address inequity, identifying disparate achievement is the first step to effective interventions, which will be discussed further.

What is less boldly stated in Slomp's articles (Corrigan et al., 2024; Oliveri et al., 2022; Oliveri et al., 2024; Slomp, 2020), is that his research in literacy deals almost exclusively in writing assessment rather than reading. His scholarship does not address measures of automatic decoding. Labeling assertion of bias in writing assessment as representative of "literacy assessment" more broadly is a "concept creep", but in the community of Canadian assessment researchers, education theorists, and research-consumers this is amplified when teachers search for information on equity in assessment and find assertions that disparity of measured outcomes for different groups is a problem with the tool rather than the a sign of societal problems where the measure was applied (Slomp, 2020). In my experience, this kind of over-generalization of assessment critiques has had a cooling effect in staffrooms and classrooms, precluding openness to the idea that assessment standardization can be a tool for equity rather than perpetuating oppression.

Standardization in the Service of Equity

The fundamental concern of the *Right to Read Reports* (MHRC, 2025; ONHRC, 2022; SHRC, 2023) is the social justice failure of inequity of reading outcomes. Evidence abounds that teachers are not able to make bias-free judgements pertaining to different social groups and races. A 2022 study by Childs and Wooten titled "Teacher Bias Matters: An Integrative Review of Correlates, Mechanisms, and Consequences" looked at teacher bias in the United States in ways that mirror conditions in Canada which have led to disparate outcomes for diverse students. Childs & Wooten state that

...teachers' treatment of students is "influenced by race, ethnicity, social class, and other identities... and have lower expectations of students based on race or parents' educational attainment. The intersection of students' identities may intensify biased experiences....

Overall, teacher bias can alter the trajectory of students' academic, career, and well-being outcomes." (2022, p. 369)

The report goes on to share that not just general judgements, but also specific assessments such as estimates of ADHD symptoms, and gifted and special education referral were influenced by teacher bias rather than data (Childs & Wooten, 2022).

Without standardized screeners, that are explicit about measure a narrow construct of reading, intermediate classroom teachers in BC are left to estimate students' reading comprehension using tools created or approved locally by each district or none at all if that district chooses not to provide them (Brethour et al., 2025). The difficulty is that when students are not able to deliver accurate results on reading comprehension tasks derived from the curriculum, teachers don't have information on where or how the acts of decoding and comprehending broke down (Davis & Vehabovic, 2018). Additionally, "some individuals may have compensating strengths which may conceal dyslexic difficulties", which echo the aforementioned question of whether portfolio assessments and teacher observations recommended in the BC curriculum may be ineffective in identifying at-risk readers (Rose, 2009, p. 46).

Within the criticisms of standardized tests, there are also solutions to use them as vehicles for equity. Corrigan et al. (2024) essentially agree with data-based decision making when they state that assessments should serve the purpose of "learners getting resources according to what they need rather than all learners receiving the same resources... students who are not performing well ... might receive supports beyond regular classroom instruction, such as more practice, different kinds of instruction" (p. 296). In this sense, the critique is not of the assessment itself, but whether or not the data is acted upon. Oral reading fluency measures as

screeners are sensitive enough to predict reading outcomes “among students from different racial/ethnic groups, from varying levels of socioeconomic backgrounds, and with variable language proficiency” and therefore are suitable for application in diverse classrooms and contexts (Burns et al., 2023, p. 307; Roehrig et al., 2008).

Teachers, on the other hand, are not tested for validity, accuracy, or consistency. A 2021 study by Urhahne and Wijnia looked at data from over 200 studies to draw conclusions on the accuracy of teacher judgement, stating that:

teachers should become aware of their stereotypes and try to rely on valid indicators to gauge student characteristic... Teachers should get valid information about actual student achievement and other student characteristics more frequently by using formal and informal tests in the classroom...objective feedback will help them to rethink and, if necessary, to revise their judgments. (pp. 16-17)

The study found that there was little difference in assessment judgment accuracy across genders but did not examine race.

Feinberg and Shapiro released a small study in 2003 that queried specifically whether teacher judgement was correct in predicting reading fluency outcomes. They outlined a history of studies that approached the topic but found huge variability and discussed that previous studies likely did not account for student ethnicity in teacher judgements and concluded that teacher correlations were weaker as students progressed through grades (Feinberg & Shapiro, 2003). Given the biases identified in American studies, and Canada’s colonial history and its ongoing impacts, using a standardized tool to critically reflect on one’s practice represents a reasonable and responsible approach to making equitable instructional decisions (Childs & Wooten, 2022).

Finally, the most compelling reason to use standardized assessments to identify students who need additional supports as early and bias-free as possible is that the First Nations Education Steering Committee and First Nations Schools Association support collecting data to identify, and address reading disparities within both independent FNSA schools, and public schools to ensure that First Nations children are not being under-served or ignored (FNESC & FNSA, 2024). While the considerable discourse in British Columbia about how to best serve indigenous students, this should be a situation where educators listen.

