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Photo credits: Getty Images and TeachOntario

Citation for this work:


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Acknowledgements

We wish to thank Learning Forward for funding the *State of Educators’ Professional Learning in Canada* study. We have benefited considerably from the advice and insight offered by Learning Forward colleagues, particularly Stephanie Hirsh and Tracy Crow, plus Frederick Brown, Tom Manning, and Joel Reynolds; and from input from the Canadian affiliates in Learning Forward British Columbia, Manitoba, and Ontario.

**THE STUDY BENEFITED TREMENDOUSLY FROM A NATIONAL ADVISORY GROUP INCLUDING:**

- **Gary Adams**, Superintendent of Schools/CEO, Chignecto-Central Regional School Board, Nova Scotia;  
- **Rod Allen**, CEO/Superintendent of Schools, Cowichan Valley School District 79, British Columbia;  
- **Ron Canuel**, President and CEO, Canadian Education Association;  
- **J-C Couture**, Associate Coordinator/Research, The Alberta Teachers’ Association;  
- **Douglas W. Currie**, Minister of Education, Early Learning and Culture, Legislative Assembly of Prince Edward Island;  
- **Ruth Dawson**, Coordinator, Professional Learning and Curriculum Services, Elementary Teachers’ Federation of Ontario;  
- **Sue Elliott**, President, Learning Forward British Columbia;  
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- **Maxine Gellar**, President of Canadian Association of Principals;  
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- **Akela Peoples**, Past President and CEO, The Learning Partnership;  
- **Beate Planche**, Learning Forward Ontario;  
- **Terry Price**, Department Head, Professional and French Language Services, The Manitoba Teachers’ Society;  
- **Chris Quinn**, Past President, Learning Forward Ontario;  
- **Heather Smith**, President, Canadian Teachers’ Federation;  
- **Joan Zaretsky**, President, Learning Forward Manitoba.
We would also like to express our sincere appreciation to the Canadian Teachers’ Federation and affiliate members who have contributed to this research. In particular, we would like to add our thanks to Myles Ellis and Bernie Froese Germain from CTF. We benefited considerably from collaboration with the Manitoba Teachers’ Society to conduct focus groups; we would like to acknowledge and thank Danielle Fullan Kulton, Lia Baskin, and Linda Thoralkson. We would also like to thank Ardith Shirley for enabling us to conduct a survey through the New Brunswick Teachers’ Association.

The British Columbia case study has been conducted and written with the extensive involvement of the members of the British Columbia Education Collaborative. We are extremely grateful to the Association of B.C. Deans of Education (ABCDE), B.C. Association of School Business Officials (BCASBO), B.C. Principals’ and Vice-Principals’ Association (BCPVPA), B.C. Teachers’ Federation (BCTF), B.C. School Superintendents Association (BCSSA), B.C. School Trustees Association (BCSTA), the Federation of Independent School Associations (FISA), Learning Forward BC (LFBC), and the Ministry of Education (MOE).

Indeed, we wish to thank all of the individuals and organizations who have contributed to this study, by participating in focus groups and interviews, by responding to surveys, by providing documents and data (sometimes not previously publicly available), and contributing advice, feedback, and suggestions throughout the work conducted.

We would also like to thank Television Ontario (TVO) and David Fulford for providing Canadian photographs for use within this report and related publications.

Finally, we wish to thank Michael Fullan and Andy Hargreaves, who have been our advisors and critical friends, from conception of this study through to this report. We deeply appreciate their advice and their written response to our report – *Call to Action: Bringing the Profession Back In* (Fullan & Hargreaves, 2016) – to advance professional learning and development in Canada and internationally.

We look forward to continued conversations, collaborations, research, and action with all involved to further the importance of educators’ professional learning in Canada.
1. Introduction: The State of Educators’ Professional Learning in Canada

Globally, there is attention to identifying countries with higher educational achievement results and understanding what educational policies and practices may be contributing to this success. Increasingly, there has been a focus on the importance of developing teachers and teaching as crucial for supporting students’ learning and achievement. Canada has been recognized in international assessments, benchmarks, and research as a country with high educational performance and there is interest, within Canada and internationally, in knowing about approaches to educators’ professional learning in Canada. However, as Canada’s school education system is the responsibility of ten provinces and three territories, there is a limited pan-Canadian data and research available to examine teachers’ professional learning across Canada. This study sought to address this gap in available research by investigating “What is the current state of educators’ professional learning in Canada?”

Beginning in late September 2015 and culminating in our first report (Campbell, Osmond-Johnson et al., 2016) at Learning Forward’s Annual Conference in Vancouver in December 2016, we spent just over a year examining this question. It is of course not feasible to fully examine the diversity and complexity of professional learning within and across Canada’s ten provinces and three territories within a one-year study; however, we have conducted the most extensive study to-date of available research, documents, and data concerning teachers’ professional learning across Canada with consideration also of school and system leaders’ support for and engagement in professional learning.

If we do not raise Canadian voices and experiences to the forefront, much of the international debate will continue to be informed from evidence generated outside of Canada. However, this international debate has considerable influence on educational policies currently being developed and adapted within Canada. The purpose of The State of Educators’ Professional Learning in Canada study is, therefore, to research, understand, and profile professional learning within and across Canada. The intent is not to argue for a uniform approach across Canada; rather it is the opposite. The purpose is to understand, value, appreciate, and respect the rich mosaic of educational experiences and the diversity of approaches and outcomes from professional learning within and across provinces and territories. While each province and territory is different, we have also identified that there are lessons to learn, opportunities to collaborate, and possibilities to co-learn from different – or similar – approaches to professional learning. We hope this report will stimulate further collaborative dialogue and actions.

This study of professional learning in Canada sits within a much larger international debate about the importance of teachers’ professional learning and the role of school and system leaders in creating the conditions to enable professional learning for staff and for themselves. We began our study by considering the features of effective professional learning identified in several existing major reviews, syntheses, and meta-analyses of teachers’ professional learning (Cordingley et al., 2015; CUREE, 2012; Darling-Hammond et al., 2009; Jensen et al., 2016; Timperley, 2008) plus a review of relevant research literature within and outside of Canada. Based on existing research literature, we have identified three key components and ten features of effective research-informed professional learning (see Figure 1 and Table 1).
Across the evidence, experiences, and examples of educators’ professional learning that we researched in Canada and present in this report, we found practices consistent with the ten features of effective professional learning identified from our review of research literature. There are many commonalities between current policies, practices, challenges, and contentions within Canada and wider debates and developments for educators’ professional learning internationally. However, we have also identified differences in the conception and implementation of professional learning within Canada compared to the existing (international) research literature. In Table 1, we summarize our key findings from The State of Educators’ Professional Learning in Canada study contrasted with the 10 key features of effective professional learning that we identified from our review of the previously existing research literature.
Based on our study of the *State of Educators’ Professional Learning in Canada*, we conclude that professional learning is a mosaic of diverse experiences, opportunities, activities, and outcomes in Canada. There are important policies and promising practices to support a wide variety of professional development needs. This is positive. Canada is a highly diverse country; our students and communities are diverse and with changing needs in a local, national, and global context, and our educators require a repertoire of professional knowledge, skills, and practices to be developed through a wide range of professional development and learning experiences throughout their careers. This variation is appropriate, professional, beneficial, and positive. However, variation should not result in inequities of access, funding, experiences, or outcomes for educators’ professional learning (and for the students they serve). Across our research, we heard and observed substantial variations in access to professional development provision and funding to support teachers’ self-
selected professional learning opportunities. This variation in high quality professional learning is not inevitable, not desirable, and has negative consequences.

The issues we discuss are important beyond Canada, as part of a wider international concern about the need for quality professional learning in education. As Darling-Hammond et al. (2009) outlined in a study of the state of professional learning in the USA funded by Learning Forward (previously known as the National Staff Development Council); research to inform professional learning policies and practices is important because:

Professional learning can have a powerful effect on teacher skills and knowledge and on student learning if it is sustained over time, focused on important content, and embedded in the work of professional learning communities that support ongoing improvements in teachers’ practice. When well-designed, these opportunities help teachers master content, hone teaching skills, evaluate their own and their students’ performance, and address changes needed in teaching and learning in their schools. (p. 7).

Teaching is a highly complex professional responsibility requiring the development of knowledge, skills, and practices to enter teaching and to continuously learn over a teacher's career in order to support the diverse needs of their students across different ages, subjects, school context, and background circumstances. In light of evidence that teachers and teaching are central to school effectiveness and improvement, indeed some evidence suggests that teacher effectiveness is the most important element within a school (National Commission on Teaching and America’s Future, 1996; Sanders & Rivers, 1996). There has been growing attention paid to teacher quality and to effective instruction internationally. Relatedly, the importance of school leaders “promoting and participating in teachers’ learning and development” (Robinson, Hohepa & Lloyd, 2009, p. 39) has been identified as a priority for school leaders contributing to improved student outcomes.

We agree with Hargreaves and Shirley that: “The dynamos of educational change can and should be a system’s thousands of teachers and its school leaders” (Hargreaves & Shirley, 2012, p. xiv). We propose the importance of teacher leaders, school leaders, and system leaders working in a new collaborative professionalism of respect and support connected to students’ learning, families’ engagement, and community development for educational equity, excellence, and well-being. Understanding and valuing the nature of teachers’ professional practice and enabling their potential as leaders of educational improvement through a system of ongoing professional development, learning opportunities, and collaboration is required in policy and in practice. Formal leaders in schools, districts, and governments also have a vital role in developing their own professional learning, knowledge, skills, and practices and in participating in and enabling the opportunities for appropriate professional development for staff in their schools and systems.

However, with increasing attention to the phrase that “the quality of an education system cannot exceed the quality of its teachers” (Barber & Moursched, 2007, p. 16) promoted by reports from the Programme for International Student Assessment (PISA) and from international research on educational systems that have improved over time (Barber & Moursched, 2007; Moursched, Chijioke & Barber, 2010; OECD, 2010); there are differing views on how teachers and school leaders
can be supported to improve their knowledge, skills, and practices in order to improve students’ outcomes. As Hargreaves and Fullan (2012) have argued:

Teaching is at a crossroads: a crossroads at the top of the world. Never before have teachers, teaching, and the future of teaching had such an elevated importance. There is widespread agreement now that of the factors inside the school that affect children’s learning and achievement, the most important is the teacher – not standards, assessments, resources, or even the school’s leadership, but the quality of the teacher. Teachers really matter. And the good news is that there is now a sense of great urgency in politics, in the teaching profession, and also among the public about the need to get more high-quality teachers. More and more people care about the quality of teaching. And this is putting teachers and teaching at the forefront of change.

But alongside the urgency, or perhaps even because of it, there is a lot of argument and more than a little aggravation about what high-quality teaching looks like and what’s the best way to get it and keep it. The crossroads are shrouded in a fog of misunderstandings about teachers and teaching, and if we take the wrong road forward, precipices are looming on many sides. (p. xii).

In this report, we aim to contribute to this international debate with evidence from Canada concerning the policies and practices to support effective professional learning and development, the challenges to be addressed, and the possibilities for future improvement.
2. | Scope of Study: Educators, Professional Learning, and Professional Development

Before presenting the details of our study’s methods, findings, and conclusions, we clarify three key terms that will be used: “educators,” “professional learning,” and “professional development.”

2.1 Educators

This study is primarily about teachers’ professional learning and development. We consider also school and system leaders’ engagement in their own professional learning and in creating the conditions and opportunities for teachers’ professional learning. In some of the evidence and examples presented, other professionals who work with students and schools will be included, for example, early childhood educators, trustees, and university faculty, as well as community members. We have used the term “educators” as defined to mean “a person (such as a teacher or a school administrator) who has a job in the field of education.”¹

2.2 Professional Learning and Professional Development

Our study focuses on the continuing professional development and learning of teachers during their career in teaching, including educators who move into formal leadership positions, whether in schools, districts, government, and/or provincial and territorial professional organisations. Our study does not examine initial teacher education to prepare individuals to enter into the teaching profession; this is of course a vital aspect of teacher development, however it is beyond the scope of the current study. We use the terms professional development and professional learning to include the wide range of approaches and activities that are involved in educators’ continuing development.

Approaches to teachers’ professional development and learning have evolved over time and in different contexts; ranging from a focus on external experts providing direct instruction with little opportunity for teacher reflection and interaction (Fullan, 2001; Gall & Renchler, 1985) to a growing emphasis on developing professional reflection linked to teachers’ practices at work (Schön, 1983) and a view of schools as “not only places where teacher work…but…as places where they learn” (Smylie, 1995, p. 95). The purpose of professional development is to support professional learning through both internal reflection and individual knowledge development, and also engaging in professional interaction, collaborative inquiry, and co-development of knowledge (Lieberman, 1995; Timperley, 2011). Wenger developed the concept of learning as social participation through the development of ‘communities of practice’ (Wenger, 1998), which can shape not only what teachers do but also who teachers are and how teachers interpret what they do. The need to develop collaborative professional learning, for example through professional learning communities, teacher inquiry, and teacher networks, has become widely recognized (Cochran-Smith & Lytle, 1992; DuFour, 2004; DuFour & Eaker, 1998; Hord, 1997; Lieberman & Wood, 2003; McLaughlin & Talbert, 1993; Newmann & Wehlage, 1995; Sparks & Hirsh, 1997). Furthermore, teachers’ professional needs for learning and development will vary by individual, in different contexts, in light of changing experiences and over time (Day and Gu, 2007). Recently, Hargreaves and Fullan

¹ Merriam-Webster dictionary http://www.merriam-webster.com/dictionary/educator
(2012) have proposed the concept of professional capital composed of three inter-related dimensions – human capital of individual talent development; social capital through the collaborative and collective development of the teaching profession; and decisional capital of valuing and enabling experienced educators to exercise their own professional judgement and insight to make decisions in complex situations.

A wide variety of professional development and professional learning exist. The Teaching and Learning International Survey (TALIS), conducted by the Organisation for Economic Cooperation and Development (OECD), uses the following definitions:

TALIS adopts a broad definition of professional development as activities that aim to develop an individual’s skills, knowledge, expertise and other characteristics as a teacher. This definition recognizes that development can be provided in many ways, ranging from formal approaches (such as courses and workshops) to informal approaches (such as collaborate with other teachers or participation in extracurricular activities).

Professional development can be conducted outside of school in the form of courses, workshops or formal qualification programmes; through collaboration between schools or teachers (in the form of observational visits to other schools); or within schools where teachers work. Professional development within schools can be provided through coaching or mentoring, collaborative planning and teaching and sharing good practices. A high-quality professional development programme is aligned with classroom conditions, school context and teachers’ daily experiences. (OECD, 2014, p. 64).

The TALIS definition is expansive of a range of professional development, from formal activities outside of school to collaborative activities within school and informal professional learning opportunities. Professional development is defined as a broad umbrella encompassing a range of professional learning.

As well as the modes of delivery of professional development, it is important to also consider the intended purpose and outcomes of such development for educators’ and students’ learning. Learning Forward (2011a) define professional development and learning as a “comprehensive, sustained, intensive, and collaborative approach to improving teachers’ and principals’ effectiveness in raising student achievement” (p. i). Linked to this definition, Learning Forward has developed Standards for Professional Learning (see Figure 2) which they propose outline “the conditions, processes, and content of professional learning to support continuous improvement in leadership, teaching, and student learning” (Learning Forward, 2011b, p. 6). The seven Standards for Professional Learning identified by Learning Forward are: Learning Communities; Leadership; Resources; Data; Learning Designs; Implementation; and Outcomes.
Figure 2: Learning Forward’s Standards for Professional Learning

**LEARNING COMMUNITIES**
Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

**LEADERSHIP**
Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

**RESOURCES**
Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

**DATA**
Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

**LEARNING DESIGNS**
Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

**IMPLEMENTATION**
Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change.

**OUTCOMES**
Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

Source: http://learningforward.org/standards-for-professional-learning#.Vuc4H_krJD8
As outlined in Table 2, there is a consistency between the features of effective professional learning that we have identified from our review of relevant research literatures (see previous Figure 1) and Learning Forward’s Standards for Professional Learning. This is important to note but perhaps unsurprising given that both are derived from research and professional experience. It is important to consider the 10 features from our review and the seven standards holistically as a set of principles for effective professional learning. Importantly, these can guide practice but they do not dictate a “one size fits all” approach to professional development. Rather, they suggest and support the importance of a variety of approaches to be informed, led, and developed by educators – teachers and formal school and system leaders – to meet professionals’ individual and collective learning needs connected also to their students, schools, communities, and systems’ needs and priorities. Furthermore, as we turn to findings from our study within Canada, there are differences in detail concerning the concepts and practices of professional learning and development.

<table>
<thead>
<tr>
<th>Features of Effective Professional Learning Identified in Literature Review</th>
<th>Connection to Learning Forward’s Professional Learning Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-informed</td>
<td>Learning Communities; Data; Implementation; Outcomes</td>
</tr>
<tr>
<td>Subject-specific and pedagogical content knowledge</td>
<td>Learning Communities; Learning Designs; Outcomes</td>
</tr>
<tr>
<td>A focus on student outcomes</td>
<td>Learning Communities; Outcomes; Data</td>
</tr>
<tr>
<td>A balance of teacher voice and system coherence</td>
<td>Learning Communities; Leadership; Implementation; Outcomes</td>
</tr>
<tr>
<td>Active and variable learning</td>
<td>Resources; Learning Designs; Implementation</td>
</tr>
<tr>
<td>Collaborative learning experiences</td>
<td>Learning Communities; Learning Designs; Implementation</td>
</tr>
<tr>
<td>Job-embedded learning</td>
<td>Learning Communities; Learning Designs; Implementation</td>
</tr>
<tr>
<td>Ongoing in duration</td>
<td>Resources; Learning Designs; Implementation</td>
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<td>Resources</td>
<td>Leadership; Resources; Learning Designs; Implementation</td>
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<tr>
<td>Supportive and engaged leadership</td>
<td>Leadership; Implementation</td>
</tr>
</tbody>
</table>
3. | Research Questions and Methods

There have been previous studies of Canadian educators’ professional learning, including: as part of wider research on working conditions and workplace learning; studies of the experiences of particular sub-groups of educators; surveys including items related to teachers’ professional learning within a wider survey of teachers or students; research on particular forms of professional learning; and pan-Canadian scans and reviews of legislation or policy documents (see for example: Bellini, 2014; Clark et al., 2007; CMEC, 2015; CTF, 2014, 2015; Kamanzi, Riopel & Lessard, 2007; Kutsyuruba, Godden & Tregunna, 2013; Smaller et al., 2005). However, overall there is limited research concerning teachers’ professional learning across Canada. Therefore, we designed The State of Educators’ Professional Learning in Canada study to address an important gap in existing research.

3.1 Research Questions

The main research question was “What is the current state of educators’ professional learning in Canada?” Key sub-questions to be addressed were:

1. Why is a study of the state of professional learning in Canada needed and important?
2. What does existing research literature and available international, national, and provincial/territorial data indicate about the nature, experiences, and quality of professional learning within Canada?
3. What can be identified about the experiences of educators’ engagements in professional learning? What benefits, challenges, and potentially promising practices from educators’ experiences of professional learning can be identified?
4. How are school and system leaders engaging in and enabling professional learning within schools and for teachers?
5. What are the enabling conditions (policies, resources, capacity) for supporting research-based best practices for professional learning?
6. What implications arise from this study to further advance and improve the state of educators’ professional learning in Canada?

3.2 Methods

The study used a multi-method design. First, we conducted an extensive review of publicly available documents, including policy documents, collective agreements involving teachers’ organisations, and frameworks for professional learning (where available) for all 10 provinces and three territories. In addition, we reviewed research reports and survey analyses from the Canadian Teachers’ Federation (CTF) and their jurisdictional counterparts. We reviewed relevant pan-Canadian information from the Canadian Ministers of Education Council (CMEC), plus international analyses and comparisons of professional development through the OECD’s TALIS and PISA. A review of the academic research literature was also completed.

In light of limitations on the extent of publicly-available data concerning teachers’ professional learning across Canada, we decided also to contact individuals in each province and territory to seek their advice and access to other documents and data that may exist. Through the CTF, we held two focus group conference calls with representatives from teachers’ organisation in Canada’s provinces and territories. We also formed an Advisory Group with membership from each province and territory as well as relevant national
organisations; the Advisory Group was requested to send relevant research, data, documents, and examples of promising practices. In addition, New Brunswick Teachers’ Association (NBTA) offered us the opportunity to add survey items to their NBTA Council Day survey; we received responses from 741 survey participants. The Manitoba Teachers’ Society (MTS) offered us the opportunity to gather original fieldwork during a MTS conference involving their Professional Development Chairs; we conducted four focus groups in person including 41 MTS Professional Development Chairs. Learning Forward Manitoba also facilitated an additional focus groups with a range of education professionals.

In addition, three in-depth case studies were conducted to gain deeper insights into the specific professional learning experiences of educators in Alberta (Osmond-Johnson, Zeichner & Campbell, 2017), British Columbia (Brown et al., 2016 & 2017), and Ontario (Campbell, Osmond-Johnson, Sohn, & DaCosta, forthcoming/2017). In each case study, a review of available documents and data was conducted, plus interviews and focus groups with teachers, school leaders, district leaders, provincial professional organisations, government officials, professional development providers, and other individuals/organisations as appropriate to each province. A fuller description of methodology is available in Appendix 1, plus samples of research instruments used are appended to this report (Appendices 2, 3, and 4).
4. Overview of the Governance of Education in Canada

Canada is a multi-cultural society, with a foreign-born population of almost 20% (OECD, 2015). The Canadian constitution recognizes both English and French as its two official languages. According to 2011 Statistics Canada census data, 5.8 million (17.5%) of Canadians speak both official languages. Nearly 7 million (21%) Canadians reported speaking French most often at home in 2011, although this is largely concentrated in the province of Quebec. In the rest of Canada, 74.1% of Canadians speak only English at home (CMEC, 2015). The minority language rights of French-speaking students living outside the province of Quebec and English-speaking students living in the province of Quebec are protected in the Canadian Charter of Rights and Freedoms. The Canadian Charter of Rights and Freedoms outlines the conditions under which Canadians have the right to access publicly funded education in either minority language. Each province and territory has established French-language school boards to manage the French-first-language schools. In the province of Quebec, the same structure applies to education in English-first-language schools. All Canadians meeting age and residence requirements have free access to public education at the primary and secondary levels (in some jurisdictions this also includes Kindergarten and pre-kindergarten).

The federal government is responsible for provisions for First Nations schools on reserves. However, there is no federal body of education in Canada: K-12 school education is the responsibility of Canada’s 10 provinces (Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan) and three territories (Nunavut, Northwest Territories, and Yukon) (see Figure 3). Although localized variations exist, the education systems within the 10 provinces and three territories are based around a common belief in the importance of education, as evidenced by the significant proportion of budgets allocated to schooling (approximately 16% of total expenditures, depending on the jurisdiction) (CMEC, 2015).

![Figure 3: Provinces and Territories of Canada](source: Natural Resources Canada)
In all 13 jurisdictions, departments or ministries of education are responsible for the organization, delivery, and assessment of education at elementary and secondary levels. A minister of education, who is almost always an elected member of the legislature, is appointed by the government leader to lead the department of education (or equivalent). Responsibility for the overall operation of the departments, however, is with the deputy ministers who belong to the civil service. The provincial/territorial ministry or department provides education, administrative and financial management, and school support functions. It also establishes the terms of the educational services to be provided, including the policy and legislative frameworks. The ministry or department of education typically lays out basic requirements around the assessment of students, with school boards and schools having the authority to establish their own assessment policies within the provincial/territorial framework. Typically, school boards (also known as districts, divisions, or district education councils in different provinces) are entrusted with local governance of education. Members are elected by public ballot, and the authority for operational and administrative (including financial) duties is delegated to local leaders at the discretion of the provincial and territorial governments. Local authorities, such as school boards or districts, oversee the group of schools within their board or division and are responsible for curriculum implementation, personnel, student enrolment, and initiation of proposals for new construction or other major capital expenditures. While there are many similarities across provincial and territorial education systems, there are substantial policy variations in the areas of curriculum, assessment, and accountability. These differences reflect the geography, history, language, culture, and corresponding specialized needs of the diverse populations served in each jurisdiction.

In 2013, Canada’s elementary and secondary school systems employed 397,122 educators (Statistics Canada, 2014), most of whom had four or five years of postsecondary study. The teaching profession is unionized in all jurisdictions; however, the scope of the work of teachers’ organizations varies. National frameworks around teacher competencies, professionalism, and the work of teachers do not exist. Rather, teacher appraisal varies across jurisdictions and the establishment of professional standards and certification of the teaching profession are provincial/territorial responsibilities. To teach in Canada, educators are required to obtain at least a Bachelor of Education from one of approximately 50 accredited teacher education programs at universities across the country. Some also offer post-graduate preparation for teaching. With large surpluses in teacher supply contrasted with available teaching jobs, Canadian teacher education programs and schools are selective in choosing candidates and teachers, which the OECD (2010) suggest is a contributor to high educational achievement results. Indicators from PISA 2012 showed that Canadian 15-year olds viewed teacher-student relations at levels that are higher than the OECD average, and school leaders reported higher than average levels of instructional leadership (OECD, 2015).
5. | The State of Professional Learning in Canada: Study Findings

In this section, we detail and discuss our findings from *The State of Educators’ Professional Learning in Canada* study. We begin by focusing on each of the 10 features of effective professional learning (Table 1) that we identified from our review of research literature and the main related findings from the Canada study. Having provided an overview of evidence across our study findings, we then provide a summary of our three case study provinces.

5.1 Features of Effective Professional Learning and Evidence and Experiences in Canada

5.1.1 QUALITY CONTENT

It may appear obvious, but quality content matters in effective professional learning and development. Our review has identified four key features: evidence-informed content; the importance of subject-specific content linked to pedagogy; a focus on student outcomes; and attention to balancing teachers’ voices and system coherence.

*Evidence-Informed*

**Summary of Research Literature**

The terms evidence-based and evidence-informed have become widely used in education and in other policy and practice areas; we use the term “evidence-informed” to indicate the use and adaptation of empirical evidence from research, evaluation, and data plus the importance of professional knowledge, expertise, and judgment (Campbell, 2016; Hargreaves & Fullan, 2012). Hence, the evidence informing effective professional learning is not limited to student achievement on standardized tests but should include a host of assessment for learning tools including observational data, teacher-created performance assessments, as well as other forms of data and evidence collected through action research or teacher inquiry. According to Cordingley et al. (2015), the most successful professional learning programs engaged participants in an “analysis of and reflection around the underpinning rationale (of the program), evidence, and relevant assessment data” (p. 23). This evidence serves to assist teachers in learning “how to identify the pedagogical content knowledge and skills they need to assist their students to achieve the valued outcomes” (Timperley, 2008, p. 23). Similarly, Jensen et al. (2016) note that the high performing education systems in their study (British Columbia, Singapore, and Shanghai) adopted an approach to professional learning that engaged teachers in a cyclic process of assessing student understanding, identifying and adopting evidence-supported teaching practices, and evaluating the impact of new practices on student learning in order to fine-tune practices in the next cycle. Both engaging in research, through teacher action research and inquiry, and engaging with research, for example by reading existing research literatures, can be powerful aspects of teachers’ professional learning (Campbell, 2016; CUREE, 2012; Nelson & O’Brien, 2014). As important as using evidence to inform the content of professional learning, the gathering, analysis, and use of evidence to assess progress and to evaluate professional learning over time is also considered to be good practice. The deliberate design and use of formative and summative evaluations of professional learning activities and outcomes, however, is less developed in practice.
Examples of evidence-informed approaches to professional learning exist at all levels of the education system in Canada. Provincial Ministries/Departments and professional organizations have engaged in reviews of professional learning research and needs analysis to inform their approaches to professional development. For example, following an in-depth review of professional learning in Prince Edward Island, the government released *The Professional Learning Report* (Prince Edward Island Department of Education and Early Childhood Development, 2013) outlining a renewed vision for professional learning rooted in seven principles of effective professional learning (see Figure 4).

Evidence has been used to inform professional development policies and programs. In Ontario, a Working Table on Teacher Development – comprised of membership from the Ministry of Education and all education professional organizations – commissioned a review of research on teachers’ professional learning and development (Broad & Evans, 2006) and considered a needs analysis conducted by the Ontario Teachers’ Federation (OTF) to identify and recommend five characteristics for the design and provision of professional learning for Ontario’s teachers: coherent; attentive to adult learning styles; goal-oriented; sustainable; and evidence-informed (Working Table on Teacher Development, 2007, pp. 4-5). The characteristics of professional learning identified by the Working Table have informed a range of teacher development policies in Ontario for over a decade, including a New Teacher Induction Program (NTIP), Annual Learning Plan (ALP) and Teacher Performance Appraisal (TPA), and a Teacher Learning and Leadership Program (TLLP) (see Figure 5). Approaches to school and system leaders’ professional development have also been informed by review of professional learning research and needs; for example, in British Columbia for the development of the *Supervision for Learning* program by the B.C. Principals’ and Vice-Principals’ Association (BCPVPA).

**Figure 4: Prince Edward Island: The Professional Learning Report**

As well as frameworks, policies, and programs, evidence is proposed to be used for planning professional development priorities, processes, and content, for example, as outlined in Alberta’s professional development planning cycle developed (see Figure 6). The majority of ATA Professional Development Chairs surveyed in Alberta agreed that “professional development planning is evidence-informed and research-based;” however, using a four-point rating scale (1 for rarely or not evident, 4 for consistently evident), there have been declining ratings for the extent to which professional learning is evidence-informed from an overall rating of 3.78 in 2010 to the most recent rating of 2.50 in 2014 (ATA, 2015, p. 17).

Nevertheless, across our case studies we identified examples of school districts and schools engaging in processes of needs assessments, analysis of students’ work and learning, identification of professional needs, and engaging in and with research and inquiry to inform their professional learning priorities. In Alberta, for example, Fort McMurray Public schools incorporate Professional Learning Fridays (PLFs) into the district calendar; 14 full-days where teachers gather together to collaborate and learn with and from one another. Of the 14 days, five are led by the district and the remaining nine are allocated to be used at the school-level. Often, the district days are used to support the work that teachers are doing at the school-level.
As one teacher explained:

*Within those 14 days that the School Board sets up, they've designed a skeleton schedule, so to speak. They show the cycle of the 14 days throughout the year and they've provided a framework where you may be wanting to work on certain things at certain points in the year. For example, in the Fall, identifying school issues, data analysis from the previous year so you can determine where to start with your existing current year students and so it gives an opportunity for staff to do that, to delve into the data, to look at issues and needs of the students in the particular classes and it provides a starting point for how teachers will plan their PLFs for the duration of the year.*

The school-based days may take a variety of forms and are often a mix of whole-school and small-group based learning activities. Whole-school activities often revolve around school improvement plans or district initiatives that the school is participating in. Small-group activities are entirely teacher-led, sometimes involving teachers from multiple schools:

*The morning might be structured where it is school based. So it might be a school/District initiative, something that you are working on based on the data that you studied at the beginning of the year. And then the networked afternoon, could be ... the grade 2 teachers in the District all get together. They have some sort of set up themselves, but they could be looking at something with digital learning or something with literacy or numeracy. So they sort of set it so that it's a bit more of an outside, beyond the school driven capacity there and we encourage the teachers to lead.*

Interviewees noted that priority areas for networked afternoons are driven by student needs and are based on analysis of a variety of student work and achievement results at both the school and district level. The process is evidence-informed and collaborative:

*Very early in the school year, we used data from the previous year as grade groups, as divisional groups and then later as the school, to identify areas of need for those different levels and really spend some time planning on how we can target improvements for those areas. We did a sticky note activity where we decided in grade groups, and then division, then as a whole school, what the different goals would be, and then we had lots of time to collaborate, come up with some strategies that we can do long term, short term, medium term and look at how we're doing throughout the year. Are we achieving those goals, do we need to change things?*

There is no requirement for the groups to set out a learning plan from the onset; rather the work of the group evolves naturally as they assess student needs and brainstorm and test out different approaches for improvement. The principals oversee the work of the various groups and provide resources to facilitate the success of the learning groups. Consequently, after each networking session, teachers submit a report to their principal that summarizes the groups progress thus far, sets goals for the next session, and outlines any support they need.
In another example, in 2015-16, Simcoe County District School Board (SCDSB) in Ontario moved from having a Board Improvement Plan to having a Board Learning Plan. Schools were also asked to move to having School Learning Plans (instead of School Improvement Plans) and to ensure that at least 10% of the school budget was allocated to professional learning (in addition to district supported professional development opportunities). School learning plans are intended to be living documents that are available online and include a school self-assessment, teacher and student voice and input, and align with district goals.

The overall finding from the *The State of Educators’ Professional Learning in Canada* study is that evidence from research and from a range of data are being drawn on and used to inform provincial policies, professional development processes, and areas of focus within provinces and territories, districts, and schools. However, while data are used extensively, this does not exclusively drive decisions, and a professional process of inquiry and judgement are important to bring together a range of evidence and expertise.

**Subject-Specific and Pedagogical Content Knowledge**

**Summary of Research Literature**

Shulman (1986) identified the importance of three forms of content knowledge in supporting a novice learner to become an expert teacher. First, *subject matter content knowledge* to understand the substantive and syntactic structures within a teachers’ specific subject area:

> The substantive structures are the variety of ways in which the basic concepts and principles of the discipline are organized to incorporate its facts. The syntactic structure of a discipline is the set of ways in which truth or falsehood, validity or invalidity, are established. When there exist competing claims regarding a given phenomenon, the syntax of a discipline provides the rules for determining which claim has greater warrant. (Shulman, 1986, p. 9).

Second, *pedagogical content knowledge*:

> … which goes beyond knowledge of subject matter per se to the dimensions of subject matter for teaching… Within the category of pedagogical content knowledge, I include, for the most regularly taught topics in one’s subject areas, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations — in a word, the ways of representing and formulating the subject that make it comprehensible to others… Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult. (Shulman, 1986, p. 9).
Third, curricular knowledge involving understanding that:

The curriculum is represented by the full range of programs designed for the teaching of particular subjects and topics at a given level, the variety of instructional materials available in relation to those programs, and the set of characteristics that serve as both the indications and contraindications for the use of particular curriculum or program materials in particular circumstances. (Shulman, 1986, p. 10).

Shulman argued that over the history of teaching and learning, the pendulum swings between a focus on subject knowledge or on pedagogical knowledge.

Concerns about ensuring a combination of subject and pedagogical knowledge persist. Rather than professional development involving generic activities and instructional strategies disconnected from subject areas, a focus on specific subject knowledge in combination with pedagogical content knowledge is an important element of effective teacher professional learning programs (CUREE, 2012; Dagen & Bean, 2014; Desimone, 2009; Desimone & Stuckey, 2014; Evans, 2014; Garet et al., 2001). In a recent review of research about professional learning in education, Cordingley et al. (2015) noted that generic pedagogic strategies are insufficient, suggesting that programs that are not “also rooted in developing content knowledge to underpin such strategies and exploring how they work for different groups of pupils are not likely to achieve their potential” (p. 5). Furthermore, the integration of new technologies within pedagogical knowledge requires increasing attention in professional development and learning for educators (Fullan & Langworthy, 2013).

Findings from The State of Educators’ Professional Learning in Canada Study

Subject and pedagogical knowledge continues to be important in Canada. However, specific professional development needs varies by teacher, career stage, and changing educational contexts. For example, a 2006 Pan-Canadian study of elementary and secondary teachers reported that 50% of teachers felt well prepared at the start of their career with respect to mastering the content of their subjects taught (Kamanzi, Riopel & Lessard, 2007). The study also identified differences between elementary and secondary teachers; 66% of elementary teachers were likely to view professional development as an opportunity to deepen their subject matter knowledge, compared to 50% of secondary teachers. In our survey in New Brunswick, 36% of respondents identified “subject matter content” as the area of professional development most needed by teachers; whereas 34% of respondents identified subject matter content as the area of professional development least needed. It appears that teachers vary in the extent to which they already feel well equipped in their subject knowledge.

To investigate the extent of subject specialist professional development across Canada, we reviewed findings from almost 1,600 teachers involved in teaching science who were surveyed as part of the Pan-Canadian Assessment Program (PCAP) in 2013. An average of 97% of teachers in Anglophone schools and 93% in Francophone schools reported participating in professional development (O’Grady and Houme, 2014). However, when asked specifically about participation in science-related professional development days, a highly varied picture emerged (see Table 3). Twenty-three percent (23%) of survey respondents in Anglophone schools in British Columbia and 22% in Francophone schools in Alberta reported participating in nine or more science-related professional development days within the previous five years; by contrast, 39% of teachers’ responding in Anglophone schools in Prince Edward Island and 64% of respondents in Francophone schools in Manitoba and Ontario reported not participating in any science-related professional development days. These variations in access to, and participation in, subject-
specific professional development are of concern, particularly for teachers in Francophone schools.

While students of teachers who had participated in nine or more science-related professional development days had on average higher achievement results on the PCAP science assessment, O’Grady and Houme (2014) concluded “there is no significant relationship between the number of science PD days and achievement in this subject” (p. 75). There are a number of cautions with this interpretation: for example, teachers who have existing high levels of expertise and experience in science may select not to participate in science-related specific professional development days; professional development days are only one form of professional learning; many factors affect student achievement and assessing a direct link to quantity of professional development is inappropriate; and, finally, consistent with our principles of effective professional learning, quality content matters. O’Grady and Houme’s (2014) attempted to also investigate participation in particular forms of professional development perceived to benefit student achievement in science. They identified three particular forms of professional development as significant: integrating Information Technology (IT) into science, academic courses, and improving critical thinking or inquiry skills. As outlined in Table 4, while the majority of teachers overall surveyed for PCAP 2013 were participating in these forms of professional development, participation varied considerably by province and by Anglophone and Francophone systems.