Literacy Interventions

Evidence is resoundingly concurrent that early reading assessment and intervention are the most effective, and delaying intervention can have far-reaching academic achievement consequences, as well as behaviour and mental health implications (Duff et al., 2015; Cunningham & Stanovich, 1992; Sparks et al., 2014; Stanovich, 1986). In the article “The Prevention of Reading Difficulties” (2002) by Josef Torgesen he states that “the costs of waiting until mid-elementary school to identify children in need of special instruction in reading are... vocabulary growth... attitudes and motivation to read... and missed opportunities to develop comprehension strategies” (p. 8). It went further to list the essential components of reading instruction including explicit teaching in phonemic awareness, phonemic decoding, fluent word recognition, reading comprehension strategies, vocabulary, spelling, and writing skills. Torgesen (2002) argues that screening must be used to identify at-risk students, and then repeated multiple times a year to determine if instruction needs to be more explicit, intensive, or supportive. While these tenets of instruction and intervention have been echoed across the evidence base in the 24 years since the article was penned, the main ideas of screening and intervention are the same. The reality in BC, however, is that the elements described above are not prominent parts of the curriculum, so there

is no systematic instruction or assessment of any of them. While it wasn't the intention of the author, when read in this context this article ends up making the case that screening and intervention are more important in middle years.

It needs to be mentioned that there are also prominent researchers who have found that the Mathew Effect, where the students who learn to read early have exponential benefits in all aspects of literacy and those who don't learn early continue to struggle and are relatively further behind peers may be overstated or not consistently supported in literacy research, as opposed to mathematics (Scarborough et al., 2001). These researchers also suggest that differences in achievement may be more closely related to factors such as IQ (Fletcher et al., 1995). However, the phenomenon's continued relevance is likely because it is so commonly observed and lamented by classroom teachers, and their observations have not been fully empirically accounted for in other terms.

Not-So-Early Interventions and Middle School Literacy

Renowned researcher Timothy Shanahan contributes to international reading discourse through his blog, *Shanahan on Literacy*, with topical articles that are very accessible to teachers, rather than academic papers. While many of his articles are extremely informative to both teachers that are starting along the path of structured literacy, and those who are further along in their implementation, the article *Decoding or fluency instruction in middle school?* was included in Ontario's provincial structured literacy resource OnLit.org, so it has already been vetted for application in Canadian school contexts (OnLit, n.d.; Shanahan, 2022). Within the article Shanahan draws upon both his experience on the National Reading Panel, and newer research that has helped him change his mind to become more hopeful of the potential of reading interventions in secondary, and therefore middle school. Particularly, he gives guidance on when

interventions should focus on basic decoding, and when fluency interventions would be profitable. This article doesn't mention the Active View of Reading (2021) but it lists many of the same factors that merit investigation for intervention that the Simple View of Reading charts out such as motivation and engagement, decoding skills, vocabulary, morphological awareness, and reading specific background knowledge (Duke & Cartwright, 2021).

While a conversation about teachers' feelings and capacity in data use could have just as easily been positioned within the conversation on professional autonomy above, or professional development below, increasing capacity to collect data is most critical to effective interventions.

When we examine the research, we have presented teachers' beliefs alongside the research on capacity building efforts; we see that they are inextricably linked. Datnow and Hubbard (2026) explore teacher beliefs and feelings about data in their article "Teacher Capacity for and Beliefs About Data-Driven Decision Making: A Literature Review of International Research". Researchers found that across multiple jurisdictions teachers vary in their ability to collect data effectively; they are apprehensive of collecting data that isn't safeguarded against accountability applications, and that few jurisdictions are utilizing data for instructional decision making within classroom contexts (Datnow & Hubbard, 2016). Clear guides such as an assessment map or flow chart that connect screeners, diagnostics, and every assessment in-between to instructional decisions are necessary to support teachers in implementing structured literacy interventions.

To support BC teachers with assessment as the first step of intervention, the article "Evidence-Based Assessment in the Science of Reading" by Una Malcolm (2022) is likely the most relevant as she is a Canadian researcher that has been working to create resources to support Ontario schools to transition to structured literacy as the Chief Academic Officer of

Dyslexia Canada. Her writing is consistent with larger resources and contains several of the foundational citations explored here, but she has already done the work of connecting writings created within and for an American context to Canadian assessment priorities like the categories within the BC curriculum: assessment for learning, assessment as learning, and assessment of learning. Her assessment descriptions are helpful to teachers who do not have previous training or education in the matter, as described above, and does not point to name-brand programs that may not be available in Canada and are often not funded by BC schools (BCTF, 2025b).

In their article “Evaluating Components of the Active View of Reading as Intervention Targets: Implications for Social Justice”, Burns et al. (2023) examine the effect sizes of interventions that fit within their Active View of Reading model. This is particularly relevant to middle school interventions as the Active View of Reading encompasses a broader range of reading aspects and proves that they are intervenable to varying degrees. This article is helpful in the short term by assisting teachers who have been encouraged by training in BC to look at their students holistically, by supporting them with an evidence-based framework to consider strategies rather than intuition. In addition, Burns et al. (2023) represent a significant contribution within the broader research context due to the authors’ use of meta-analysis to look at very specific aspects of reader profiles from average readers to struggling readers, to their socioeconomic status, race, and primary language. Even outside of BC, teachers are encouraged to practice judgment when selecting programs and interventions that fit the particularities of their classrooms as we know that these are not one-size-fits-all decisions. This article takes the rigor of evidence that the science of reading upholds and applies it to the vast and growing amount of data available on both student progress and identities to suit both evidence enthusiasts and individualization stalwarts alike.