### Table 3:
**Number of days of science-related professional development during the past five years**
(O’Grady & Houme, 2014, p. 75)

<table>
<thead>
<tr>
<th>Province</th>
<th>0-2 Days</th>
<th>3-4 Days</th>
<th>5-8 Days</th>
<th>9 or more</th>
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<tbody>
<tr>
<td><strong>Anglophone schools</strong></td>
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<tr>
<td>BC</td>
<td>11</td>
<td>19</td>
<td>72</td>
<td>24</td>
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<tr>
<td>AB</td>
<td>16</td>
<td>17</td>
<td>24</td>
<td>26</td>
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<tr>
<td>SK</td>
<td>20</td>
<td>34</td>
<td>33</td>
<td>18</td>
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<td>MB</td>
<td>29</td>
<td>27</td>
<td>18</td>
<td>7</td>
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<tr>
<td>ON</td>
<td>34</td>
<td>15</td>
<td>12</td>
<td>6</td>
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<tr>
<td>QC</td>
<td>10</td>
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<td>NB</td>
<td>9</td>
<td>39</td>
<td>26</td>
<td>13</td>
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<td>NS</td>
<td>39</td>
<td>23</td>
<td>8</td>
<td>14</td>
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<tr>
<td>PE</td>
<td>18</td>
<td>13</td>
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<td>NL</td>
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<td>18</td>
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<td>CAN</td>
<td>22</td>
<td>26</td>
<td>21</td>
<td>18</td>
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<tr>
<td><strong>Francophone schools</strong></td>
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<tr>
<td>BC</td>
<td>18</td>
<td>32</td>
<td>9</td>
<td>9</td>
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<tr>
<td>AB</td>
<td>11</td>
<td>22</td>
<td>22</td>
<td>22</td>
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<td>SK</td>
<td>13</td>
<td>38</td>
<td>14</td>
<td>9</td>
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<tr>
<td>MB</td>
<td>64</td>
<td>38</td>
<td>9</td>
<td>5</td>
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<tr>
<td>ON</td>
<td>64</td>
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<tr>
<td>QC</td>
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<td>CAN</td>
<td>30</td>
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</table>
The importance of subject and pedagogical knowledge is recognized within the work of professional organizations and subject associations. For example, the British Columbia Teachers’ Federation (BCTF) have Provincial Specialist Associations (PSA) which include such areas as Social Studies, Mathematics, and French Immersion and French first language (Association Provinciale des Professeurs d’Immersion et du Programme Francophone), while pedagogy-oriented PSAs include Cooperative Learning, Montessori Teachers and Distributed Learning Teachers. Cross-curricular PSAs encompass themes and groups such as Aboriginal Education, Teacher-Librarians, Inclusive Education (formerly Special Education), and Rural and Multi-grade teachers (Daly, 2011). Similar specialist councils exist within the Alberta Teacher’s Association, offering a host of opportunities for teachers to network, collaborate, and learn. Such specialist associations and councils include subject and curricular foci as well as attention to early childhood, middle years, school leadership and First Nations, Métis, and Inuit education. In Ontario, over 50 Subject, Division, and Special Interest Associations (SDA) linked to curricular and educational areas exist and are supported by the Ontario Teachers’ Federation (OTF).

Table 4:
Percentage of teachers participating in professional development activities that are positively related to science achievement (O’Grady & Houme, 2014, p. 78)

<table>
<thead>
<tr>
<th></th>
<th>Integrating IT into science</th>
<th>Academic courses</th>
<th>Improving critical thinking or inquiry skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anglophone schools</strong></td>
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<td></td>
<td></td>
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<tr>
<td>BC</td>
<td>92</td>
<td>78</td>
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<tr>
<td>AB</td>
<td>87</td>
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<td>SK</td>
<td>84</td>
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<tr>
<td>MB</td>
<td>89</td>
<td>75</td>
<td>64</td>
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<td>ON</td>
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<td>70</td>
<td>66</td>
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<tr>
<td>QC</td>
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<td>74</td>
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<tr>
<td>NB</td>
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<td>83</td>
<td>65</td>
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<tr>
<td>NS</td>
<td>90</td>
<td>85</td>
<td>62</td>
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<tr>
<td>PE</td>
<td>86</td>
<td>79</td>
<td>45</td>
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<td>NL</td>
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<td>81</td>
<td>73</td>
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<tr>
<td>CAN</td>
<td>89</td>
<td>77</td>
<td>68</td>
</tr>
<tr>
<td><strong>Francophone schools</strong></td>
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<td>BC</td>
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<td>55</td>
<td>55</td>
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<tr>
<td>AB</td>
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<td>41</td>
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<td>SK</td>
<td>88</td>
<td>50</td>
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<tr>
<td>MB</td>
<td>82</td>
<td>59</td>
<td>32</td>
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<td>ON</td>
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<tr>
<td>QC</td>
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<td>39</td>
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<td>CAN</td>
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<td><strong>CAN overall</strong></td>
<td>86</td>
<td>71</td>
<td>61</td>
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As well as engaging with subject and specialist associations, teachers also have opportunities to engage in professional development designed to increase their knowledge, skills, and practices in specific subject or pedagogical areas. For example, in Ontario more than 40,000 teachers voluntarily take Additional Qualifications (AQ) programs every year to upgrade their qualifications and enhance their practice. There are over 350 different AQ course topics available offered by numerous providers that includes universities, teacher federations, and a few district school boards. Latest offerings have included a focus on current provincial priority areas, including: the use of technology integrated with pedagogy; the inclusive classroom; and understanding and supporting First Nations, Métis, and Inuit education and mathematics.

The need for, and access to, subject-specific, curricular, and pedagogical professional development can be affected by changes in educational priorities, policy changes, and political contexts. In 2015-16, in light of concerns about mathematics results, the Ontario Ministry of Education provided funding to the OTF to subsidize the costs of teachers selecting to complete a Math AQ. Survey responses from teachers’ participating in the Math AQs indicated that:

- 92% felt the course(s) improved their confidence in Math content/concept knowledge, with 61% citing considerable or large increases in confidence.
- 94% felt the course(s) improved their confidence in instructing Math, with 64% citing considerable or large increases in confidence.
- 96% felt they had changed their instructional and assessment practices, with 62% saying they changed their practices considerably or completely overhauled their teaching (Yashkina, 2016).

In British Columbia, a major reform and implementation of a new curriculum is in process. In September 2015, the B.C. Ministry of Education and the BCTF jointly announced the creation of a three-year plan to support teachers to deliver the new K–12 provincial curriculum to full implementation by 2018. The plan included an initial $1-million fund to support the training of 2,000 teacher leaders across the province to familiarize them with the curriculum changes and to collaborate with school district administration to design professional in-service for teachers for the 2016–2018 implementation period. Funding and time for collaboratively developed Provincial Curriculum Days are part of the professional development supports for teachers. Hence, provincial curricular and subject priorities are influencing the content and availability of professional development. Within the wider curriculum reform, a major element of the new B.C. curriculum is Applied Design, Skills, and Technology (ADST), with curriculum competencies extending K–12. This framework includes coding and “computational thinking,” and is designed to be implemented in multiple curricular areas, rather than as a distinct subject area. The Ministry surveyed district superintendents to determine readiness of teachers, hardware, and networks for the ADST curriculum. Of the 27 superintendents who responded, 22 said that half or fewer of K–5 educators are “ready to integrate computational thinking into teaching practice.” Results for Grade 6–9 teachers were similar (Chan, 2016). Subsequently, the Ministry announced $6 million in new funding to support coding (Government of British Columbia, 2016), with the parameters of this funding largely aligned to the content requirements and learning objectives of the ADST curriculum. Proposed professional learning approaches include districts identifying lead teachers and professional development providers being commissioned to provide sample student materials and training resources to be used by teachers. In Ontario, surveys of teachers participating in the Elementary Teachers’ Federation of Ontario (ETFO) professional
learning indicated that the majority of teachers’ identified technology (67%) as their priority topic for professional learning; followed by classroom assessment (63%); curriculum and instruction (60%); student mental health (56%); and classroom management (54%).

As well as technological, curricular, and subject knowledge, a major finding from our research is the priority need for professional development to equip teachers to work with and support all students with diverse learning needs. We present a summary of priority professional development needs identified in Table 5. In our New Brunswick survey, “supporting diverse learning needs” was identified as the most needed area of professional development for teachers (56% of respondents; compared to 36% for subject matter content and 34% for instructional methods). A survey in British Columbia suggested that while teachers in the first five years of their experience may prioritize professional development on specific subject or pedagogical strategies, over time teachers’ professional learning priorities may shift to broader concerns for students’ equity, well-being, and learning (BCTF, 2010). Across Canada, a recent CTF survey highlighted the importance of, and need for, appropriate professional learning to support teachers’ knowledge and understanding of Aboriginal people (CTF, 2015); this priority is further required to support the recommendations of the Truth and Reconciliation Commission of Canada (2015). Relatedly, approaches to professional development will need to vary depending on the priority need to ensure appropriate quality content and learning; for example, teachers participating in professional learning experiences to support knowledge of Aboriginal people reported highest satisfaction with “cultural teachings/school visit by an Elder/knowledge keeper” (63% of survey respondents very satisfied, contrasted with 36% very satisfied with “in-service on new curriculum materials”) (CTF, 2015, p. 16). Overall, the priority professional learning needs are knowledge, skills, and practices to support diverse learners’ needs; this includes attention to developing teachers’ pedagogical, subject, curricular, technological, and cultural knowledge linked to students’ needs and wider educational, social, and political changes.
Table 5: Perceived Priority Professional Development Needs

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Perceived Priority Professional Development Needs</th>
<th>Source</th>
</tr>
</thead>
</table>
| Alberta            | • Working with all students in an inclusive environment  
|                    | • Differentiating instruction  
|                    | • Teaching cross-curricular competencies                                                                         | ATA, 2015, p. 23  |
| British Columbia   | • Strategies or materials (<5 years of teaching)  
|                    | • Philosophical issues, social issues (e.g., poverty), engaging in positive health and wellness (>5 years of teaching) | BCTF (2010, p. 10) |
| New Brunswick      | • Supporting diverse learning needs  
|                    | • Subject matter content  
|                    | • Instructional method                                                                                          | NBTA, 2016, pp. 73-74 |
| Ontario            | • Technology  
|                    | • Classroom assessment  
|                    | • Curriculum and instruction  
|                    | • Student mental health  
|                    | • Classroom management                                                                                          | ETFO (2015)       |
| Ontario            | • Equity and poverty education  
|                    | • Assessment and math instruction                                                                               | Bodkin et al. (2013, p. 25) |

A Focus on Student Outcomes

Summary of Research Literature

Several recent reviews of research on effective teacher professional learning identify the need to have content that is focused on student outcomes (CUREE, 2012; Cordingley et al., 2015; Darling-Hammond et al., 2009; Darling-Hammond & Rothman, 2015; Jensen et al., 2016; Timperley, 2008). According to Timperley (2008), “Such a focus requires teachers to understand the links between particular teaching activities, the ways different groups of students respond, and what their students actually learn” (p.8). High quality content that blends and connects theory and practice is more likely to lead to teachers’ professional learning that supports student outcomes (Darling-Hammond et al., 2009). For example, research has shown that when professional learning requires teachers to engage with the materials they wish students to learn and model subject-specific instructional strategies, it positively impacts student achievement (Desimone, Smith, & Phillips, 2013). According to Cordingley et al. (2015), professional development that is focused on student outcomes generates teacher buy-in by “creating an overt relevance of the content to its participants – their day-to-day experiences with, and aspirations for, their pupils” (p. 15). A recent study by Jensen et al. (2016) noted that professional development in high performing countries focuses strongly on student learning:

The focus on student learning cannot be underestimated. It ensures professional...
learning is always relevant to teachers and anchors school improvement in the quality of professional learning (p. 12).

Similarly, Darling-Hammond and Rothman (2011, p. 1) argued in their review of education systems supporting teacher development:

The focus on teacher effectiveness makes sense. While there might be disagreement about the most effective ways to measure and develop effectiveness, educators and policymakers generally agree that ensuring that teachers are capable of improving student learning – and that school leaders are able to help them to do so – is perhaps the most significant step they can take to raise student achievement. This conviction is backed up by research. The evidence is clear that teaching is one of the most important school-level factors in student achievement, and that improving teacher effectiveness can raise overall student achievement levels.

It is important to note that professional development can also support a broader range of outcomes for teachers, such as their self-efficacy, and for students, such as connection to equity and well-being. Fullan & Langworthy (2013) have argued for the development of “new pedagogies” to advance deeper learning skills:

New Pedagogies for Deep Learning… seeks to renew our goals for education and learning, to include skills that prepare all learners to be life-long creative, connected and collaborative problem solvers and to be healthy, happy individuals who contribute to the common good in today’s globally interdependent world. We need our learning systems to encourage youth to develop their own visions about what it means to connect and flourish in their constantly emerging world, and equip them with the skills to pursue those visions. This expansive notion, encompassing the broader idea of human flourishing, is what we mean by “deep learning.” (p. 2).

These deeper learning skills are proposed to include character education, citizenship, communication, critical thinking and problem solving, collaboration, creativity, and imagination. Therefore, consideration of which student outcomes are to be supported and advanced through teachers’ improving knowledge, skills, and practices linked to professional development content and activities requires careful attention.

Findings from The State of Educators’ Professional Learning in Canada Study

A focus on student outcomes is also considered important in the content and intended benefits of professional learning in Canada. In our New Brunswick survey items, we asked teachers to identify their priority professional needs linked to our ten principles of effective professional learning (Figure 1): the majority of respondents (56%) selected a focus on student outcomes as the top priority. A focus on student outcomes can also be a political priority. For example, in Ontario a new government was elected in 2003 with a priority commitment to improving student outcomes. Three priority goals were identified and focused the work of the Ontario Ministry of Education and the publicly funded education system for a decade:

- Increased student achievement
- Reduced gaps in student achievement
- Increased public confidence in publicly funded education.

For teachers’ professional learning specifically, the approaches involved in the Ontario Ministry of Education’s Student Achievement strategies have evolved over time (Glaze, Mattingley & Andrews, 2013). Early strategies, beginning in 2005, included large-scale provincial training on literacy, numeracy, differentiated instruction, and assessment through summer programs for teachers and provincial events for school and school board leaders (Campbell and The Literacy and Numeracy Secretariat, 2008; Glaze & Campbell, 2007). Subsequent phases of the Literacy and Numeracy
Strategy included increasing availability and access to resources and materials to support educators, parents, and students. For example, by 2014, over three million visitors had accessed the Student Achievement Division’s Webcasts for Educators, YouTube resources, and online videos. The Student Achievement Division’s approach to capacity building has become increasingly focused on local professional collaboration and inquiry centered on understanding students’ learning, using data, and sharing knowledge and practices across schools, districts, and provinces. Targeted supports have also been provided for schools and student groups that are struggling to improve. Recently, a Renewed Math Strategy has been implemented to prioritize student achievement in mathematics.

While student achievement and outcomes are recognized as important across our case study interviews, there were concerns that a focus on student outcomes should not be interpreted narrowly or conceived as exclusively about test scores. Generally, professional development intended to improve student achievement includes a broader range of intended outcomes. For example, from 2012-15, the B.C. Ministry of Education funded the Changing Results for Young Readers (CR4YR) initiative; a collaborative inquiry project intended to increase the number of children who were engaged, successful readers. Teachers in 57 participating districts met with a facilitator seven times each year to explore inquiry questions they chose. Participating districts and teachers had a variety of networking opportunities, including two provincial sessions per year, shared resources through facilitators and Early Reading Advocates, and ongoing dialogue. To track the impact of CR4YR, teachers tracked one child from each classroom in the project, from November 2014 through May 2015. Wherever possible, the team tracking an individual child included both a classroom teacher and another teacher, administrator, or support (e.g., Learning Support; Educational Assistant; Teacher librarian; Principal; Aboriginal Support). Analysis of 311 complete case records indicated that 96% of the vulnerable students selected for the case studies showed growth in reading for meaning; teachers observed major changes in 40% of these students. Furthermore, there were substantial decreases in the gaps between student literacy achievement: over 60% of students had progressed more than one year during the 8-month project and a substantial proportion (17%) were meeting grade level expectations. Alongside a focus on student achievement, teachers focused on other important processes and outcomes. According to analyses of the teachers’ case reports, teachers were most likely to focus on increasing student confidence (75%); followed by personal responsibility and motivation (72%). More than half of teachers reported some focus on self-regulation; approximately 40% reported focusing on awareness and competence; and 25% reported some focus on personal and cultural identity.

While recognizing and valuing the importance of students’ learning, our findings indicate a concern about also recognizing and valuing professionals’ learning needs in their own right. For example, in the CR4YR, benefits for teachers’ confidence and their engagement in professional collaboration and inquiry were identified with benefits for their understanding of literacy, use of a range of instructional strategies, and their capacities to engage students in the joy of reading. Similarly, the Collaborative Inquiry for Learning – Mathematics (CIL-M) in Ontario recognized the need to support changes in teachers’ efficacy, beliefs, and practices before improving students’ efficacy, expectancy, and achievement for mathematics (Bruce et al., 2010). The importance of professionals’ own learning needs and outcomes is a key element of teachers’ organizations agreements across Canada. For example, The Manitoba Teachers’ Society Handbook (MTS, 2016a), policy concerning professional development details:

8.3 Professional Development
The Society believes that:
(a) professional development encompasses formal and informal activities which Members undertake to direct their own learning and to enhance their professional practice…
Effective professional development is, as intended, about supporting a range of learning processes and outcomes for the professionals involved as well. Overall, the study findings indicate that valuing, respecting, and promoting a range of professionals’ and students’ outcomes is important in Canada. Student achievement matters, however outcomes are not only about test scores. Generally, professional learning content needs to develop teachers’ efficacy, knowledge, and practices in order to support students’ efficacy, engagement, learning, and equity of outcomes.

A Balance of Teacher Voice and System Coherence

Summary of Research Literature

Attending to an appropriate balance of teacher voice and choice in their professional learning, while also supporting system coherence connected to system, district, and or school priorities and needs is important. These are not new themes; for example, Sarason (1971) researched the importance of the culture of schools in affecting teachers’ lives and Smylie and Denny (1990) wrote about the tensions between the bureaucractic nature of the school organization and the collaborative strategies needed for the growth and development of teacher leadership. In the past two decades, the purpose, goals, and scale of educational change have become ‘bigger’ (Hargreaves et al., 2010, p. xii) with the rise of Whole System Reform and large-scale educational change (Fullan, 2000, 2009, 2010). Attention on how to improve entire education systems (at national or state levels) has included a focus on developing systems for supporting teacher quality, leadership development, and professional learning (Darling-Hammond & Rothman, 2015; Hargreaves & Shirley, 2009, 2012; Jensen et al., 2012; Jensen et al, 2016; Barber & Moursheed, 2007; Moursheed, Chijioke & Barber, 2010). In the context of supporting system improvement, Darling-Hammond et al.’s (2009) research on professional learning suggests that this is more likely to bring about improvement in student outcomes when the content of teachers’ professional learning connects with larger system-wide educational priorities and school improvement needs.

However, a focus on system improvement and coherence should not be interpreted as requiring professional learning to be exclusively top-down. As Jensen et al. (2016) noted, while all jurisdictions in their study provided clear objectives and expectations around professional learning, they also “emphasize the power of bottom-up initiatives” (p.12) - effective professional development was embedded in broader improvement strategies that “put teacher professional learning at the heart of school improvement initiatives” (p. 4). Hence, teacher voice, choice, and leadership that includes opportunities for teachers to self-direct their learning and engage in collaborative peer learning is important. The concept that teachers should be at the center of their own learning, as well as their students’ learning is well-established (Berry, 2013; Cochran-Smith & Lytle, 1993; Hargreaves & Shirley, 2012; Lieberman & Friedrich, 2010; Lieberman, Campbell & Yashkina, 2017; Macdonald & Shirley, 2009).