The final piece of the literature reviewed here is What Works Clearinghouse's *Educator's Practice Guide to Providing Reading Interventions for Students in Grades 4-9* which serves as a comprehensive synthesis of the research literature and, as such, warrants limited scrutiny (Kieffer et al., 2022). Recommendations for intervention include targeting decoding skills, building fluency, and instructing a few high-impact comprehension strategies. This is important to include because the Institute for Education Sciences shares the most stringently vetted research, and their research summary style enables teachers to build their own practices from the ground-up to fit their circumstances from their recommendations, unlike many articles that reference specific intervention programs that are not based on research in BC populations, are beyond the budgets of many teachers and schools, or require organizational structures that are not commonly found in BC school district (BCTF, 2025b; Brethour et al., 2025; Coyne et al., 2024). Most importantly, this resource is intended for middle school-year students needing whole-class, small group, or separate setting interventions for a variety of reading challenges, which fits perfectly into the aims of this project.

Design Considerations for the BC Context

The current project largely consists of creating a tool to not just present to teachers, but to appeal and even persuade teachers to change practices, and support changes towards evidence-based practices. However, implementing, operationalizing, or mandating, is beyond the scope of the project as it is not within the power of a teacher researcher or the culture of the BC education system. I have explored some readings connected to professional development and implementation sciences to understand how to best appeal to teachers and support them.

Levels of Professional Development

From an international perspective, Béatrice et al. (2016) explore the elements of teacher professional development at work as falling into the progression of these categories: “(1) keeping up to date: reading... (2) keeping up to date: participation in training related to work... (3) experimenting... (4) reflecting... (5) collaborating with colleagues to improve the lesson (and) ... (6) collaborating with colleagues to improve school development” (p. 229). Based on these categories, this project aims to contribute to the ease of access to vetted reading materials, and ideas for experimentation and collaboration. This longitudinal study confirmed previous findings that rather than formal and structured training, cycles of reading, experimenting, and reflecting within collaborative relationships where feedback is comfortably shared without judgement are the best tools to improve competence in the workplace (Béatrice et al., 2016). With the growth of professional collaborative learning in BC schools, resources that point to manageable readings could have a strong impact.

Professional Learning Networks and Variations in BC

Within British Columbia, this kind of on-the-job peer-supported learning could be referred to a self-study, professional learning community, professional learning network, network of inquiry, and network of inquiry and indigenous education. The book *Professional Learning Networks: Facilitating Transformation in Diverse Contexts with Equity-Seeking Communities* (2020), edited by Leyton Schnellert includes six chapters by various practitioners, facilitators and writers on the topic of meeting advancing professional capacity in education in the context of both urban and remote communities in BC in the service of equity-seeking communities. The book includes the Spirals of Inquiry model by Hablert and Kaser (2013), which is widely used in British Columbia, and similar to the Teacher Inquiry Program that is

promoted and supported by the British Columbia Federation of Teachers (BCTF, 2026). The book largely focuses on connecting practicing professionals as resources and supporting expertise through networking, fostering connection, peer-regulation, mentorship, and leadership models. In summary, the book is about locating and attending to other professionals as a resource for growth. There is little discussion about learning resources such as printed materials, academic papers, published resources, or discussion on how to introduce novel ideas into these networks and cycles. The Teacher Inquiry Program focuses on attuning your practice and elevating practice through systemic observations and discussions. Session four of six in the Teacher Inquiry Program includes “connection to any articles” as one of several steps in their process (BCTF, 2023). These models would inform the design of the project as a consideration in creating an appealing product that offers information and resources in small, high-quality pieces of actionable resources in order to fit into this model of implementation and reflection rather than leadership-driven focused and resource-heavy training that other jurisdictions may implement.

The above-mentioned works on models of teacher-driven peer-led development often refer to measures of teacher satisfaction on self-reported surveys as their data or indication of success (Schnellert, 2020). In contrast, the study “An Investigation of the Relationship between Professional Learning Community Practices and Student Achievement in an Eastern Canadian School Board” by Noel et al. (2018) from Memorial University in Newfoundland, Canada took a critical approach attempted to directly compare the uptake of teacher-driven improvement models with student success. First, they disambiguated various practices associated with professional learning communities in existing literature into four aspects: democratic environment, collaborative culture, teacher collaboration, and teacher efficacy and confidence, which is helpful to understand models of change and Canadian school leadership structures

(Hurley et al., 2018). Second, they took teacher-reported scores of the presence of those practices and compared them to the provincial literacy assessment data over three years across one district. They found no conclusive evidence that these models have a positive effect on literacy achievement. The authors lament their small sample size and speculate that the existing culture of teacher empowerment through involved unions could have created a situation where the aforementioned changes weren't discernably different from business-as-usual, or that the historical achievement of the district was already sufficiently high that the intervention of PLCs wasn't able to push them further. However, while the discussion and popularity of PLCs have advanced, this type of research that uses student achievement as an indicator of success is not a sufficiently large enough part of the conversation in my observation.

Implementation Science

Returning to international works, the National Implementation Research Network operates from the University of North Carolina at Chapel Hill is a prominent organization that publishes research for health and human services about implementation, meaning changing organizational practices (NIRN, 2026). Implementation sciences have received a considerable amount of attention from structured literacy advocates who aim to change practices within schools, and their Implementation Stages Planning Tool (2020) is included as a suggested resource on the OnLit website for application in the Canadian context of changing policies and practices (OnLit, n.d.). Rather than including their broader body of research, the most relevant work for the context of British Columbia's emerging interest in evidence-based practice and practitioner-driven professional learning is the article *De-Implementation: Clearing the Path for What Truly Works*, particularly its discussion of balanced literacy and the Initiative Inventory (Perkins, 2026). While the example and article support a leadership-driven model for

organizational change, this model of starting with an inventory assessment would be extremely practical within the professional-driven development models mentioned above.

Gaps in Research

The challenge of this literature review is focusing on British Columbia's education system which has largely had an unexamined culture of balanced literacy that teachers take for granted and, in my experience, can hardly name just as fish don't have a word for water. Bridging research into practice and knowledge mobilization is one commonly lamented challenge, but this literature review faced the challenge that current practices are sparsely reflected in research. As the British Columbia teaching culture relies on peer-driven development, likely more than other jurisdiction, there is missing research on the effectiveness of existing classroom practices measured in student outcomes, and measures of effective practices compared to jurisdictions with leadership-driven documentation and data gathering systems.

There is also a gap in research that includes reading data in British Columbia. The BCTF lays out specific criticisms of the tools and data that do exist, but BC is only just starting on its journey to start to collect data that is comparable to other jurisdictions, across the province, and between classrooms and students in an actionable way. While this is changing rapidly, by creating their own screening tool, BC won't have historical data to validate the tool that they create, or to measure the impact of institution-level intervention.

Middle school and late intermediate literacy evidence-based interventions are less readily available than early intervention materials, programs, and research. This is quickly changing, and different jurisdictions will have different needs based on their implementation advancement. For example, when a district is just starting on their structured literacy journey, their late intermediate and middle school students may have had little to no explicit instruction in

phonemic patterns or even spelling in some instances and students may benefit more from interventions that address those skills compared with districts that have been prioritizing that instruction for the last eight years. This project hopes to contribute by promoting the research that does exist for this age group.

Finally, there is a gap in research on teacher choice in selecting practices in an environment with high professional autonomy. This project aims to appeal to teachers by proving to be relevant and easily implemented in the context of BC middle school and late intermediate classrooms. However, discussed research in implementation is not within the culture of BC schools, or the scope of this project. Over time, data on interaction with the resource and impact in classrooms could be collected for future studies.

Summary of Knowledge in the Field of Study/ Justification of Value of Applied Project

This project aims to support teachers by providing resources connected with the identified shortfalls of initial teacher preparation for teaching literacy by collecting evidence-based resources and suggesting strategies that can be implemented in the context of BC middle schools and late intermediate classrooms. The biggest challenge noted in the research will be to educate teachers on using standardized assessments as screeners to collect data and provide resources to use data to make further planning and intervention decisions. While teachers are empowered to make choices autonomously, the culture and models shared in initial teacher training do not equip teachers to implement standardized reading assessments, or structured literacy in their classrooms, or even to know to look for these tools (Arrow, 2015). Many of these resources are already shared in graduate studies, but research has shown that classroom teachers want access to resources to inform their practice in the short term, as well as resources that fit into practical peer-led collaborative learning models of professional development (BCTF,

2025b). This project is presented at a time when both the province and the teachers are signally that support for structured literacy is needed.

Chapter Three: Considerations for Implementation of Product

[After The Screener](https://sites.google.com/view/literacyinbc/using-data)

<https://sites.google.com/view/literacyinbc/using-data>

In this project, Supporting Using Data for Instructional Decision-Making in British Columbia Middle Schools, the primary goal is to support teachers to increase their capacity to use reading screeners and assessments within their planning and teaching. Research, human rights organizations across the country, and specialists in the province have declared that schools need to be using data more effectively to make better instructional decisions (BCASP, 2023; Castles et al., 2018; CPS, 2024; MHRC, 2025; OHRC, 2022; SHRC, 2023). Yet, teachers do not feel like they are currently prepared to teach literacy and are doubtful that plans to learn to use screeners will be adequately supportive (BCTF, 2025; Friesen et al., 2024). Further, the province's current plans do not include using screeners to their full potential in higher grades (BCMECC, 2025b). From these premises, it seems clear that there is a need for a resource to support teachers in starting to use evidence-based strategies in the middle years.

The project is a website because it is an effective way to communicate to teachers who range in workload, experience, position, and geography, and have indicated that they need to be able to engage asynchronously while managing competing demands, all at a low cost (BCTF, 2025b). Information can be layered to highlight relevant information using brief summaries to connect to situations in BC middle schools, but also layered with links to the wealth of knowledge and resources that have been developed across the English-speaking world by well-funded agencies, and the current explosion of interest in the subject. As the science of reading is characterized by high standards in research, collecting and vetting that work is important. The

goal is not to be the best or most comprehensive resource, but to be the most succinct and relevant to BC middle school teachers because curation and support are needed, not workload.