Attention to developing teacher leadership has grown in prominence. For example, Lieberman and Wood (2003) and Lieberman and Friedrich’s (2007) studies of the National Writing Project identified a range of social and professional practices involved in teachers leading professional learning: for example, honoring teacher knowledge; publicly sharing knowledge, ideas, and practices; fostering teaching collaboration; developing the capacity of teachers to engage in improvement; and sharing leadership. While conceptions of distributed leadership have become strongly associated with teacher leadership (Harris, 2005), there is a distinction between when leadership is effectively delegated by formal leaders to distribute responsibilities contrasted with teacher-led leadership within and among professional communities (Hargreaves & Shirley, 2012), involving professional expertise, judgement, and
wisdom (Hargreaves & Fullan, 2012). Recently, teacher leaders themselves have called for an approach to ‘flip the system’ (Elmers & Kneyber, 2015) from top-down governance to a system where teachers have opportunities to exercise collective autonomy, professional judgement, and leadership of educational change. Attention to balancing teacher leadership and system coherence is a current priority (Lieberman, Campbell & Yashkina, 2017).

Findings from The State of Educators’ Professional Learning in Canada Study

In our research for the *The State of Educators’ Professional Learning in Canada* study, the appropriate balance between teacher voice and system coherence was contentious and appeared to vary between provinces, territories, boards/districts, and schools, as well as between the responses from individual teachers and their organisations, and individuals and organisations in district or provincial leadership roles. In practice, teachers are engaged in both professional development provided or required by their school, district, or larger education system and also in self-directed professional learning. For example, in Saskatchewan, 95% of teachers reported participating in employer-directed professional development during the last year and 79% reported participating in teacher-led professional development (Saskatchewan Teachers’ Federation, 2013). Generally, a balance between professional development linked to overall system goals and also professional learning for teachers’ specific needs is considered important. For example, in Alberta, the *Teacher Growth, Supervision, and Evaluation Policy* (Alberta Education, 2015) requires all employed teachers in the province to complete an annual growth plan that outlines learning goals and activities that the teacher intends to engage in over the next year. The teacher may identify a combination of district, school-based, and self-selected learning experiences to facilitate the plan. The plan must be approved by school administrators at the beginning of each year and is reviewed for progress at year’s end. However, in a recent survey asking ATA members whether “My school district recognizes my need to determine my own professional growth priorities”; 58.4% of respondents agreed, while 29.9% of respondents disagreed (ATA, 2016a, p. 113).

Issues of teachers’ ability to exercise professional judgement over their own learning needs and their autonomy over selecting and leading professional learning were present throughout our research. Teachers’ organisations strongly value these rights and responsibilities. For example, in 1985, the BCTF adopted a statement of principles that continue to frame its professional learning policies and activities:

> These principles reflect understandings of professional development and the core values of teachers which are:

- The primacy of continuing career-long professional development.
- The necessity of teacher autonomy.
- The importance of teaching-centered and teacher-directed professional development.
- The diversity of effective professional development needs and practices.
- The value of teachers teaching teachers.
- Recognition that teachers are learners.

(BCTF, 1985, p. 28 (Section 30.A.09).

Other professional organizations (also included in this study) contested the “necessity of teacher autonomy” in contrast to the importance of supporting professional learning and development linked to school and district priorities.

How much current autonomy teachers do or do not have over their professional development was also complex. According to a 2014 pan-Canadian survey by CTF, the majority (55.5%) of teachers responding reported having significant ability (14.5%) or having somewhat ability (41%) to exercise their professional judgment with regard to professional development (CTF, 2014, p. 10). Relatedly, teachers were also asked to what extent
they feel that their professional autonomy has changed over the last five years, broadly speaking. The majority of respondents (52.5%) indicated that they perceived their autonomy to have either decreased somewhat (28%) or significantly (24.5%) (CTF, 2014, p. 11). Therefore, there was a mixed picture; the majority of teachers had some authority to make decisions about their professional development, but the majority also perceived that this autonomy had reduced and eroded over time. Our survey conducted in New Brunswick also indicated mixed perceptions and experiences: 36% of respondents reported less autonomy; 34% reported more autonomy; 16% reported continuing low autonomy; and 14% reported continuing high autonomy.

Of concern are responses from the CTF (2014) survey indicating 64% of teachers were somewhat (34%) or significantly (30%) stressed by “imposed professional development activities.” Of concern also are findings from ATA surveys that indicators of both teacher autonomy and of system coherence have declined over time (see Table 6). In part these results may reflect reactions to the ending of the Alberta Initiative for School Improvement (AISI). Over 14 years, AISI had funded over 1,800 collaborative teacher-led, school-based action research projects to address local needs and lead to improved student learning (Parsons and Beauchamp, 2012). AISI funding was ended by the government in 2014. Provincial partners, districts, and schools across Alberta are attempting to build on AISI’s momentum to facilitate further collaborative professional learning within and across schools. With a change of government in Alberta, the need to (re)consider the balance between teacher autonomy and system coherence will be vital; as indeed it appears to be across Canada.

Table 6:
Extent to which Professional Development Chairs perceive the following principles are evident in implementing effective professional development practice in their context (Source: Alberta Teachers’ Association, 2014, p. 17)

<table>
<thead>
<tr>
<th>Principles</th>
<th>2014</th>
<th>2012</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional development planning respects the professional judgment of teachers and the unique circumstances in which they teach</td>
<td>2.58</td>
<td>2.47</td>
<td>3.59</td>
</tr>
<tr>
<td>Professional development is systemic, systematically planned, and sustained</td>
<td>2.57</td>
<td>2.49</td>
<td>3.49</td>
</tr>
<tr>
<td>Professional development is supported by a shared vision</td>
<td>2.46</td>
<td>2.34</td>
<td>3.30</td>
</tr>
<tr>
<td>Professional development is supported by shared responsibility</td>
<td>2.42</td>
<td>2.40</td>
<td>3.45</td>
</tr>
</tbody>
</table>
One example of an initiative that has successfully attempted to balance teachers’ professional judgement and needs with wider system coherence is Ontario’s Teacher Learning and Leadership Program (TLLP). Established in 2007, the TLLP is a partnership between the Ontario Ministry of Education and OTF and affiliates with shared goals to:

- support experienced teachers undertaking self-directed advanced professional development;
- develop teachers’ leadership skills for sharing their professional learning and exemplary practices; and
- facilitate knowledge exchange for spread and sustainability of practices.

Each year, experienced teachers can apply to conduct a TLLP project. School board committees review applications and submit their priority choices to a provincial committee comprised of teacher union and government representatives, who select projects for funding. Successful applicants receive training, support, and funding for their TLLP projects. In 2015-16, the 10th cohort of the TLLP began. Across the ten cohorts, over 1,000 TLLP project have been funded.

Teachers select the priority topics that they will focus on in their proposed TLLP project; however, the Ministry encourages proposals that align generally with school, district, and provincial priorities. The balance of enabling teachers to select innovative themes or whether topics align with provincial priorities is an issue of debate. Analyses of the most prevalent project topics indicated shifting emphasis that is consistent with the overall policy priorities in Ontario: focusing on literacy and mathematics, increasing prevalence of differentiated instruction and technology, and new themes of safe schools and equity (Campbell, Lieberman et al., 2016). However, through TLLP, teachers choose what specific aspect of the topic they will investigate, how they will develop their own professional learning, and how they will (co-)lead the learning of other professionals. In analyses of recent cohorts (Campbell, Lieberman et al., 2016), 95% of teachers select to engage in collaborative professional learning to support improvement in their own knowledge, skills, and practices. TLLP teacher leaders are also expected to develop the learning of other teachers and to share their knowledge and practices; in recent cohorts, the main forms of professional learning led by teachers for other teachers has been provision of workshops (84% of projects), online sharing (73% of projects), and working with other teachers in their classrooms (70%). The majority of TLLP participants report development of leadership skills and benefits for their professional knowledge and understanding (89%), teaching practices (89%), collaboration skills/practices (61%), and for improving their students’ learning and experiences (68%). The opportunities for teacher choice, voice, and leadership through the TLLP are highly valued by participants and are contributing to wider system improvements through developing professional learning, knowledge, skills, practices, and resources (Lieberman, Campbell & Yashkina, 2017).

Overall, the findings indicate that system- and school-directed professional development can be important to support current priorities; however, this needs to be balanced with flexibility for teachers (and other educators) to identify specific professional learning needs for themselves and linked to their students, schools, and contexts. Opportunities for teachers to lead their own, and their colleagues’, learning can benefit individual and collective professional learning and support changes in practices to benefit students’ learning.
5.1.2 LEARNING DESIGN AND IMPLEMENTATION

As well as the importance of the substantive content of professional learning, discussed above, effective approaches require attention to the design and implementation of processes to support professional learning and development. We highlight three key features from our review of the literature: active and variable learning opportunities and processes; collaborative learning experiences; and job-embedded professional learning.

Active and Variable Learning

Summary of Research Literature

Like their students, teachers need access to multiple and varied opportunities to learn new content, gain insights, and apply new understandings to their daily practices (Timperley, 2008). This means ensuring engagement in flexible professional learning activities that build on teachers’ day-to-day experiences and provide opportunities to experiment, observe, reflect, and adapt new skills and practices to teachers’ own classroom contexts (Cordingley et al., 2015). A variety of professional development activities exist; for example, in the TALIS, participation in the following forms of professional development were reported: courses/workshops; networks of teachers formed specifically for the professional development of teachers; education conferences or seminars where teachers and/or researchers present their research results and discuss educational issues; observation visits to other schools; in-service courses in business premises, public organizations, or non-governmental organizations; individual or collaborative research on a topic of interest to the teacher; mentoring and/or peer observation and coaching as part of a formal school arrangement; and qualification programs (including university degrees) (OECD, 2014, p. 64).

While there is a wide array of types of professional learning activities, differentiation is critical in meeting teachers’ diverse learning needs, which are inevitably influenced by the vast and varied contexts of their work, career stage, professional priorities, personal preferences, their students’ needs, and school contexts (Day et al., 2006). For example, Broad and Evans (2006) suggested that experienced and beginning teachers may require different kinds of professional development opportunities. As Day (1999) outlined, several models of teacher learning conceptualize teachers as moving through many stages of skill acquisition. Dreyfus & Dreyfus (1986, as cited in Day, 1999) proposed that professionals move through five stages of continuing development - from being a ‘novice’ with little discretionary judgement to an ‘advanced beginner,’ ‘competent,’ ‘proficient,’ and finally, ‘expert’ with deep tacit understanding. According to Day (1999), however, conceptualizing teacher learning as a series of sequential steps “ignores the complexity and dynamic of classroom life” (p. 51) and oversimplifies the interactive nature of making meaning of learning experiences. Based on the large scale Variations in Teachers’ Work, Lives, and Effectiveness (VITAE) research project (Day et al., 2006), Day and Gu (2007) explained that teachers’ professional lives, including their motivation towards engaging in professional learning and their specific needs, are:

…influenced by their professional life phase and their identities, and that these were mediated by the contexts or ‘scenarios’ in which they lived and worked. The mediating influences were found to consist of three dimensions: the personal (related to their lives outside school); the situated (related to their lives in school); and the professional (related to their values, beliefs and the interaction between these and external policy agendas). These dimensions were not static. (pp. 423-424).
In addition, quality professional learning should be responsive to the kinds of learning processes teachers are engaged in. For instance, different approaches are required depending on whether the new ideas align with or challenge underlying assumptions around teaching and learning (Timperley, 2008). This further supports the notion that, over the course of their careers, teachers require access to a variety of formal and informal learning opportunities to stimulate lifelong learning.

Findings from The State of Educators’ Professional Learning in Canada Study

In the TALIS (OECD, 2014), junior high school teachers in Alberta reported one of the highest participation rates (98%) in professional development among the 35 participating countries (compared with the TALIS average for junior high school teachers of 88%). In a pan-Canadian survey of teachers, 90% indicated that they had engaged in formal learning courses or workshops over the past year (Smaller et al; 2005). In a more recent survey of elementary teachers in Ontario; 90% of respondents also reported participating in professional learning activities during the school day (Directions Evidence and Policy Research Group, 2014). In addition, teachers are engaging in professional learning outside of the school day, in the evenings, weekends, and over the summer (CTF, 2014). In our survey in New Brunswick, 80% of respondents reported participating in three or more professional development activities over the past year.

Table 7:
Types of professional development New Brunswick teachers report participating in over the past year

<table>
<thead>
<tr>
<th>Respondent choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (one day/one topic)</td>
<td>84%</td>
</tr>
<tr>
<td>Collaborative inquiry/action research (school-based, with colleagues)</td>
<td>51%</td>
</tr>
<tr>
<td>Individual research/inquiry on a topic of self-interest</td>
<td>50%</td>
</tr>
<tr>
<td>Conference</td>
<td>48%</td>
</tr>
<tr>
<td>Professional network/learning community (external to your school)</td>
<td>35%</td>
</tr>
<tr>
<td>Mentoring/coaching</td>
<td>29.5%</td>
</tr>
<tr>
<td>Institute (multiple days/one topic)</td>
<td>20%</td>
</tr>
<tr>
<td>University course work (master’s or doctoral level)</td>
<td>14%</td>
</tr>
<tr>
<td>Observation visits to other schools</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>
Our research indicates provision of, and participation in, a wide range of types of professional development opportunities. For example, the majority of New Brunswick teachers responding to our survey reported participating in workshops, collaborative inquiry/action research and/or individual research/inquiry (see Table 7). Looking across several sources of data, we see a similar pattern of the predominant activities being workshops and collaborative learning (see Table 8). There are cautions to interpretation of Table 8 as it is derived from multiple surveys, conducted at different times, by different organizations, using different survey items and for different purposes. Nevertheless, the predominance of workshops is perhaps surprising in light of research literature suggesting a shift away from external professional development and move towards job-embedded professional learning (a point to which we return later).

Table 8: Qualitative comparison of participation for various types/models of professional development or learning

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Type/model of professional development or learning</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>Most... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Courses and workshops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Education conferences or seminars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Participating in networks of teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Individual or collaborative research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Least... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In-service training in outside organizations</td>
<td>OECD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2013, p. 3)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>Most... participated in</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Customized workshops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workshops linked to certification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Presentations</td>
<td></td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Most... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workshops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Collaborative inquiry/action research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Individual research/inquiry on a topic of self-interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Least... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Observation visits to other schools</td>
<td>NBTA</td>
</tr>
<tr>
<td></td>
<td>• University course work (master’s or doctoral level)</td>
<td>(2016, pp. 64-65)</td>
</tr>
<tr>
<td>Pan-Canadian (focus on Indigenous learning or training)</td>
<td>Most... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hard copy books/lesson plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workshops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Oral traditions (e.g., Elders)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Least... participated in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Webinars</td>
<td>CTF</td>
</tr>
<tr>
<td></td>
<td>• post-secondary courses</td>
<td>(2015, p. 11)</td>
</tr>
</tbody>
</table>
An important question is not what professional development activities are participated in, but rather which types of activities are considered beneficial by teachers. Returning to our New Brunswick survey, workshops and collaborative professional learning were also reported as the forms of professional development with most beneficial impact (see Table 9). In Ontario, a survey of asking teachers the types of professional learning they were most interested in by ETFO (2015) identified the top three types as: face-to-face workshops (85% of respondents); multi-day courses (62%); and conferences (46%). Drawing together findings from multiple surveys again in Table 10, we see a similar pattern where a combination of workshops plus collaborative learning opportunities are frequently perceived as valuable. This suggests the importance of teachers having opportunities to collaborate with peers and engage in teacher-led workshops, and of access to opportunities to engage in and with external expertise and sources of professional development. Within such processes, quality content matters.

### Table 9:
Types of professional development and their perceived impact on teacher practice for New Brunswick teachers

<table>
<thead>
<tr>
<th>Models of PD</th>
<th>Most impact</th>
<th>Least impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (one day/one topic)</td>
<td>61%</td>
<td>19%</td>
</tr>
<tr>
<td>Collaborative inquiry/action research</td>
<td>44%</td>
<td>15%</td>
</tr>
<tr>
<td>Individual research/inquiry on a topic of self-interest</td>
<td>38%</td>
<td>13%</td>
</tr>
<tr>
<td>Professional network/learning community (external to your school)</td>
<td>36%</td>
<td>19%</td>
</tr>
<tr>
<td>Observation visits to other schools</td>
<td>33%</td>
<td>13%</td>
</tr>
<tr>
<td>Mentoring/coaching</td>
<td>30%</td>
<td>16%</td>
</tr>
<tr>
<td>Conference</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Institute</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>University course work (Master’s or doctoral level)</td>
<td>12%</td>
<td>34%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>2%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Table 10: Qualitative comparison of types/models of professional development or learning perceived to have the most impact

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Type/model of professional development or learning</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most...interest</td>
<td>Seminar or workshop</td>
<td>ATA (2015, p. 22)</td>
</tr>
<tr>
<td></td>
<td>• Collaborative less/unit planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Interschool/classroom visitation</td>
<td></td>
</tr>
<tr>
<td>Least...interest</td>
<td>Book/article study group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Attending an online conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Online curriculum/teaching issues forum</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>Most...valuable</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Collaboration with colleagues</td>
<td>Beauchamp et al. (2014, p. 10)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Most...impact</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Workshops</td>
<td>NBTA (2016, p. 66)</td>
</tr>
<tr>
<td></td>
<td>• Collaborative inquiry/action research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Individual research/inquiry on a topic of self-interest</td>
<td></td>
</tr>
<tr>
<td>Least...Impact</td>
<td>University course work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Institute</td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>Most...interested in</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Face-to-face workshops</td>
<td>ETFO (2015)</td>
</tr>
<tr>
<td></td>
<td>• Multi-day courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conferences</td>
<td></td>
</tr>
<tr>
<td>Pan-Canadian</td>
<td>Most...effective</td>
<td>N/A</td>
</tr>
<tr>
<td>(focus on Indigenous learning or training)</td>
<td>• ‘Other’</td>
<td>CTF (2015, p. 12)</td>
</tr>
<tr>
<td></td>
<td>• Oral traditions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workshops</td>
<td></td>
</tr>
<tr>
<td>Most...satisfied</td>
<td>Cultural teachings/school visit by an Elder/knowledge keeper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ‘Other’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workshop on historical perspective</td>
<td></td>
</tr>
<tr>
<td>Least...effective</td>
<td>Postsecondary courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hard copy books/lesson plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Online reports/articles</td>
<td></td>
</tr>
</tbody>
</table>
The theme of differentiation for professional and personal learning needs is important. For example, in Ontario, ETFO allocates six percent of their budget for women-only programs, including Reflections on Practice which supports women to engage in-depth with inquiry on problems of practice. Differentiation can also relate to career stage, including induction and mentoring for early career teachers through to teacher leadership opportunities for experienced teachers. Overall, The State of Educators’ Professional Learning in Canada study findings indicate that “there is no one size fits all” approach to professional learning and nor should there be. Teachers are engaging in a range of professional learning activities differentiated to their professional needs and inquiry processes to support their students’ needs.

Collaborative Learning Experiences

Summary of Research Literature

There is a strong consensus in the research literature about the importance of collaborative approaches to educators’ professional learning (Donohoo & Velasco, 2016; Sharratt & Planche, 2016). Collaboration among and between teachers, and among administrators and within and across schools and systems, can aid educators in navigating the complexities of adopting new strategies; serving as both a network of support and a source of new ideas and perspectives. As Darling-Hammond et al. (2009) pointed out, however, “historically, schools have been structured so that teachers work alone, rarely given time together to plan lessons, share instructional practices, assess students, design curriculum or make administrative or managerial decisions” (p. 11). As a response to the professional isolation of teaching and hierarchy of schools, Hord proposed the importance of developing professional learning communities, which she outlined as involving:

- the collegial and facilitative participation of the principal who shares leadership and thus, power and authority through inviting staff input in decision making;
- a shared vision that is developed from an unswerving commitment on the part of staff to students’ learning and that is consistently articulated and referenced for the staff’s work;
- collective learning among staff and application of the learning to solutions that address students’ needs;
- the visitation and review of each teacher’s classroom behavior by peers as a feedback and assistance activity to support individual and community improvement;
- physical conditions and human capacities that support such an operation. (Hord, 1997, p. 27).