Another benefit to the design choice of a website is that it can evolve over time. Text can change as this issue is developing rapidly in British Columbia, and links can be added or substituted as organizations develop and publish resources. Once the website content is created, it could be developed into a tool for collaborative or instructor-led professional development. The discussion is heating up in BC, and of course the science is never settled, so creating a static product would be obsolete quickly.

The project is designed to connect with teachers working in middle schools, or Grades 6-8, in British Columbia. This population may have trained as an elementary school teacher with some initial teacher preparation in reading instruction, as a middle school teacher with little or no coursework in early literacy, or a high school teacher that would have no training at all in language and literacy development. Teachers in the middle years may specialize in their roles and only teach a few topics in a high school setting; they may teach one subject, or they may teach every subject to their homeroom group. Administrators are even less likely to have current training in early literacy skills, and could benefit from this resource as they lead selection and planning for school goals. However, at this point, the design considerations are focused on middle school teachers, rather than risk creating a resource that is diffuse.

Background Literature to Support the Choice of Type and Design of the Project

In designing this project, I looked at three fields of research: a) implementation science which has limited applications for teacher-led resources in a high autonomy environment; b) professional development design considerations which have significant relevance in terms of content and format; and, c) web-based medical interventions which have no applications in terms

of content, but rich considerations in terms of a model for medium and long term engagement that has the potential to modify behaviour outcomes.

Implementation Science

Implementation science fits with science of reading like a glove onto a hand, but this project is not specifically about in-school leadership-driven implementation, so the application within this project is limited. The National Implementation Research Network (NIRN) is recommended by OnLit for its application to education settings (OnLit, n.d.). The Implementation Stages Planning Tool by NIRN (2020) breaks implementation into four steps: exploration, installation, initial implementation, and full implementation. This project's audience is teachers who are currently working and likely need support for locating and implementing strategies that can support with an emergent classroom challenge. The province is putting momentum behind organizational change, and this could be a space for further development. The website project offers opportunities for the exploration step of this model so teachers can browse concepts and resources that might fit their needs and situations before committing to implementation. Specifically, the website format offers information for the exploration stage activity to "identify and learn about other potential practices or programs to address the change needed" (NIRN, 2020, p. 5). This website makes clear links between the broader science of reading public conversation with applications in BC middle school classrooms that are often less obvious. In this way, the website supports connecting BC teachers to the resources rather than providing learning opportunities directly to support exploration rather than direction, and installation, initial implementation, and possibly full implementation through links to resources.

Professional Development Design

The professional development progressions from Béatrice et al. (2016) offer descriptors for where this project could be very beneficial: “(1) keeping up to date: reading... (2) keeping up to date: participation in training related to work... (3) experimenting... (4) reflecting... (5) collaborating with colleagues to improve the lesson (and) ... (6) collaborating with colleagues to improve school development” (p. 229). As this website model does not rely on leadership imposition of learning, it fits well in the BC context of high professional autonomy (BCTF, 2023a). This model also has potential for addressing some of the issues raised by teachers such as being challenged to learn on their own time and spending their own resources by offering as-you-need-it information, as well as substantial links to further resources and books to support sustained implementation should this route be chosen (BFTF, 2025b). Further development of the project could include features that connect to social media and support collaborating and connecting with other teachers who are doing similar learning and experimenting through chats, groups, and mailing list features.

There is research on factors that make professional development successful, yet a central problem is that effective professional development supports teachers over time, yet teachers often prefer single-day events (Ehlert & Souvignier, 2024). The same study also showed not just a large variation in preferences like amounts of active learning in structure, and research vs practical applications in content, but also a tendency to avoid professional development that didn't fit their expectations rather than adjust expectations based on the complexity of the topic day (Ehlert & Souvignier, 2024). The format of a website could provide the context that builds continuity and context between one-off single-day workshops to enable teachers to enjoy their preference while making sustainable changes to practice and working towards complex changes

in the short bursts that teachers are more likely to sign-up for. In this way, teachers have options to choose how to interact with the content based on their preference, budget, time, and location restraints (BCTF, 2025b).

In *Online Teacher Professional Development: A Research Synthesis on Effectiveness and Evaluation*, Stavermann (2024) charts out what makes online professional development most impactful for teacher's efficacy and student performance. Stavermann's (2024) research review gathered that the most effective elements in online teacher professional development were: "addressing teachers' needs (relevance),...solving problems related to teaching practice,...collaborative and interactive nature,... integrate authentic tasks,... (and) support for reflecting on how newly acquired knowledge can be transferred to classroom practice and how this might affect students' learning outcomes" (p. 204)

In addition, the study concluded that instructor-led sessions and synchronous opportunities were also highly rated by teachers (Stavermann, 2024). Following this, the current project is designed to curate relevant and practical connections to current challenges, which is currently difficult to find for both British Columbia and middle school teachers. While teachers want flexibility in their professional development to be able to take manageable pieces that connect with their context to add to their current knowledge and skills, the study found that teachers want information presented in a clear sequence and structure; "there is an emphasis on the importance of clear structures, simple course navigation, and clear objectives" (Stavemann, 2024, p. 221). Keeping the sections minimal and organized and writing sparse would help achieve this goal. Further, the design of the current project to offer a simplified explanation text, with hyperlinks to explore the topic through experts and specialist associations and websites could also support teacher confidence by offering multiple sources to support decisions.

Instructor led sessions, and collaboration are not currently part of the design of this project but could be added in a future iteration.

Research in professional development colludes with implementation science to affirm that effects of professional development wain over time, and sustained engagement in professional development is essential for meaningful change in practices and organizational change (Bierman et al., 2014; Bufasi et al., 2025; Fullan, 2016; Peele & Wolf, 2019). In search of practical ways to generate sustained engagement with professional development, a limited qualitative study found that teachers enjoyed participating in professional development using Twitter in their leisure time (Haselwood, 2018). Put together, a resource that offers resources that can be engaged with as needed over time, coupled with intensive learning opportunities could have a strong impact.

Web-Based Professional Learning

The study *Persuasive System Design Does Matter: A Systematic Review of Adherence to Web-Based Interventions* by Kelders et al. (2012) looks at websites and platforms that offer health interventions. This design genre is relevant because, like professional development, it concerns itself with either short-term intensive supported modules, or long-term lifestyle changes and engagement with change over time. This study found effects and engagement (“adherence”) were increased when interaction, updates, and frequent reminders were part of the intervention. The design of the website can be very easily updated to maintain relevance and provide novelty to encourage revisiting. When planning further steps for this project, a mailing list could be considered to serve as reminders, and support engagement with the website.

There is a significant amount of information and further research on website design that aims to maximize engagement with a target audience that is beyond the scope of the project’s

aims to offer quality information to teachers who are seeking resources to explore as part of their professional development. Future iterations of this project could include utilizing data collection to implement strategies to increase engagement.

Finally, the last body of research considered in the design of this project is peer-led professional learning, as it has a strong history and influence in BC (BCTF, 2023b; BCTF, 2023c; Schnellert, 2020). The structure and tone of the project is to provide research and evidence-based resources to teachers, mediated through the voice of a colleague. The aim is that this format makes it relevant to BC middle school teachers, but also accessible and relatable.

Overview of the Product Created

The project is a website with a home page welcome message that briefly introduces the project and creates a premise for engagement that is relatable to the user. The pages are Gathering data, Using data, English Language Arts, Reading Across the Curriculum, and Organizations and Resources for Using Data in Middle School. The contents of those pages are presented in Table 1. Further expansion of the project could include information for school leadership specifically, resources for intensive professional development sessions, news and updates about structured literacy in British Columbia, and other emergent topics.

Table 1*Website Contents Overview*

<p>Gathering Data</p> <ul style="list-style-type: none"> • Reading Models • Implementing Screeners in the Middle Years • Why Assess Oral Reading Fluency? • Maze for Assessing Comprehension • Tools for Assessing Oral Reading Fluency & Maze • Diagnostics: Digging Deeper • Making Individual Decisions in Screeners and Diagnostics • Transitioning Away from Levelled Readers and Instruction Systems • Recommended Resources for Gathering Data
<p>Using Data for Instructional Decisions</p> <ul style="list-style-type: none"> • What is an intervention? • What is Multi-Tiered System of Supports? • Selecting Appropriate Texts: A (More) Complex Task • Fluency: A Transferable Skill • Decoding Skills: Filling Gaps • Vocabulary and Knowledge • Comprehension: An Outcome Not a Skill • Large Language Models and Literacy • Recommended Resources for Using Data to Plan Literacy Instruction
<p>English Language Arts Whole Class (Tier 1)</p> <ul style="list-style-type: none"> • Structured Literacy & Explicit Instruction in Language Arts • Vocabulary Knowledge & Skills • Morphology and Spelling • Teaching Language Structures • Writing & Responding • When to Read Aloud and When Students Read • Supported Silent Reading > Independent Silent Reading • Novels in the Classroom • Recommended Resources for Rich Language Arts Instruction
<p>Reading Across the Curriculum</p> <ul style="list-style-type: none"> • Is your Group Grade-Level Text Ready? • Strategies and Supports to Access Textbooks • Vocabulary Tiers and Strategies • Social Studies Vocabulary • Science Vocabulary • Recommended Resources for Cross-Curricular Reading
<p>Organizations and Resources for Using Data in Middle School</p> <ul style="list-style-type: none"> • TBC

Gathering Data

When the Ontario Human Rights Commission released their Right to Read Inquiry, it provoked a country-wide discussion of literacy instruction. Unfortunately, its focus on the early years didn't catch the attention of intermediate teachers, yet "word-level reading difficulties are the most common challenge for students who struggle to learn to read well. Most students who have issues with reading comprehension have word-level reading difficulties (2022a, p. 9). Identifying the students who continue to struggle with reading in the middle years can be done effectively with fluency screeners, but using standardized assessment is not part of initial teacher training (Biancarosa, 2024; Coombs et al., 2020). Starting with Gathering Data is intended to quickly introduce teachers with the reasoning and skills to equip them to start experimenting with implementation in their own classrooms as part of a larger professional development trajectory (Béatrice et al., 2016).