When the content and processes of professional learning communities are effective (Bolam et al., 2005; DuFour & Eaker, 1998; Stoll et al., 2006), there can be benefits for school improvement, for teachers’ self-efficacy and practices, and for students’ learning. However, when professional learning communities become something that system or school leaders require all school staff to participate in with externally defined purpose and goals and with prescribed processes, the dangers of ‘contrived collegiality’ (Hargreaves, 1994) emerge:

Contrived collegiality is characterized by formal, specific bureaucratic procedures to increase the attention being given to joint teacher planning and other forms of working together. (Hargreaves & Fullan, 2012, p. 118).
The original intent and continuing development of professional learning communities is not intended to be ‘contrived’; in essence, professional learning communities are – or should be – about engaging, developing, and supporting teachers in order to improve schools and to benefit students’ learning. This is consistent with the key characteristics of professional learning communities identified in research reviews (Bolam et al., 2005).

Hence, professional learning communities and collaborative professional learning involves consideration of opportunities to develop the collective efficacy of the teaching profession, not just individual talent development. As Hargreaves and Fullan (2012) argue “you cannot increase human capital just by focusing on it in isolation” (p.89). However, it is not simply collaboration that is required; it is forms of collaboration that enable co-learning, co-development, and joint work for educators. As Hargreaves and Fullan (2012, p. 112) outline:

Not all kinds of collaboration are equally effective, though. Judith Warren Little (1993) has set out a continuum of collaboration from weaker to stronger forms. These comprise:

- **Scanning and storytelling** – exchanging ideas, anecdotes, and gossip
- **Help and assistance** – usually when asked
- **Sharing** – of material and teaching strategies
- **Joint work** – where teachers teach, plan, or inquire into teaching together

If collaboration is limited to anecdotes, giving help only when asked, or pooling existing ideas without examining or extending them, she says, collaboration will reproduce the status quo instead of challenging it. It is ultimately joint work that leads to improvement through exploring challenging questions about practice together – although other kinds of collaboration may be prerequisites for it.

Effective and authentic collaborative professional learning has been linked to improved professional knowledge, skills, and practices (CUREE, 2012; Cordingley et al, 2015; Lieberman & Wood, 2003) and increased expectations for student learning (McLaughlin & Talbert, 2001; 2006).

**Findings from The State of Educators’ Professional Learning in Canada Study**

In our research, as indicated in the previous section, collaborative learning experiences were valued. For instance, in a survey about professional development and self-efficacy conducted for the ATA, 80% of respondents reported their best professional learning as “collaboration with colleagues” (Beauchamp, et al., 2014). Examples of collaborative professional learning opportunities exist within and across all levels of the education systems in Canada: international, across provinces and territories, within provinces and territories, within and across districts and schools, and school-based.

At the provincial level, for example, Departments/ Ministries of Education in Newfoundland and Labrador (Professional Learning Newfoundland and Labrador, 2015), Nova Scotia (Nova Scotia Department of Education and Early Childhood Development, 2013), and Prince Edward Island (Prince Edward Island Department of Education and Early Childhood Development, 2013) have emphasized the importance of collaboration for school improvement and professional development. Within provinces and territories, networks have been developed to support collaboration. One example of a university partnering to support collaboration is Teachers in Action, a partnership project between Memorial University of Newfoundland and HMDC (Goodnough, Pelech & Stordy, 2014; Goodnough et al., 2016). Supporting 80-100 teachers per year from across Newfoundland and Labrador, the four overall goals are: a) enhancing teacher learning and classroom practice in K-9 science, technology, engineering, and mathematics (STEM); b) fostering high levels of STEM literacy in primary/elementary children; c) creating a model of teacher professional
learning that reflects current research about how people learn, with particular emphasis on STEM education, and; d) fostering communication and collaboration among stakeholders at all levels in STEM education. Teachers define research areas based on professional interests and classroom needs, make decisions about their own professional needs, work collaboratively in school-based teams, and engage in cycles of planning, acting, observing, and reflecting.

Teachers’ organizations are also providing opportunities to support school collaborative learning and inquiry. For instance, the ATA were involved in initiating two international collaborations. Launched in 2011, the FINAL partnership between Alberta and Finland is a joint venture of the ATA, Alberta Education, and the Ministry of Education in Finland. Focusing on the overarching question of “what makes a good school,” the project was conceived as a way for teachers and school administrators to gain cross-cultural learning experiences with the purpose of generating transformational educational reform from the bottom-up (Lam & Shirley, 2012). The project partners Alberta schools with schools in Finland. A second international network – NORCAN – brings together schools from Alberta and Ontario in Canada and Norway.

Within Canada, networks and collaboration within provinces are also being supported. For example, using funding from the Ontario Ministry of Education, the Ontario English Catholic Teachers’ Association (OECTA) funds and supports Collaborative Learning Communities (CLCs) (OECTA, 2012). According to an interviewee, the purpose of CLCs is to enable teachers to meet in groups to discuss mutual interests and concerns about teaching and learning.” Teachers can submit applications for projects on topics connected to differentiated instruction, early learning, French, math, literacy, technology, social justice, and virtues. In our interviews with teachers participating in CLCs, participants were highly positive about the opportunity for teachers to collaborate on a priority need that they had identified and have the time and opportunity for shared dialogue, inquiry, and learning.

Across our research, we found evidence of benefits from collaborative professional learning for the teachers involved with a focus also on supporting their students’ learning experiences and outcomes. The State of Educators’ Professional Learning in Canada study findings indicate the value and prominence of a range of collaborative professional learning opportunities within and across schools and wider professional networks. However, as discussed below, there are challenges of time and supports for collaborative professional learning opportunities integrated within the working day and work lives of educators.

**Job-Embedded Learning**

**Summary of Research Literature**

Teacher professional development has historically been an “add-on” activity often disconnected from the daily work-life of teachers. Separated from school contexts and networks of peers, such approaches yielded little for supporting the actual development of the teaching profession or changes in classroom practice (Garet et al., 2008, 2010; Rafael et al., 2014). There has, therefore, been increasing attention to “job-embedded” professional learning. Opfer (2016) conducted analyses of the TALIS findings (OECD, 2014) to examine the differences between non-school embedded and school embedded professional development. According to Opfer, non-school embedded are activities understood to “pull teachers out of their schools and classrooms in order for them to learn a new technique or skill” (Opfer, 2016, p. 12). Examples include conferences, workshops, in-service training, and qualification programmes. Opfer reports that, on the whole, teachers participated in these types of professional development activities more than other kinds of professional development. By contrast, school embedded professional development activities include professional development networks,
undertaking collaborative research on problems of practices, peer observation, and coaching; Opfer notes that these activities are more closely aligned with the literature indicating that “ongoing, intensive and collaborative activities…have a greater impact on teaching practice” (Opfer, 2016, p. 12). Opfer (2016) reports that there is an inverse relationship in participation between the two types of professional development: “systems where teachers report high levels of participation in school embedded PD also tend to be the systems where teachers report lower levels of participation in non-school embedded PD; and vice versa” (p. 15).

Opfer (2016) suggests that teachers’ own beliefs and sense of efficacy may affect the types of professional development that they participate in. Furthermore, teachers’ engagement in job-embedded professional development can be affected by school leadership actions and school conditions. According to Opfer (2016, p. 21):

Results from TALIS 2013 are thus consistent with the available literature on conditions that support teacher participation in more effective types of professional development. When teachers have high levels of co-operation in a school, they tend to participate more often in professional development that is co-operative, sustained and focused on problems of their practice. Likewise, when there is more instructionally focused leadership action taking place in the school, teachers are more likely to participate in more effective types of professional development. When teachers lack these conditions, they are more likely to participate in less effective professional development that takes place outside of their school environment. The consistency of the relationships across these conditions suggests that there could be types of schools where engagement in different types of professional development activities takes place.

Rooted in problems of practice, job-embedded learning is intended to provide authentic, contextualized opportunities for educators to engage in inquiry learning around the immediate work they do with their students (Croft et al., 2010).

Findings from The State of Educators’ Professional Learning in Canada Study

Across our case study interviews, a key element of effective professional learning was that it is practical and relevant to teachers’ need. In focus groups conducted with a total of 79 participants for our British Columbia case study, “relevant” was the second most important factor for effective professional learning (time was the first).

One potentially powerful approach to relevant and practical job-embedded professional learning is through induction and mentoring for new teachers. A pan-Canadian analysis by Kutsyuruba et al. (2013) showed that “support in the form of either induction based programs and policies and/or mentoring related support exists in all Canadian provinces” (p. 48). However, only Ontario and the Northwest Territories require teachers to participate in a formal induction program and the Yukon requires teachers to complete 50 hours of professional learning to receive their permanent teaching certificate. In most jurisdictions, induction and mentoring is a more informal process that takes a variety of forms including beginning teacher conferences and mentoring programs operated by teachers’ organizations (Alberta, Manitoba, Saskatchewan, New Brunswick, Nova Scotia) or hybrid programs jointly run by school boards and professional organizations, which are sometimes funded (at least in part) by the Ministry (British Columbia, Yukon, Quebec, Prince Edward Island, Nunavut, Newfoundland and Labrador). Kutsyuruba et al.’s (2013) report also indicated that many school boards across the country operated their own induction and mentoring programs, with varying
levels of support for new teachers. However, there can be considerable variation within provinces and between districts. It is very concerning that 71% of teachers responding to Kamanzi, Riopel and Lessard’s (2007) survey of teachers across Canada had not been offered any mentoring activities.

Concerns about local inconsistencies in availability of mentoring contributed to the development of the New Teacher Mentorship Project (NTMP) in British Columbia, funded by the Ministry of Education and developed in partnership between the BCTF, the University of British Columbia, and the British Columbia School Superintendents Association (BCSAA). Since its inception in 2012, the NTMP has provided mentorship opportunities for 270 beginning teachers and mentor teachers in pilot programs, and additional in-service and post-secondary educational learning opportunities for several hundred educators through a variety of workshops and institutes (New Teacher Mentoring Project, 2016). The NTMP advocates that beginning teachers’ professional learning models “be responsive to the diversity and distinctiveness of district cultures and practices in all regions of BC,” “ensure that mentorship is non-evaluative and non-remedial, and that participation is voluntary,” and emphasize “learning through inquiry and critical reflection on practice” (Mentoring BC, 2016).

Concurrent with the work of the NTMP, there is a longitudinal research initiative carried out by the UBC Faculty of Education: Pedagogical Assemblage: Building and sustaining teacher capacity through mentoring programs in British Columbia. Among the preliminary findings of this research was the necessity of respecting the diverse and particular “place based” needs of British Columbia’s beginning teachers—whose geographical circumstances range from inner city urban to rural settings and encompass the complex needs and demographic characteristics of the students they serve. Effective and sustainable mentorship programs are also expected to take into account “reciprocal professional learning communities, the complexity of teachers’ needs, the variety of inquiry foci, increasing cultures of collaboration among schools, teachers and students, and effective leadership” (New Teacher Mentoring Project, 2016, p. 7).

In Ontario, all first-year new teachers hired to a permanent contract are expected to participate in the New Teacher Induction Program (NTIP). Established in 2006 and funded by the Ministry, NTIP is informed by four goals to enhance teachers’ efficacy, practice, confidence, and commitment to continuous learning. NTIP includes three components: 1) an orientation to the school and school board; 2) ongoing mentoring by more experienced teachers throughout the first year (with option for a second year also) and; 3) professional development and training appropriate to the needs of new teachers. Principals conduct two performance appraisals throughout the first twelve months, and if not satisfactory, teachers are given up to twenty-four months to improve. Mentorship is voluntary, although school administrators may invite individuals to take on the role to support a beginning teacher or teachers may identify and invite someone to be their mentor. Mentees may also select to develop a “mentoring web” involving more than one mentor. Mentors are provided with support and professional development also by the Ministry and/or school boards. In line with the personalized and learning-focused nature of the mentorship program, there are no formal requirements with respect to activities. Mentors and mentees select activities based on the professional learning plan they co-create. Shared release time for mentors and new teachers to collaborate is provided by the NTIP and can be used for co-planning, classroom observation, and collaborative assessment of student work, among other areas. Mentors and mentees interviewed for this study described shared release time as highly beneficial. They also described learning opportunities in the classroom as having one of the most significant impacts on mutual professional learning. As well as practical support, providing emotional support, such as encouragement and empathetic listening, was emphasized by all of the mentors as a critical aspect of their roles. Participation in the mentorship
program has reciprocal professional learning value, as it necessitates self-reflection for both mentors and mentees.

Outside of formal mentoring programs, opportunities for peer coaching and mentorship can also be valuable. For example, Dr. Donald Massey school in Alberta has undertaken a range of approaches to peer coaching over the past six years. Together, the peer mentors decided which classes they were going to observe each other teach and what kinds of practices they wanted to be coached on. Pairs were intentionally cross-graded to eliminate the feeling of being judged by someone teaching the same grade level. Teachers were paired throughout the whole year and the administration supported the project by providing release time for the classroom visits and post-visit debriefing sessions. Classroom visits were also videotaped so teachers could watch and reflect on their lesson with the critical friendship of their mentoring partner. The focus in Dr. Donald Massey school later expanded from one-on-one mentoring to larger team collaboration.

Opportunities for peer coaching, observation of classroom teaching, and feedback can be powerful and important. However, peer mentoring or coaching is not a widespread practice. In a survey of elementary teachers in Ontario (Directions Evidence and Policy Research Group, 2014), less than 25% of respondents indicated that they were involved in peer coaching, mentoring, or peer observation activities during the past year. More commonly, observations and feedback appear to be the responsibility of the school principal. In the 2013 TALIS, 93% of junior high school teachers surveyed in Alberta responded that they received formal or informal feedback from a number of different sources; however, they were considerably more likely to have received that feedback from their principal – 81% of teacher responses in Alberta compared with TALIS average of 54% (Alberta Education, 2014, pp. 7, 103). Of concern, from those teachers who reported receiving feedback, only 51-60% reported positive impacts on their confidence, motivation, and job satisfaction, compared with the TALIS average of 63-70% (OECD, 2013, p. 1). In addition, fewer teachers in Alberta (compared to the TALIS average response) reported that the feedback they received led to positive changes in their teacher practices (52%, compared to 62% TALIS average), their methods for teaching for students identified as having special needs (39%, compared to 45% TALIS average), or their use of student assessment to improve student learning (54%, compared to 59% TALIS average) (OECD, 2013, p. 2). The further development of appropriate mentoring and use of feedback appears needed.

As well as school-based, “job-embedded” professional learning, it is important to recognize that professional development can be ‘embedded’ in relevant and practical learning without being physically located within a school or classroom.

Our interviewees commented on the importance of opportunities for teachers to get out of their own school and to expand their professional networks, to learn new ideas, to see new practices and to access new resources, for example through conferences, workshops, institutes, participating in professional organizations, completing graduate studies, or other qualifications. Increasingly, social media and online networking are important and valued activities. For example, interviewees spoke positively about the collaborative and practical learning through TeachOntario, an online platform for teachers.

Overall, The State of Educators’ Professional Learning in Canada study findings indicate that importance of professional learning that is relevant and practical for teachers. Professional development can be “embedded” in someone’s work without being physically located within someone’s workplace; rather the importance is new learning and co-learning that has the potential to be embedded in the professional’s needs and can contribute to changes in their knowledge, skills, and practices.
5.1.3 SUPPORT AND SUSTAINABILITY

Finally, attention to providing support and sustainability for effective professional learning is required from the outset. Specifically, effective approaches for professional learning need to have sustained duration over time, adequate resourcing and access to external support, and supportive and engaged leadership within schools and education systems.

Ongoing in Duration

Summary of Research Literature

Shifts in thinking and changes in attitudes and practice do not happen quickly; rather, time is essential for teachers to challenge existing methods, experiment with new ideas, and evaluate the fit of new strategies and practices with respect to the needs of their students. As Timperley (2008) noted, this cyclic, reflective process may be new for many teachers and often requires the development of a specific set of “professional, self-regulatory inquiry skills so that they can collect relevant evidence, use it to inquire into the effectiveness of their teaching, and make continuing adjustments to their practice” (p.24). Consequently, professional learning opportunities are more likely to have a positive impact in the classroom if they are ongoing and provide teachers with multiple opportunities for collaborative and meaningful activities (Cordingley et al., 2015; CUREE, 2012; Darling-Hammond et al., 2009; Timperley, 2008).

According to Jensen et al.’s (2016) analyses, “creating time” for professional learning is a key strategy for education systems seeking to improve teachers’ practices and students’ learning. There are three important aspects of time. First is the actual amount of time teachers spend engaged in professional learning activities. Based on a review of relevant research, Darling-Hammond et al. (2009, p. 9) concluded:

An analysis of well-designed experimental studies found that a set of programs which offered substantial contact hours of professional development (ranging from 30 to 100 hours in total) spread over six to 12 months showed a positive and significant effect on student achievement gains. According to the research, these intensive professional development efforts that offered an average of 49 hours in a year boosted student achievement by approximately 21 percentile points. Other efforts that involved a limited amount of professional development (ranging from 5 to 14 hours in total) showed no statistically significant effect on student learning.

The second aspect of time is the balance of hours spent on direct teaching activities contrasted with time for teachers’ professional learning and development within the regular work week. For example, on average teachers in countries participating in the 2013 TALIS spent 19 hours per week on instructional and related activities; by contrast, in Jensen et al.’s analyses (2016), teachers in Shanghai spent 10-12 hours teaching, teachers in Singapore and Hong Kong spent 17 hours, and teachers in British Columbia spent 22-23 hours. The fact that teachers in British Columbia have less dedicated time for professional learning, yet British Columbia is a relatively high performing by international measures of student performance is noted by Jensen et al. (2016), who suggest that the provision of time within specific professional learning activities, such as spirals of inquiry (Halbert & Kaser, 2013), is an important factor. Hence, a third key aspect to sustained duration is the time for professional learning integrated into the regular school day, as is the case in Finland (Sahlberg, 2011, 2016; Hammerness, Ahtianen & Sahlberg, 2017) and Singapore (Low, Goodwin & Darling-Hammond, 2017). Furthermore, it is not simply a matter of quantity of time; sustained professional learning needs to be cumulative in offering a progression of knowledge, skills, and practice development over time (Darling-Hammond et al., 2009). As Hargreaves and Fullan (2012, p. 92) summarize, “What is crucial is what happens between workshops.”
Findings from The State of Educators’ Professional Learning in Canada Study

In general, teachers across Canada spend an average of two hours during the work week on professional learning (see Table 11). What is less clear is how much of this time is formally scheduled into the instructional day. For example, in Prince Edward Island, of the 1.54 hours reported during weekday hours; 0.4 hours are during the school day and 1.14 hours are before or after the official school day (Macdonald et al., 2010); therefore, teachers in Prince Edwards Island spend almost triple the time on professional development before or after the school day compared to within the school day (and almost double the time during the weekend compared to within the school day).