Using Data for Instructional Design

As stated in Chapter 2, the largest challenge of this project is to educate teachers on interventions specifically. Challenges facing education on this topic include that there is no guidance from the Ministry of Education and Child Care on the topic of intervention, interventions are not part of initial teacher training, and sociocultural perspectives on literacy echo the whole-language stance that reading development is a natural process that can reliably flourish without direct intervention (Coombs et al., 2020; Dyslexia Canada, 2025a; OHRC, 2022b; Smith, 2003). On top of these challenges, the BCTF has also found that their workforce does not feel prepared to teach literacy, and face challenges in finding the time and support to learn new skills (BCTF, 2025b). The report didn't state this, but it is clear that the notion of

working more intensively may be a difficult proposition in the context of the challenges outlined in the report.

Yet, the mounting signs that the province is moving towards structured literacy in terms of not just planning, but assessment and intervention, that it behooves teachers to investigate the matter (BCASP, 2023). Teachers-as-learners may initially feel intimidated or decline in their confidence in teaching while learning new strategies, but stand to gain self-efficacy in their longer term as they build confidence in decision making and using data (Schaefer, 2023). Again, this content is often focused on foundational skills in the primary years, but since adolescents who may not have been previously identified may potentially benefit from timely interventions even more than those with documented reading, this is a classroom teacher issue (Galuschka et al., 2014).

This section aims address likely knowledge gaps in BC classroom teachers' initial teacher preparation by starting with quick summaries of themes in the evidence-base with links to more comprehensive resources, and then further reading to bring the teacher-learner beyond the initial intimidation or slump in confidence and towards successful implementation (Coombs et al., 2020; Schaefer, 2023).

English Language Arts Whole Class (Tier 1)

A 2020 study sponsored by the BCTF said plainly: “the day-to-day reality of inclusive education in BC continues to be in a state of crisis” and elaborated that this was because of three themes: a) “putting out fires”, b) over-relying on special education staff, and c) school cultures that enable communication (Gacoin, 2020, pp. 3-4). This same study stated that the province introduced Response to Intervention (RtI), yet the province has only started to recommend screeners five years after the study was published, the province still has no guidance on

evidence-based interventions, and collaboration time and access to specialists was noted as lacking, which leaves teachers to wonder what aspect of RtI are actually being implemented (Al Otaiba, 2024; Dyslexia Canada, 2025a; Gacoin, 2020). All of this points to the need for more resources for classroom-level instruction and intervention knowledge that can dovetail into a MTSS framework when that superstructure is more than colloquially present.

This section shares whole-class strategies that are likely somewhat familiar to intermediate teachers, but that specifically guide teachers towards structured literacy implementation that can be escalated to include Tier 2 & 3 interventions.

Reading Across the Curriculum

As the teacher workforce in middle schools either has a background in elementary education with discussed shortfalls in literacy preparedness, or no literacy instruction at all, it is important that all teachers see their role in contributing to literacy instruction. Middle school is often characterized by fewer transitions and more cross-curricular opportunities than high school. Further, all teachers are tasked with both content-area and disciplinary-literacy for their subject, and have responsibilities to serve diverse learners (Cervetti, 2021). Therefore, this section aims to equip all subject teachers to consider structured literacy approaches to support gains in comprehension through building background knowledge and vocabulary (Cabell et al., 2022). Further, this section also supports ELA teachers in using structured literacy across the curriculum to help find time for interventions and address underlying deficits in background knowledge that could be contributing to comprehension struggles (Catts & Kamhi, 2024).

Organizations and Resources for Using Data in Middle School

This section aims to connect teachers to learning opportunities that are explicitly structured literacy-aligned and evidence-based in order to provide opportunities to continue to learn and

sustain engagement with this professional learning long enough to have an impact on practice. There are many high-quality online courses and learning opportunities that are free or cheap, but it is very difficult to discern truly evidence-based information in a market place and profession with a long history of lower quality research (Lane, 2022).

Required Information for Successful Implementation of the Product

First and foremost, the website is authored by an educator who went to k-12 school in BC, trained in BC Universities, and currently works in a public school in BC. It is therefore uniquely positioned to deeply understand the knowledge, strategies, and ideologies that BC teachers either possess or are familiar with, and bridge it with international research on the topic of literacy. While the historical context and literature review document research on classroom practices, this project has the added potential to incorporate the nuance of lived experience

The project format was selected for ease of use and accessibility for the user. Teachers are familiar with website navigation, hyperlinks, and videos as modes of professional development formats. The website presents clear structures and simple navigation that were found to be effective by Stevermann (2024). The website is thoughtfully written and heavily edited to be quick to read and digest to appeal to busy teachers learning off the side of their desks (BCTF, 2025b). The website is set up to meet many of the preferences noted by teachers for short bursts of intensive learning, as well as factors identified by researchers to be effective for long term change in behaviours like sustained engagement over time (Ehlert & Souvignier, 2024).

The first challenge will be to connect this website to its intended audience in the context of algorithms and search structures. As an emic researcher the next step is to promote this

resource strategically through channels like Provincial Specialist Associations, and Facebook groups to connect to a provincial audience.