Table 11:
Hours full-time teachers dedicate to professional development in a regular work week

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Weekday hours (before/during/after school)</th>
<th>Weekend hours</th>
<th>Hours during summer holidays</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Brunswick</td>
<td>1-2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Saskatchewan (a)</td>
<td>2.68</td>
<td>0.43</td>
<td>-</td>
</tr>
<tr>
<td>Saskatchewan (b)</td>
<td>-</td>
<td>n/a</td>
<td>8.6</td>
</tr>
<tr>
<td>Ontario (a)</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ontario (b)</td>
<td>2.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ontario (c)</td>
<td>2.18</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PEI</td>
<td>1.54</td>
<td>0.71</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Sources:
Saskatchewan (a): Joint Committee, 2015, p. 11
Saskatchewan (b): Saskatchewan Teachers’ Federation, 2013, pp. 14, 20
Ontario (a): Leithwood, 2006, p. 55
Ontario (b): OECTA, 2006, p. 5
Ontario (c): Directions Evidence and Policy Research Group, 2014
PEI: Macdonald et al., 2010, pp. 124-26
While collaborative professional learning is highly valued, concerns about time for collaboration were identified across our case studies. For example, in Alberta, alongside moves to emphasize school-based professional learning communities, issues of time and scheduling have been identified; in 2014, only 21% of Professional Development Chairs reported time for professional learning communities during the normal school day and 18% reported that no specific scheduled time existed (ATA, 2015). Nevertheless, some districts and schools have been creatively attempting to address issues of time for collaborative professional learning. For example, after eliciting feedback from the staff, the leadership team at Jasper Place High School in Alberta decided that teachers needed more time to interact with and learn from each other and to collaborate on learning issues to reach all students. The regular monthly staff meeting was replaced with weekly, 50-minute professional learning meetings before school. Five days from the regular school schedule were replaced by ‘alternative learning opportunities’ (ALOs) where teachers could spend half the day on their own self-directed action research projects and the other half of the day was provided for students to have flexible learning and enrichment experiences. Another example of creating time for learning across schools was the Edmonton Public West 6 network, Alberta. Finding themselves facing similar issues regarding poverty, transience, and English as a Second Language learners, the schools felt that they needed more time for teachers to work together. To facilitate learning across the schools, time was embedded into the regular school day, which had been re-organized to facilitate a 1pm dismissal every Thursday. One Thursday a month was used for school staff meetings and two others were used for School Specific Learning (SSL). SSLs could be used for individual school-based learning but they could also involve teams of schools. Once a month, teachers also gathered to work in inter-school teams called Planning and Sharing Networks (PSNs). In the beginning the groups were arranged by grade level or subject area but have since moved to cross-curricular topics of teacher interest that are decided upon by the teachers themselves.

While there are examples of promising practices to address the need for professional development time, issues of time, workload, and work intensification were major themes across our case studies. For example, in the British Columbia focus groups, time was consistently the top response with respect to enabling and challenging conditions for professional learning. Participants viewed the insufficiency of time, with respect to release time from regular work duties, and general adequacy of time within their respective roles and schedules, as central challenges and needs for professional learning. Release time, ample peer collaboration time, and professional development days were cited as specific time provisions that could be enhanced or more effectively leveraged.

The issue of time for sustained duration of professional development is not simply about number of hours dedicated to professional learning activities, but also about the balance of overall time involved in a teachers’ daily work compared to time available for their own development. If time is to be added for professional learning, time needs to be reduced for other activities. While Jensen et al.’s (2016) analyses focused on teaching time, the bigger issue is the overall hours spent working and how much of that time is for ongoing professional learning. In the 2013 TALIS survey (OECD, 2014), teachers in Alberta reported working 48.2 hours per week, compared to an average work week of 38.44 hours across the 35 participating countries and above the 44.8 hours per week reported by U.S. teachers. Other surveys of teachers’ workload in Alberta (ATA, 2012) and Ontario (OECTA, 2006) have indicated work weeks of approximately 55 hours. Hence, the provision of dedicated professional activity or development days is important and is generally contained within collective agreements negotiated by teachers’ organizations. The number and use of these days
varies. For example, the negotiated number of professional development days in Canada range from 20 days per school year in Quebec to 3 days in Newfoundland and in Saskatchewan (Bellini, 2014). In many jurisdictions, these days are often a combination of broader district-based initiatives and localized school-based days. In some instances, like Alberta and Prince Edward Island, the teachers’ organizations are also provided with regional or province-wide close out days to host an annual teacher convention. In Quebec, Manitoba, and Nova Scotia, some of these days can also be used by teachers for self-directed professional learning. Self-directed learning days in other provinces are either a provision of federation-operated professional learning funds or individual school board policies that make allowances for one or two individually directed learning days per teacher per year. In the Northwest Territories, for example, teachers can also apply for Education Leaves with Allowances to devote a year to pursuing a course of study either onsite or online.

Therefore, despite challenges and constraints, the vast majority of teachers across Canada are spending time on professional development. Taking the examples in Table 11, if an average teacher spends 2 hours per work week over the period of an average school year, teachers are engaged in approximately 76 hours of professional development (plus additional time over weekends and the summer). This quantity of professional learning is within the range identified as impactful for teachers’ learning and students’ outcomes by Darling-Hammond et al. (2009) if it is sustained, cumulative, quality learning. Across the research we have conducted, there is strong support for sustained inquiry and professional learning, both for individual teacher action research projects and for collaborative learning communities and equivalents, supported with external expertise, resources, funding, and time. An analyses of professional development in Ontario noted that “workshop series raised awareness, but transfer is not guaranteed without time, follow-up and coaching support in assessment practices” (Bodkin et al., 2013, p. 25). Nevertheless, generally, the longest specific professional development program we reviewed was one year to 18 months in duration. Most specific professional development is shorter in duration, sometimes a one day or part of day event, sometimes a sequence over a specific time period. Hence, there is a vital need to carefully consider and plan for a coherent sequence of cumulative and sustained professional learning, which can be achieved through a flexible series of activities and/or through engagement in longer-term programs. A particular challenge was identified for teachers who do not have a full-time contract; during periods of unemployment or short-term employment, teachers may not have access to (or ability to afford) professional learning opportunities which may be beneficial to support their continued development and enhance their career prospects.

Therefore, while the study findings include promising and creative practices for scheduling, release time, and professional development days to support professional learning, issues and challenges of time were prevalent and require further attention to ensure that professional learning can be integrated into teachers’ working hours.

Overall, The State of Educators’ Professional Learning in Canada study findings indicate the importance of ensuring availability of time for sustained, cumulative professional learning is integrated within educators’ work lives.

**Resources**

**Summary of Research Literature**

The need to provide teachers with high-quality professional development that is properly resourced is recognized in the professional learning literature (Cordingley et al., 2015; Timperley et al., 2007; Timperley, 2008). Without adequate resourcing, and the effective management of such resources, the aim to develop and implement a high quality teaching profession may not be
fully realized (Odden & Picus, 2014). Concrete examples include: not being able to access the professional development opportunities due to lack of funds to cover the costs; insufficient time to attend professional development or to make use of resources provided; and difficulties locating qualified personnel both to provide professional development and also to provide coverage to enable teachers to leave their classrooms. Alongside adequate funding, therefore, is also the importance of access to the professional resources of expertise. External support can be important to model, demonstrate, and develop new knowledge, skills, and practices and also to challenge existing mind-sets and practices (Cordingley et al., 2015; CUREE, 2012; Timperley, 2008).

Findings from The State of Educators’ Professional Learning in Canada Study

Given that funding varies between and within provinces and territories and by differing collective agreements, it is difficult to calculate the overall expenditure on professional development in Canada. This is further complicated by the fact that generally, professional development funds may be wrapped into broader funding packages or allocated in ways that allow flexibility on what the actual funds are used for. As we reviewed available evidence, there were many cases of professional learning funds from one organization (e.g., ministry or department) being given to another (e.g., district, professional organization, or private contractor) to develop or deliver professional learning. As teachers perceive an increasing proportion of their professional development is ‘mandated’ or directed by the education system they work in, the provision of government, district, or school resources to support release time, professional learning activities, and resources is vital. Generally, Ministries are providing funding for required provincial professional development activities within funding to school districts, professional organizations, and/or professional development consortia and providers. For example, in Ontario, the Education Programs – Other (EPO) funding for 2016-17 included $79.4 million allocated across 22 designated priority programs plus a further $60 million dedicated to a Renewed Math Strategy (Ontario Ministry of Education, 2016a). A substantial proportion of this combined $139.4 million in funding was connected in some way to professional learning, whether provision of professional development activities, purchase of resources to support school improvement, teaching and learning, or hiring and allocation of specialist staffing, including lead teachers and coaches or equivalent. Nevertheless, the exact distribution of funding is determined locally within school districts. Funding for professional learning can also be generated and provided by professional associations. Mainly funded by members’ contributions, the ATA spent over $9 million on professional development related activities in 2015-16, including funding for 21 specialist councils, ten convention associations that each plan and provide an annual two-day convention, and sponsoring fellowships and scholarships (ATA, 2016b). As well as funding and provision through government and professional organizations, teachers also pay personally out of their own pockets for a range of professional learning activities and resources. Overall, considering all forms of funding linked to professional learning and development, we conservatively calculate that at least half a billion dollars are spent on professional development for educators each year in Canada. This is a substantial sum; however, in light of concerns and challenges about funding it may actually not be optimal and, for some individuals in some contexts, even sufficient.

Every teacher organization in Canada has negotiated provisions for professional development in their collective agreements. In many instances this takes the form of a professional development fund provided to the federation from the Ministry to support the implementation of a variety of teacher organization operated professional learning opportunities, for example in Quebec, Nova Scotia,
and all three of the territories (Northwestern Territories, Nunavut, Yukon). The nature of collective agreements and funding for professional development, however, varies markedly. Variations between available funding and decisions on how to allocate funding were a major source of concern in our Manitoba focus groups. A study by MTS in 2010 raised the following concerns:

…professional development (PD) appears to be accessed on a random basis due to the way funds are allocated. In some cases, the school division may choose to maintain direct control over all PD funds. In others, it is a combination of divisional/school control via the administrator. Only a few associations have a clause within their collective agreement that provides the association with control of the allocated funds and thus provides its members with professional autonomy. (MTS, 2010, p. 23).

In subsequent negotiations and collective bargaining, concerns about ensuring Locals were involved in professional development decisions have been central. The current Manitoba Teachers’ Society Handbook includes the clause:

**8.4 Local Responsibility for Professional Development**

Each Local shall establish and maintain a professional development committee whose responsibilities include:

(a) having the committee chair also be a table officer of the Local executive;

(b) promoting the importance of professional development within the Local;

(c) ensuring that authorized days are available and used for professional development; and

(d) being involved in the management of professional development funds received from the province (MTS, 2016a, pp. 125-126).

In our Manitoba focus groups, the concerns were not only about decision making; they were also about significant variation in the absolute and relative levels of funding between Locals. As one interviewee commented: “$200 in Winnipeg is not the same as $200 in the North.” For teachers in rural communities, the funding available could be insufficient to pay for supply cover, costs for purchasing professional development (such as conference fees), and travel if it was required. Similarly, analyses of funding in British Columbia identified considerable variability:

Maple Ridge-Pitt Meadows School District teachers can access $75 per person for one year’s professional development (and 30% of that is funded by the Maple Ridge Teachers’ Association), while Sooke teachers get $100. In Rocky Mountain School District, their annual PD funds are $255 per teacher, and $340 in Sea-to-Sky. (Naylor, 2011, p. 2).

In contrast to most provinces and territories, provisions for teachers’ professional development have not been updated recently in British Columbia collective agreements; hence, “the funding that is allocated to teachers’ professional development has not changed since the early ‘90s, and the “buying power” of these funds has been reduced considerably over the years, thus reducing professional development opportunities for teachers” (BCTF, 2014, p. 3). On average, BCTF (2010) analyses suggests that in most districts and Locals in British Columbia, professional development funds are shared equally among teachers, usually resulting in a very low allocation of approximately $120 for each teacher. Contrast this with the Northwest Territories, where all teachers have access to choose professional development opportunities through regional funds; teachers can apply for reimbursement up to a maximum of $2500 per year for online distance credit courses and summer credit and non-credit courses. Hence, substantial variation exists in levels of professional development funding that can be accessed by individual teachers in Canada.
Provision of targeted funding and grants can influence take up of professional learning. For example, in Saskatchewan, the McDowell Foundation established by the STF has a budget of approximately $80,000 per year to support school-based research projects. Teams of teachers and school administrators can apply to the McDowell foundation for grants up to $20,000 in support of projects that address self-identified areas of inquiry. Often used to support the implementation of new and innovative classroom practices, past projects have included “Reclaiming our Cree Language through Oral Tradition” and “The impact of self-regulation strategies upon student learning.” Over 25 years, the McDowell Foundation has supported over 200 teacher-led research projects in Saskatchewan (McDowell Foundation, 2014-15). In Ontario in 2016, subsidies for AQs in mathematics resulted in over 5,000 teachers and other education professionals participating in these courses within one year. Nearly all participants (96%) indicated that the subsidy influenced their decision to take the math courses, and 32% indicated that they would have not taken the courses without the subsidy (Yashkina, 2016).

Despite existing funding for professional development in Canada, across our research, funding was identified as an obstacle for many teachers’ participation in self-directed professional development, particularly for teachers in remote and rural areas. Beginning teachers and those without a permanent contract may not be able to afford the costs of self-selected professional development. A further, compounding obstacle can be lack of availability, or access to, external expertise. Availability and costs of supply teachers to allow full-time teachers to leave their classrooms to participate in professional development is an issue (ATA, 2015; BCTF, 2014). Availability of expert external facilitators for professional development can also be an issue. Overall, The State of Educators’ Professional Learning in Canada study findings indicate that there are inequitable variations in access to funding for teachers’ self-directed professional development.

Supportive and Engaged Leadership

Summary of Research Literature

If a professional learning culture is to be sustained; school and system leaders need be actively engaged in creating, encouraging, and supporting this climate of shared learning and experimentation in the wider school and system contexts. Leadership is also essential in developing a coherent vision around professional learning that helps teachers connect their learning to wider priorities (Cordingley et al, 2015). School leaders play a significant role in supporting their own and teachers’ professional learning. Robinson, Hohepa and Lloyd’s (2009) best evidence synthesis of 134 studies to examine School Leadership and Student Outcomes: Identifying what works and why identified the importance of “pedagogical leadership” with the most impactful practice by school leaders being “promoting and participating in teacher learning and development” (pp. 38 – 39). The relative impact of this leadership practice for student outcomes was calculated to have an effect size of 0.84, double the effect size of the next two most impactful practices – “establishing goals and expectations” and “planning, coordinating and evaluating teaching and the curriculum” – each with an effect size of 0.42. Timperley (2008) identified the importance of school leaders working with teachers to assess student learning needs and decide appropriate directions for school-based professional learning, creating an atmosphere of collective responsibility for student learning to drive professional learning, and ensuring that adequate resources are in place to support the initiatives that are decided upon. Leadership and professional learning related to these practices are important for contributing to improvements in teachers’ capacities and for student outcomes. School leaders can also have a critical role in developing school-wide professional learning communities, as Hord (1997, p. 6) proposed: “It seems clear that transforming the school organization into a
learning community can be done only with the leaders’ sanction and active nurturing of the entire staff’s development as a community.” School and district leaders can also play a vital role in encouraging and facilitating teacher leadership (Leithwood & Seashore-Louis, 2012). More broadly, formal leaders acting as advocates for the importance of professional learning and creating system and school supports for effective approaches to educators’ learning is vital. For these formal leaders, their own professional learning can benefit from being part of a wider network of leaders extending beyond their individual school or district (Robinson et al., 2009).

**Findings from The State of Educators’ Professional Learning in Canada Study**

Across Canada, professional development is considered to be a legal right and responsibility of the teaching profession (Bellini, 2014). Throughout the research we have conducted, system leaders at the provincial level, in regions and in districts, and school leaders were actively engaged in supporting and contributing to teachers’ professional learning, as well as their own learning. Frequently, professional associations for system and school leaders, such as Directors of Education, Supervisory Officers, Trustees, Principals, and Vice-Principals, are collaboratively engaged in contributing to the development and/or delivery of professional learning opportunities. For example, in response to the new British Columbia curriculum, a Curriculum Framework Development Team including representatives from BCTF, Ministry of Education, BC School Superintendents Association (BCSSA), and BCPVPA was established.

Within the daily work of teachers, the learning context and conditions provided by district and school leaders mattered. Across the promising practices we have highlighted, the appropriate engagement of formal leaders mattered; sometimes by being actively involved, sometimes in a facilitating or enabling role, and sometimes by not being involved to enable teachers to lead their own learning. For example, in Elk Island School Division, Alberta, rather than being in charge of developing professional development for teachers, principals now see themselves as supporting teachers in identifying their own learning needs and providing access to time and other required resources. Teachers in our case studies appreciated when school, district, and provincial leaders supported their professional learning, took an interest in what they were learning, and celebrated their work. How formal leaders supported professional learning varied and there were some tensions in conceptualization and practice. Concepts of distributed leadership were sometimes referred to suggest an inclusive learning culture engaging all, for example in the new focus on collaborative professionalism in Ontario (Ontario Ministry of Education, 2016b). Supportive and engaged leadership could be interpreted as formal leaders championing and co-learning with their staff, with positive intent and outcomes. However, for some teachers, formal leaders’ attempts in provinces, districts, and/or schools to create coherence and coordination could be perceived as controlling and undermining teachers’ own professional judgement.

Importantly, formal leaders in schools and districts also require support for their own professional learning. For teachers who select a career trajectory into formal leadership roles and administrative responsibilities, there are qualifications, professional development requirements, and professional standards associated with the principalship and superintendency in Canada. An Ontario Leadership Strategy and Ontario Leadership Framework (OLF) include the five key domains of leadership practices – setting directions; building relationships and developing people; developing the organization; leading the instructional program; and securing accountability – and three personal leadership resources (cognitive, social, and
psychological) that are intended to inform the work and development of school and district leaders (Leithwood, 2012). Principals and vice principals in Ontario must attain principals’ qualifications by completing the Principals’ Qualification Program (PQP). Participants self-fund their participation in PQP courses. The program is accredited by OCT and consists of two parts, each totaling 125 hours, plus a practicum. In British Columbia, the BCPVPA’s Professional Learning mandate is to support principals and vice-principals in the critical role they play in education by continuing to research, develop, and implement professional learning opportunities designed to align with the BCPVPA Leadership Standards (BCPVPA, 2015), the needs of members as revealed in periodic needs ongoing program evaluations, and the goals and objectives of Association’s strategic plan. There are three feature programs that have been developed to support members in the field: 1) Supervision for Learning Program (SFL) Level 1; 2) Leadership Standards; and 3) Short Course.

School and system leaders are also engaged in active and variable learning, collaborative learning, and job-embedded learning experiences, as consistent with our features of effective professional learning. Across our case studies, we heard of the desire for, and importance of, professional learning opportunities, time, and resources for leaders throughout the education system. School leaders can benefit from opportunities to engage in collaborative learning communities within and beyond their school building. For example, Ontario’s Leading Student Achievement (LSA) initiative involves principals working in professional learning communities (PLCs) within their school and principal learning teams (PLTs) with principals across their school districts. Research indicates that principals found involvement in both their school’s PLCs and district’s PLTs beneficial (Massey & Kokis, 2010). Using a seven-point rating scale (1 = strongly disagree, 7 = strongly disagree) principals rated the effect of PLCs on informing them of areas of need for improvement and providing direction to their improvement process very highly (average rating of 6.15 out of 7). Principals were even more positive about the value of district PLTs where principals and district leaders come together to develop their instructional leadership capacities. The overall rating for: “Participation in a principal learning team is beneficial to me” was 6.37; and the overall rating for “Participation in a principal learning team has improved my own instructional leadership capacities” was 6.16 (Massey & Kokis, 2010, p. 13). These are high impact ratings indicating the benefits of collaborative learning experiences.

Nevertheless, as with our evidence concerning teachers, school and system leaders across our case studies commented on challenges and issues of time, work load, and work intensification which could be obstacles to engaging in their own professional learning, as well as facilitating and enabling their teachers’ and other staffs’ professional development. As well as time concerns, the availability of external support and/or mentoring for leaders at different stages in their career trajectory was noted. There are formal leadership frameworks and standards in Canada for vice-principals and principals and for district officials; of note, while some districts have developed specific supports, there is a lack of dedicated professional development and leadership supports for ‘middle leaders’ such as Heads of Department, Instructional Coaches, Curriculum Coordinators, or specialist teachers across Canada.

Overall, the study findings indicate the importance of system and school leaders supporting professionals’ learning and being supported to be engaged in their own learning.
5.1.4 SUMMARY OF KEY FINDINGS FROM EDUCATORS’ EXPERIENCES OF ENGAGING IN PROFESSIONAL LEARNING IN CANADA

Across the evidence, experiences, and examples of educators’ professional learning that we have researched in Canada, we found practices consistent with the ten principles of effective professional learning that we had previously identified in our review of research literature (Table 1). There are many commonalities between current policies, practices, challenges, and contentions within Canada and wider debates and developments for educators’ professional learning internationally. However, we have also identified some differences in conception and application of the features of effective professional learning within Canada. Sometimes these differences reflect the details of implementation within and across diverse contexts and for diverse professionals’ and students’ needs. However, these differences can go beyond minor nuances or adaptations to indicate important differences in the underpinning values and understanding of the purposes and intended outcomes of effective professional learning, and in the details of diverse practices within and across Canada. As outlined in Table 1, we highlight ten key findings concerning educators’ experiences of professional learning in Canada:

- Evidence, inquiry, and professional judgement are informing professional learning policies and practices.
- The priority area identified by teachers for developing their knowledge and practices is how to support diverse learners’ needs.
- A focus on a broad range of students’ and professionals’ learning outcomes is important.
- The appropriate balance of system-directed and self-directed professional development for teachers is complex and contested.
- There is “no one size fits all” approach to professional learning; teachers are engaging in multiple opportunities for professional learning and inquiry with differentiation for their professional needs.
- Collaborative learning experiences are highly valued and prevalent within and across schools and wider professional networks.
- Teachers value professional learning that is relevant and practical for their work; “job-embedded” should not mean school-based exclusively, as opportunities to engage with external colleagues and learning opportunities matter also.
- Time for sustained, cumulative professional learning integrated within educators’ work lives requires attention.
- Inequitable variations in access to funding for teachers’ self-selected professional development are problematic.
- System and school leaders have important roles in supporting professional learning for teachers and for themselves.
5.2 Case Studies of Approaches to Professional Learning and Development in Provinces

As well as seeking to identify and examine evidence concerning educators’ professional learning across Canada, we conducted in-depth case studies in the provinces of Alberta (Osmond-Johnson, Zeichner & Campbell, 2017), British Columbia (Brown et al., 2016 & 2017) and Ontario (Campbell et al., forthcoming/2017). Below we provide a summary of key themes contained within each case study report.

5.2.1 ALBERTA

As Canada’s fourth most populated province, Alberta is a multilingual and ethnically diverse province with a population of 4.1 million people. Children can attend private or charter schools, though 97% of the province’s 690,844 students are enrolled in one of the 2,388 publicly funded schools, approximately 9% of whom identify as First Nations, Metis, or Inuit (FNMI). (Alberta Education, 2016a).

The provincial Ministry of Education, known as Alberta Education, is responsible for developing curriculum, overseeing assessment, and setting the policy direction for education, including making provisions for the funding of public education (which is heavily influenced by the province’s reliance on the fluctuating oil industry). Local governance is the responsibility of 63 publicly-funded school authorities: 42 public boards, 17 separate boards, and 4 francophone boards (Alberta Education, 2016b). All of the approximately 40,000 teachers and administrators employed by school boards in Alberta are members of the Alberta Teachers’ Association (ATA), the only teacher organization in the province.

For much of Alberta’s history, the educational climate has been one of collaboration, consultation, and high regard for the teaching profession. Opportunities for teachers’ professional development in Alberta are vast; a combination of district-led, school-based, and teacher-selected learning experiences. Each district is required to submit a three-year strategic plan to Alberta Education. This plan outlines the major goals of the district and, as such, district-led professional development typically serves to aid the district in meeting these goals. Similarly, schools must submit yearly improvement plans to the district which guide the content of school-based professional learning. The Teacher Growth, Supervision, and Evaluation Policy (Alberta Education, 2015) requires all employed teachers to complete an annual growth plan that outlines learning goals and activities the teacher intends to engage in over the next year. Teachers may identify a combination of district, school-based, and self-selected learning experiences to facilitate the plan.

While there is no minimum number of required professional development hours, in many districts, access to a minimum number of paid professional development days is guaranteed through the collective bargaining process at the local level. These days are typically a combination of district-led and school-based initiatives, often provided by the Alberta Regional Professional Development Consortia (ARPDC), which were established in 1997 to serve as hubs for professional development services at the local, regional, and provincial level. Some collective bargaining agreements also allow professional leaves for study purposes at a university and individual teachers in most ATA locals can also apply for monetary assistance to partake in conferences, workshops, seminars, or other self-selected professional development. Some districts have additionally established their own professional development polices, re-organizing the school calendar to create additional time for job-embedded teacher collaboration through early-release of students or whole days where students are not attending school.

From 2000 to 2014, teacher professional learning in Alberta was heavily influenced by the AISI. Described as a “Learning Mosaic” by Hargreaves...
et al. (2009), at its core AISI was a variety of government-funded, teacher led action-research projects aimed at improving student learning. The success of AISI was measured from a number of perspectives including student achievement (which increased across the province), the development of curricular resources, improved understandings of pedagogy, an increased focus on student outcomes, and the emergence of teachers as leaders in Alberta’s education system (Gunn et al., 2011; Hargreaves et al., 2009; Parsons and Beauchamp, 2012; Parsons, McRae, & Taylor; 2006). According to Shirley and McEwan (2009), it was the movement away from a conservative and traditional route of professional growth towards a “more collective understanding of peer learning” (p. 55) that made the AISI model so successful.

Building on insights gained from AISI, in 2006 the ATA partnered with Alberta Education, the ARPDC, the Alberta School Boards Association (ASBA), the College of Alberta School Superintendents, and Alberta Universities to develop *A Guide to Comprehensive Professional Development Planning* (2006), which emphasized that professional development planning should encompass a broad range of activities to balance the needs of the individual, the school, and the district. To achieve this, professional development in Alberta has typically taken many forms: action research, classroom observation, mentoring, coaching, study groups, conferences, curriculum development, post-secondary courses, workshops, seminars, and collaborative learning experiences. The ATA (2010) also developed a framework that identified three components that should be present in all professional development opportunities:

1. **Process** – professional development should encourage teachers to explore, reflect critically on their practice, and take risks in the planning and delivery of curriculum.

2. **Content** – utilize current research highlighting effective teaching and learning strategies.

3. **Context** – regardless of the professional development activity, a teacher’s professionalism is recognized as well as their judgment in determining their needs.

Over the past few years, however, the educational climate in the province has become somewhat more contentious. An initiative of the Ministry of Education launched a Task Force for Teacher Excellence in 2013 to make recommendations on the future of Alberta’s teaching profession in light of a new vision for education which had been previously outlined though a collaborative province-wide consultation process known as *Inspiring Education* (Alberta Education, 2010). While the ATA supported a number of the Task Force’s recommendations, including a proposed mentorship framework for teachers, school, and district leaders and the acknowledgement that teachers require additional time for collaboration and sharing amongst colleagues, several of the Task Force’s recommendations, including the recommendation that a professional college be created to handle issues of misconduct and professional competence, were met with much opposition from the ATA. Furthermore, while public support for the vision for education articulated in *Inspiring Education* was initially strong, concerns about the pace at which educational change in the province was occurring were raised by parents, students, and teachers alike and, leading in to the election of 2015, the government paused efforts to address any of the Task Force recommendations.

Moreover, after a series of budget cuts to education, funding for AISI ended in 2014, leaving individual districts and schools to build the next generation of collaborative, teacher-led professional development in Alberta without any formalized government support. While some forms of current professional development carry the spirit and essence of AISI, the lack of provincial level policy around job-embedded and collaborative teacher learning has limited access to such experiences. Also, the degree to which teachers have professional autonomy
to develop and meet the learning goals in their growth plans varies across the system. For instance, in the ATA's bi-annual survey of Professional Development Chairs from 2010 to 2014, fewer than 50% of respondents indicated that teachers enjoy a high degree of autonomy (ATA, 2015). In the ATA's 2016 member survey, approximately 30% of the over 800 respondents indicated that that they disagree (22.49%) or strongly disagree (7.65%) that their school district recognizes their need to determine their own professional growth priorities (ATA, 2016a).

In sum, professional development in Alberta appears to be largely up to the discretion of the district, the school, and lastly, individual teachers, and there is variation both within and across districts in the professional development that is provided. The teachers and school administrators whom we interviewed were highly supportive of the variable learning experiences afforded to them by their districts and the ATA. It was clear that their experiences had supported their individual development as well as collaborative learning and development of the education profession. Unfortunately, this is not the reality for every teacher in Alberta. Rather, despite all of the professional development opportunities that exist, teachers in Alberta do not have equal access to high-quality learning experiences nor are they always able to take advantage of what is available because of the intensity of their work lives.

5.2.2 BRITISH COLUMBIA

To learn more about the state of professional learning in British Columbia, including the experiences and values of teachers, administrators, trustees, school business officials, and other educators, education organizations formed the B.C. Education Collaborative (BCEC)—comprised of the Association of B.C. Deans of Education (ABCDE), B.C. Association of School Business Officials (BCASBO), B.C. Principals’ and Vice-Principals’ Association (BCPVPA), B.C. Teachers’ Federation (BCTF), B.C. School Superintendents Association (BCSSA), B.C. School Trustees Association (BCSTA), the Federation of Independent School Associations (FISA), Learning Forward BC (LFBC), and the Ministry of Education (MOE). These organizations worked collaboratively to construct a comprehensive overview and analysis of British Columbia’s education system and the state of professional learning in the province.

In 2015–16, there were 635,037 K–12 students in British Columbia, the large majority of which (87%) were in public schools (BC Ministry of Education, 2016a). Over half (53%) of British Columbia’s total population of 4.7 million people (BC Stats, 2016) resides in the Vancouver Census Metropolitan area. Total student enrolment has declined over the past 15 years (Schaefer, 2009; BC Ministry of Education, 2016b); however, public school enrolment in the 2015–16 school year increased (BC Ministry of Education, 2016b) and demographic trends project future annual enrolment increases (BC Stats, 2016; BC Stats, 2015).

The British Columbia School Act provides the provincial legislative framework for public education in British Columbia (Government of British Columbia, 1996a). The School Act establishes provisions for, inter alia: student, parental, school personnel, and school trustees’ rights and obligations; teachers’ collective agreements; establishment and governance of school boards, and the responsibilities and obligations of publicly-elected school trustees; and taxation and grants (Government of British Columbia, 1996a). Funding for public and independent schools is comprised of residential, non-residential, and other school taxation revenue collected at the provincial level and provided to school districts and independent schools based on an allocation formula. Funding of public schools is primarily provided from provincial government general revenues. Government funding is allocated on a per pupil basis. Other formulae generate additional funding in recognition of the diverse geography of the province and student
characteristics (e.g., special needs, English Language Learners, Aboriginal status). Total estimated public expenditures for K–12 educations in 2015–16 totaled $5.4 billion (Government of British Columbia, 2016). Eligible independent (private) schools in British Columbia receive public funding, provided as per-student grants. The Independent School Act in British Columbia governs grant allocation for independent schools as well as requirements and oversight of independent schools operating in BC (Government of British Columbia, 1996b). Independent schools receive grants according to their group classification; Group 1 schools receive 50% and Group 2 schools receive 35% of the local district’s per student grant (BC Ministry of Education, 2016a). Independent schools receive grants according to their group classification; Group 1 schools receive 50% and Group 2 schools receive 35% of the local district’s per student grant (BC Ministry of Education, 2016a). Independent schools receive grants according to their group classification; Group 1 schools receive 50% and Group 2 schools receive 35% of the local district’s per student grant (BC Ministry of Education, 2016a). Independent schools receive grants according to their group classification; Group 1 schools receive 50% and Group 2 schools receive 35% of the local district’s per student grant (BC Ministry of Education, 2016a).

Sixty (60) elected school boards govern the delivery of educational programs in public school districts. Fifty-nine (59) of these districts represent distinct geographic areas and the sixtieth encompasses all francophone schools throughout the province. Student enrolment in francophone schools numbered 5,333 in 2015-16 (BC Ministry of Education, 2016c). School districts have specific areas of authority, including budget setting, hiring of personnel, and maintenance of district capital assets, but they have limited authority over the terms of conditions of the work of teachers, curriculum, assessment, and taxation (Government of British Columbia, 1996b). In addition to public and independent schools, there are 128 First Nations controlled schools in 67 First Nations communities throughout British Columbia (First Nations Education Steering Committee & First Nations Schools Association, 2015). The schools “are founded upon First Nations cultures and languages, and they strive to reflect the values and traditions of the communities they serve” (p. 10).

The Teacher Regulation Branch (TRB) of the Ministry of Education administratively supports regulatory decisions-makers in carrying out their responsibilities under the Teachers Act for licensure and discipline of persons holding teaching certificates. The TRB reports that over 70,000 people currently hold valid teaching certificates (Teacher Regulation Branch, 2016). The certificate holder population includes teachers and administrators in both the public and independent systems. Non-practicing educators are able to maintain certification through payment of an annual fee. The Teacher Qualification Service (TQS) classifies teachers for salary purposes based on qualifications. The TQS is jointly funded and governed by the BCSTA and the BCTF.

British Columbia’s teachers are highly academically and professionally trained and certified. With the exception of fewer than 100 persons who are granted annual permission to teach for a limited period in specified teaching areas under Letters of Permission issued by the Teacher Regulation Branch, the province’s teachers possess undergraduate degrees that align with curriculum content areas and have completed teacher education programs that meet certification requirements for work in the education sector. From 2010 to 2015, 9,000 teachers upgraded to higher categories on the salary scale through further formal qualifications, out of the total (by headcount) teaching force (not including Teachers Teaching on Call (TTOCs) of 33,008 (BC Ministry of Education, 2016d; Teacher Qualification Service, 2007-2016).

The British Columbia Case Study highlights key professional learning initiatives across a diverse range of educational organizations in the province. Educators in British Columbia avail themselves of a wide variety of professional learning opportunities. All teachers in public schools belong to the BCTF - the largest provincial teachers’ organization in Canada - as a condition of their employment. Independent school teachers, and school and district leaders, belong to their respective professional associations: principals and
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vice-principals belong to the BCPVPA; senior district educators belong to the BCSSA; and senior staff working in the area of school finance and operations areas belong to the BCASBO. Each of these associations offers robust programs of professional learning targeted at the needs of their members. Post-secondary institutions in British Columbia, Canada, and the United States are also significant providers of professional learning for teachers and educators. British Columbia’s educators also avail themselves of learning opportunities provided by private providers and through a myriad of informal networks at the school, district, provincial, and international levels.

The BCEC undertook focus groups with BCEC member participants to identify and characterize British Columbia’s educators’ professional learning experiences, challenges, and promising practices so as to inform future dialogue and organizational planning. The main themes identified are outlined in Figure 7. Summary findings from the BC case study include:

1. Broadly held consensus that meaningful professional learning addresses student achievement, learning needs, and social/cultural contexts; cultivates knowledge generation and mobilization; and builds professional capital and human capacities.

2. Characterization of effective professional learning as purposeful in its design, content, process, and application stages, and striving to attain alignment and balance between individual/personal and community/systemic needs.

3. Consensus that effective professional learning design is long term, embedded in one’s work context and incorporates high quality facilitators who are knowledgeable, engaging, and skilled, and who ground their approaches in research-based content and practices.

4. Strong acknowledgment that tangible resources required to support the intentions and implementation of professional learning principles and activities are essential for a healthy professional learning culture. Participants identified lack of time, funding, and resources as the most significant material challenges regarding professional learning initiatives.

5. Participants expressed the need for cultivating a supportive culture for quality professional learning—namely, acknowledging the diversity of interests and needs of participants, and providing a wide range of choices and “entry points” for developing knowledge, skills, and critical understanding.

Figure 7: Key Themes in British Columbia Education Collaborative Case Study of Professional Learning in British Columbia
Key considerations identified in further developing professional learning included: the need for educational organizations to more effectively identify, share, and learn from the many “promising practices” currently in play throughout British Columbia’s geographic regions, and across role groups whose participants encompass not only teachers and administrators but also school business officials, trustees, and higher education faculty; how to enable professional learning stakeholders to work collaboratively towards improving systemic coherence and alignment while acknowledging and respecting the diversity of individual educators’ needs, contexts, and aspirations; and the need to address the lack of time and resources which are systemic obstacles to achieving high quality, sustainable professional learning experiences.

5.2.3 ONTARIO

Ontario spans over one million square kilometers with a population of over 13.5 million people. Ninety-five percent (95%) of school-age children (over 2 million students) attend the publicly funded education system, which is comprised of four education systems (English public, English Catholic, French public, French Catholic) involving almost 5,000 schools across 72 school boards and 11 school authorities. Twenty-seven percent (27%) of students in Ontario were born outside of Canada. Twenty percent (20%) of students self-identify as members of a visible minority and 4.5% of Ontario students are French speaking. In 2015-2016, there were: 123,578.96 full-time equivalent (FTE) teachers and long-term occasional (LTO) teachers; 7,313.02 FTE administrators (principals and vice-principals); and 9,032.26 FTE early childhood educators (ECE) and 538.51 LTO ECEs working in Ontario’s publicly funded education system (Ontario Ministry of Education, 2017).

The Ministry of Education administers the system of publicly funded elementary and secondary school education, in accordance with and under the authority of the Education Act (2014). Ontario has a provincially developed and implemented curriculum K-12, with advice from the Curriculum Council and linked provincial assessments administered by the Education Quality and Accountability Office (EQAO) in Grades 3 and 6 for reading, writing, and math, grade 9 math (academic and applied), and a grade 10 literacy test. District school boards, involving professional officials and elected trustees, govern the province’s publicly funded schools. School councils are elected each year as local advisory boards comprised of parents, students, community members, school staff (both teaching and non-teaching), and a school administrator.