Conclusion

Considering the current high level of interest, and relatively low level of education on the subject, a website is the best method to promote evidence-based instructional practices such as gathering data for instructional decision making. Through investigating the factors that make professional resources effective, and the needs and preferences of teachers, I have concluded that offering information for teachers on the two levels of brief explanations and links to longer format research and resources is the best way to connect with teachers where they are. While traditional instructor-led professional development may be preferable for quick adoption, many middle school teachers in the province are likely in an exploration phase at the moment to prepare and persuade teachers to choose to engage in further professional development in the future. Users can connect with content over time as they need, and dive-in when they choose. In this way, the project design can meet some of the challenges that teachers are facing across the province (BCTF, 2025b).

Chapter Four: Reflections and Conclusions

This project started feeling like somewhat of a personal crusade to proselytize about the virtues of data-gathering and data-informed instruction and intervention in the middle years. Throughout the research to situate the project in the historical context of changes to literacy instruction in British Columbia, understand teachers' current knowledge, and gather resources that meet the current identified needs of teachers as well as stretch their understanding of what could be happening in classrooms, I have come to understand the nuance of the topic. In many ways, evidence based instructional strategies for middle years are not significantly different from current practices of instructing comprehension rather than decoding and centering meaning making with texts. In this way, it is understandable that the province-wide adoption of screeners does not at this point extend to middle years. However, teachers in middle years cannot continue to assume or take for granted that the students that they are working with have foundational skills for comprehending the content that teachers are presenting. Changing realities for students will require changing attitudes in the workforce to empower teachers to work intensively will require connecting teachers with knowledge to work strategically. After learning about BC teachers' situations, district responsibilities, and autonomous professional development offering opportunities to learn about screeners and evidence-based decision making is the best course of action, rather than a crusade approach. Building confidence and capacity in the teaching workforce has the best chance of connecting teachers to the international research base that supports the success of intervening in student learning to address risks of reading failure (NRP, 2000; OHRC, 2022a; Rose, 2009).

Reflections on Key Learning

Returning to the initial Guiding Questions: a) How can standardized assessments be implemented without challenging or reducing the benefits of professional autonomy and, b) How

can teachers be empowered to work within current structures in BC public school districts to collaborate to make decisions and choices based on data? the website offers flexible opportunities for learning and support, allowing teachers to engage on their own terms and at their own pace. Through the process of learning and developing this project, the focus has shifted from implementation to support, with an emphasis on appealing to teachers rather than compelling them. In relation to the second question, organic, teacher-driven collaboration is often possible when workload is balanced; however, this remains an area for further development within the project.

Future Development

This project could grow indefinitely, as new developments and research is published, and the province changes the supports that they offer and goals that they set. This is a benefit to the website format, as well as a drawback. Like any media, websites compete for attention, so aesthetic, design, and quality standards need to be met to become or stay relevant. The next steps for this project could include synchronous interaction opportunities, workshops, updates or reminders, engagement opportunities, and outreach to administration.

Synchronous activities and teacher interactions were highly rated aspects of professional development in research that were not included in the design of the project (Stavermann, 2024). Synchronous aspects could be added in the future through using the website to promote online webinars, and hosting webinars to promote the site.

Expanding the website to include maintained links to single-day workshops and professional development opportunities would help bridge the gap between teachers' preferences for a single day event and professional development that research-supports to be more effective at changing practices and effecting student outcomes (Ehlert & Souvignier, 2024).

Email updates and other website engagement strategies could be added to extend the scope of the project and increase engagement with the website over time to sustain learning through reminders (Kelders et al.,2012). Links to social media accounts and widgets that allow the user to post portions of the site directly onto their social media to both drive traffic to the site, and instigate interactions on the topic on an individual’s social media account could provide engagement experiences.

Further development would also shrewdly consider how to reach the audience of administrators and leadership who could have a higher impact in implementation and organizational change to be able to support teachers, support a culture of continued growth and resource utilization, as well as make specific organizational changes that support cohort-wide screeners and data-based decision making like planning time and investment (Fullan, 2016). Prominent writer on the topic of school leadership Michael Fullan encourages administration to act as the “lead learner”, but the BC Principals and Vice Principals Association Leadership Standards describe the role as facilitating or leading the learning of others and does not mention being active participants themselves (BCPVPA, 2019; Romano, 2024). This difference in roles and approaches to evidence-based methods may require a different project focus entirely.

Conclusion

The specifics of supporting teachers to implement evidence-based strategies will evolve as provincial mandates, initial teacher preparation, current workforce development, and even the evidence itself changes. This paper gathers information on the historical context of the British Columbia education system, teacher training, to create a project that connects teachers to the evidence base that supports reforming literacy instruction and screening for fluency in the middle years. The project structure of a website allows both initial exploration as teachers become aware

of some of the changes that could improve their efficacy, as well as connects to an extensive international network of research and development that supports screeners to intervene strategically. It also sets a foundation that can foster growth in the future and space to evolve over time as teachers build their skills and the landscape of mandates and priorities in BC middle years changes. While the evidence and specific strategies for effective literacy instruction continue to grow, and novel strategies constantly emerge that deserve either refutation or support, this project is only the start.

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