Established in 1944, all public teachers are required to be members of the Ontario Teacher’s Federation (OTF) and a member of one of four affiliate teacher organizations depending on the education system in which they are working or affiliated. Principals and vice principals are not part of the teachers’ federations. Rather, there are additional professional organizations for administrators who can voluntarily become members of one of three principals’ associations. In 1997, the Ontario College of Teachers (OCT) was established to regulate the teaching profession in the public interest. All teachers in Ontario’s publicly funded school system are licensed by OCT and are expected to uphold Standards of Professional Practice for Teachers (Commitment to Students and Student Learning; Professional Knowledge; Professional Practice; and Leadership in Learning Communities) and Ethical Standards (Care; Respect; Trust; and Integrity).

In 2003, a Liberal government was elected with a commitment to improvements in public education as the top priority. After a decade of reform, under the leadership of a new Premier who was a former Minister of Education, Kathleen Wynne; the Ministry of Education embarked on an extensive consultation process in 2013-14. This resulted in a renewed vision, Achieving Excellence, with four priority goals: achieving excellence; ensuring equity; promoting well-being; and enhancing public
Throughout the recent education strategies, there has been a strong commitment to professional learning. Initially coined in the phrase “capacity building with a focus on results,” the intention was a system-wide strategy of professional learning and development that would support improvements in literacy, numeracy, and high school graduation (Fullan, 2010). More recently, the language has shifted to “collaborative professionalism” to value and engage formal and informal leadership and professional learning in a new style and substance of working together for educational improvement (Ontario Ministry of Education, 2016b).

In 2005, a Working Table on Teacher Development was established to bring together the Ministry and professional organizations. Based on a review of research (Broad & Evans, 2006), five characteristics were recommended for the design and provision of professional learning for Ontario’s teachers: coherent; attentive to adult learning styles; goal oriented; sustainable; and evidence-informed. These characteristics have informed key provincial policies and practices supporting the development of teachers and teaching for over a decade.

All first-year new teachers hired to a permanent contract and long-term occasional teachers with an assignment of a minimum of four months are expected to participate in the New Teacher Induction Program (NTIP). Key themes emerged from the interview data about the experiences and benefits of NTIP including: mutual, collaborative learning for mentors and mentees; holistic support for new teachers (professional, practical, and emotional); and varied and job-embedded learning connected to teachers’ work, such as classroom observation and co-teaching. Challenges included accessing mentor support, particularly in rural areas, and creating time and opportunities to build relationships.

Over 90% of elementary teachers indicated participating in professional learning activities outside of regular working hours; activities included a balance between individual research or participation in additional qualifications or study, as well as collaborative professional learning activities, including participation in learning networks with other teachers, collaborative professional research, and/or mentoring or coaching activities. There are concerns about available time for professional learning and workload challenges for teachers (OECTA, 2006) and principals (Pollock et al., 2014).

The government’s education strategies generally include resources and support for professional development for Early Childhood Educators (ECEs), teachers, and school and/or district leaders as appropriate. Two of the major student achievement strategies have been the development of a Literacy and Numeracy Strategy with a focus on improving instruction and learning in elementary schools, and a Student Success/Learning to 18 Strategy with changes in programs and pathways to support high school students through transitions in schooling and to succeed in graduating from high school. In 2016-17, the Ministry announced $60 million in funding for professional learning linked to a Renewed Math Strategy.

Partnership working between the Ministry and teachers’ federations is also important. One example is the Teacher Learning and Leadership Program (TLLP), which is developed and delivered by the Ministry and OTF with shared goals to:

- support experienced teachers undertaking self-directed advanced professional development;
- develop teachers’ leadership skills for sharing their professional learning and exemplary practices; and
- facilitate knowledge exchange for spread and sustainability of practices.

Very high satisfaction rates for the professional learning provided by the TLLP have been
reported with the vast majority of participants indicating benefits for their professional learning and practices, for their leadership skills, for collaborating and sharing knowledge and practices, and for students’ learning (Lieberman, Campbell & Yashkina, 2017).

The teachers’ federations are considered a trusted source of professional learning “by teachers, for teachers.” Teacher “choice” and “voice” are considered vital. There is a rejection of the notion of a “one size fits all” approach to professional learning; the need for flexibility and differentiation to meet teachers’ needs is emphasized by teachers’ federations. Teachers’ self-directed professional learning is considered important, as well as opportunities for teachers to expand their development and networks beyond their own school and/or school district. The importance of access to workshops and conferences is valued, as is the provision of Additional Qualifications (AQs) to support teachers in developing specific knowledge and skills in over 350 topics, and opportunities to engage in collaborative inquiry and teacher action research projects.

For teachers who select to move into administrative roles, there is a range of supports and resources through the Ontario Leadership Strategy. The Ontario Leadership Framework (OLF) includes leadership practices for school and system leaders, plus personal leadership resources. Through the OLS, each school district in Ontario is provided with funding and support to develop and implement a Board Leadership Development Strategy (BLDS) which focuses on developing school and system leaders. Principals and vice principals must attain principals’ qualifications by completing the Principals’ Qualification Program (PQP). As part of their succession planning, many school districts offer a leadership development program. In addition to formal principal development programs linked to career stage, school leaders have opportunities to engage in a range of professional development opportunities. One example is Leading Student Achievement (LSA), led by the principals’ associations, which involves principals working in teams at three levels – provincial, district, and school – to develop instructional leadership. Benefits of participating in these three levels of professional learning teams have been reported by principals involved (Massey & Kokis, 2010).

School districts receive funding from the Ministry to support Professional Activity (PA) days and school district-led professional development. Districts select how to use this funding connected to provincial priorities and district improvement plans. For example, in Simcoe District School Board in 2016-17, all schools are required to participate in a centrally-funded system inquiry connected to innovation in STEAM (science, technology, engineering, arts, and mathematics) and to select one inquiry connected to either Transforming Assessment Through Technology or Leveraging Digital Tools for Deep Learning. In addition, schools can also develop collaborative inquiries connected to schools’ and their teachers’ and students’ needs.

Therefore, educators in Ontario have access to a wide variety of Ministry, school district, school, and/or self-directed professional development. Given the major focus in Ontario on improving student outcomes, both raising achievement and closing gaps in performance, it is not surprising that a focus on student outcomes and on linked subject and pedagogical knowledge is present. This is influenced particularly by the Ministry’s strategies and also in the funding that they allocate for linked capacity building activities to school districts and to teachers’ federations and professional associations. A current focus on mathematics permeates the priorities for professional development.

The Ministry has prioritized the importance of professional learning with varying emphases and approaches. Teachers, school administrators, district officials, teachers’ federations, and professional associations appreciated the investment in supporting professional development. While funding for targeted priorities is important,
there are concerns that prioritizing funding on specific subjects or outcomes may reduce the availability of access and resources for quality professional learning in other educational areas. However, educators can also engage in a wider range of content foci, for example concerning differentiated instruction, technology, social justice concerns, and self-directed inquiry and research, through teacher-led and/or teacher federation-supported professional learning opportunities. Nevertheless, challenges of time and funding remain. Teachers without a full-time contract and early career teachers were reported to find the costs associated with some forms of formal professional development expensive. Pressures of workload and work intensification are felt by teachers and principals. External support, whether from professional colleagues and/or from formal providers, was welcomed. Sustainability could also be a challenge; however, examples of professional learning which enabled reflection, inquiry, co-learning, collaboration, new knowledge, application, and adaption of changes in practice were sustaining improved knowledge, skills, and practices with benefits for educators and students. In conclusion, Ontario has prioritized developing professionals’ learning and capacity in order to support students’ learning, equity, and well-being.

5.2.4 LESSONS FROM ALBERTA, BRITISH COLUMBIA, AND ONTARIO CASE STUDIES

There is a large volume and range of types of professional development available. Across our case studies, governments played an important role in the direction, culture, and funding of professional development. However, the role varied. The Ontario Ministry of Education is perhaps the most directly involved in the direction and provision of professional development. With goals to increase student achievement and reduce gaps in student achievement, the Ontario Ministry of Education has changed and developed its own internal structure and capacity and partnered with professional organizations across the province to design and deliver an extensive range of professional development linked to provincial goals and initiatives. In British Columbia, the Ministry envisages its role as providing vision and strategic direction coupled with supports for the sector. While the B.C. Ministry does deliver some professional development directly, in the main, the Ministry’s primary role is not direct delivery of professional development but rather funding professional organizations and professional development providers when provincial professional development is needed, as with the current new curriculum implementation. Alberta Education does not currently have a strong, direct role in professional development provision; rather, funding is provided to regional consortia and to districts and schools. Following the ending of the AISI, the need for teacher-led, district- and school-based professional development has become a priority. Approaches to collaboration and partnership working have been cultivated. Partnership working of course requires time, trust, and continued attention. In Ontario, a Working Table on Teacher Development brought together all of the professional organizations and the Ministry to co-develop teacher development policies. In Alberta, professional organizations came together to design a guide to comprehensive professional development planning. In British Columbia, in response to curriculum changes, professional organizations and the Ministry have collaborated to design provincial curriculum implementation days. For this research study itself, the BCEC have worked together as a collaboration of key associations and organizations.

All teachers belong to teachers’ organizations. In Alberta, teachers and vice-principals/principals are part of one association. Whereas in British Columbia and Ontario, teachers belong to a federation and other educators belong to a professional organizations depending on their role/position. The need to support professional learning for all educators is important. Professional organizations are large, active providers of a range of quality professional learning opportunities.
Each province also provides career development for teachers from initial education in faculties of education through to supports for new teachers, opportunities for experienced teachers to continue their development and potentially their leadership, and formal routes, qualifications, and requirements into administrative positions in schools and school districts. The details of these policies vary and there can also be variations at local levels, such as between school districts.

Three main challenges were common, although differed in detail, across the case studies: an appropriate balance between system direction and professional autonomy; time and workload issues for engaging in professional development; and high variability in funding for professional development with changing political and economic circumstances at the provincial level, with substantial variations in provision within and between local areas, and in availability of funds to support teachers’ self-directed professional learning. Overall, professional learning is considered important in each province with ongoing concerns for further improvement in professionals’ development and for students’ learning and equity of outcomes.
6. | Conclusions

This study sought to investigate “What is the current state of educators’ professional learning in Canada?” Key sub-questions addressed were:

1. Why is a study of the state of professional learning in Canada needed and important?
2. What does existing research literature and available international, national, and provincial/territorial data indicate about the nature, experiences, and quality of professional learning within Canada?
3. What can be identified about the experiences of educators’ engagements in professional learning? What benefits, challenges, and potentially promising practices from educators’ experiences of professional learning can be identified?
4. How are school and system leaders engaging in and enabling professional learning within schools and for teachers?
5. What are the enabling conditions (policies, resources, capacity) for supporting research-based best practices for professional learning?
6. What implications arise from this study for the development of professional capital to enhance educators’ and students’ learning and to further advance and improve the state of professional learning in Canada?

We summarize our answers to these questions below.

6.1 Why Is a Study of Professional Learning in Canada Needed and Important?

Professional learning and development are high priorities internationally and within Canada. We have sought to comprehensively review available policy and professional documents, websites, data, and other relevant resources within and across Canada, supplemented by new fieldwork including survey items in New Brunswick, focus groups in Manitoba, and case studies in Alberta, British Columbia, and Ontario.

While there is no one “Canadian” approach to education or to professional learning, as a country, Canada values the importance of education and wider social, economic, and cultural policies to support the development of the people in Canada. Education policies and practices vary between and within provinces and territories. There are, however, important pan-Canadian organizations seeking to consider education across Canada, including the Council of Ministers of Education (CMEC), Canadian Association of Principals (CAP), and Canadian Teachers’ Federation (CTF).

The purpose of our study was not to argue for a national education strategy or a uniform approach across Canada. Rather it was the opposite; it was to value, appreciate and respect the rich mosaic of educational experiences and the diversity of approaches and outcomes from professional learning within and across provinces and territories. The purpose was to learn with and from each other.
As one of our interviewees expressed:

... we would have a belief that there's lots to learn from a study like this, bringing forward examples from the rest of the country as a national community...

Another commented:

... just as we are saying we would like educators to de-privatize their practice, you're deprivatizing provincial practices. How wonderful is that? To network our networks.

While each province and territory is different, we have identified that there are lessons to learn, opportunities to collaborate, and possibilities to co-learn from our different – or similar – approaches to professional learning. Our work with an Advisory Group, with CTF, and with other partners across Canada has already demonstrated considerable interest in learning with and from each other. If we do not raise Canadian voices and experiences to the forefront, much of the international debate will continue to be informed from evidence generated outside of Canada; yet, with considerable influence currently within educational policies being developed and adapted within Canada. We hope this report will stimulate further collaborative dialogue and actions.

6.2 What Is the Evidence Concerning Experiences and Examples of Educators’ Professional Learning in Canada?

In this section, we discuss our overall conclusions to the following three research questions:

- What does existing research literature and available international, national and provincial/territorial data indicate about the nature, experiences, and quality of professional learning in Canada?

- What can be identified about the experiences of educators’ engagements in professional learning? What benefits, challenges, and potentially promising practices from educators’ experiences of professional learning can be identified?

- How are school and system leaders engaging in and enabling professional learning within schools and for teachers?

Based on our review of relevant research literatures, meta-analyses and syntheses, we identified ten features of effective professional learning (see Table 1): evidence-informed; subject-specific and pedagogical content knowledge; a focus on student outcomes; a balance of teacher voice and system coherence; active and variable learning; collaborative learning experiences; job-embedded learning; ongoing in duration; resources and external support; and supportive and engaged leadership. We found evidence of all of these features in our research in Canada. However, based on the research we have conducted, there are differences in the details of approaches to professional learning within and across Canada, contrasted to the ten features identified from our review of previously existing research. While it is not possible to generalize for the whole of Canada, we discuss our main findings below.
6.2.2 The Priority Area Identified by Teachers for Developing Their Knowledge and Practices Is How to Support Diverse Learners’ Needs

The priority professional learning needs identified by teachers were knowledge, skills, and practices to support diverse learners’ needs, including attention to inclusion, diversity, and equity. A particular priority need to support teachers’ knowledge and understanding of Aboriginal people was identified. Subject and pedagogical knowledge continues to be important; however, the level of need varied by individual, career stage, school panel, and school systems. The need for, and access to, subject-specific pedagogical knowledge professional development was also affected by policy changes, especially new curriculum and integration of technology. Quality content matters and needs to be appropriate to the particular professional learning need; for example, formal courses to support science-specific knowledge and cultural teachings/school visits by an Elder/knowledge keeper to support knowledge of Aboriginal people.

6.2.3 A Focus on a Broad Range of Students’ and Professionals’ Learning Outcomes Is Important

The study’s findings indicate that valuing, respecting, and promoting a range of professionals’ and students’ outcomes is important in Canada. A focus on student outcomes was considered important in the content and intended benefits of professional learning. Professional learning focused on improving student achievement can benefit improved achievement results. Student achievement matters. However, there is a concern that outcomes should not be interpreted narrowly as achievement results primarily on standardized assessments or test scores; broader student learning, well-being, and equity processes and outcomes were also considered important to focus on and develop. Processes and outcomes related to professionals’ own efficacy, learning, practices, and well-being were also important to focus on and develop. Generally, professional learning content needed to develop teachers’ efficacy, knowledge, and practices in order to support students’ efficacy, engagement, learning, and equity of outcomes.

6.2.4 The Appropriate Balance of System-Directed and Self-Directed Professional Development for Teachers Is Complex and Contented

The balance of system-directed contrasting with self-directed professional development for teachers was one of the most prevalent and contentious themes in the study’s findings. In practice, teachers were engaged in both professional development provided or required by their school, district, or larger education system and also in self-directed professional learning. The majority of teachers appeared to have some opportunities for professional judgement and choice over some
aspects of their professional learning. The majority of professional development activities, however, were mainly required or directed by the province, district, or school. Perceptions of the extent of teachers' autonomy in their professional learning were mixed, but suggested a decline over time. Overall, the findings indicate that system- and school-directed professional development can be important to support current priorities; however, this needs to be balanced with flexibility for teachers (and other educators) to identify specific professional learning needs for themselves and linked to their students, schools, and contexts. Opportunities for teachers to lead their own, and their colleagues', learning can benefit individual and collective professional learning and support changes in practices to benefit students' learning.

6.2.5 THERE IS NO “ONE-SIZE-FITS-ALL” APPROACH TO PROFESSIONAL LEARNING; TEACHERS ARE ENGAGING IN MULTIPLE OPPORTUNITIES FOR PROFESSIONAL LEARNING AND INQUIRY WITH DIFFERENTIATION FOR THEIR PROFESSIONAL NEEDS

Like their students, teachers need access to multiple and varied opportunities to learn new content, gain insights, and apply new understandings. The vast majority of teachers in Canada (90% and above) were engaging in professional learning. A clear finding is that there is not a “one-size-fits-all” approach to professional development in Canada and nor should there be. Teachers were engaged in multiple and varied professional learning activities. Overall, workshops and collaborative professional learning opportunities were the predominant forms of activity; these were also perceived as the most beneficial forms of professional learning in surveys of teachers. Differentiation for professional learning needs, career stages, working contexts, and personal circumstances was important.

6.2.6 COLLABORATIVE LEARNING EXPERIENCES ARE HIGHLY VALUED AND PREVALENT WITHIN AND ACROSS SCHOOLS AND WIDER PROFESSIONAL NETWORKS

Collaborative learning experiences were valued by educators. Examples of collaborative professional learning opportunities exist within and across all levels of the education systems in Canada – internationally, across provinces and territories, within provinces and territories, within and across districts and schools, and school-based – and take many forms from system-initiated networks, school collaborations, and forms of professional learning communities to teacher-led communities of practices and inquiry processes. However, as discussed below, there were challenges of time and supports for collaborative professional learning opportunities integrated within the working day and work lives of educators.

6.2.7 TEACHERS VALUE PROFESSIONAL LEARNING THAT IS RELEVANT AND PRACTICAL FOR THEIR WORK; “JOB-EMBEDDED” SHOULD NOT MEAN SCHOOL-BASED EXCLUSIVELY AS OPPORTUNITIES TO ENGAGE WITH EXTERNAL COLLEAGUES AND LEARNING OPPORTUNITIES ALSO MATTER

The study findings indicate the importance of professional learning that was relevant and practical for teachers. Induction and mentoring for new teachers is an important form of practical and relevant professional learning with positive reciprocal benefits for mentors and mentees, including practical, professional, and emotional support. However, variable approaches across Canada meant that induction and mentoring were not available in all school districts and schools. Peer coaching is a valuable application of job-embedded professional learning. However, the study findings suggest that peer mentoring or coaching was not a widespread practice. The main source of feedback to teachers was from school principals as part of formal observations and appraisals. The further development of appropriate
mentoring and use of feedback is needed. As well as school-based, “job-embedded” professional learning, opportunities for teachers to get out of their own schools to engage in external networks, experiences, and learning mattered. Professional development can be “embedded” in someone’s work without being physically located within someone’s workplace; rather the importance is new learning and co-learning that has the potential to be embedded in the professional’s needs and can contribute to changes in their knowledge, skills, and practices.

### 6.2.8 Time for Sustained, Cumulative Professional Learning Integrated Within Educators’ Work Lives Requires Attention

Teachers in Canada spent an average of two hours during the work week on professional learning. This is equivalent to an average of 76 hours of professional learning time during the school year, which is within the range of time considered to have the potential for sustained impact on professional development and student learning if it is sustained, cumulative quality learning. However, the vast majority of professional development activities that teachers were engaged in are shorter-term, frequently a day or half-day or a series of days. There is a need to develop approaches which support a coherent sequence of cumulative and sustained professional learning, which can be achieved through a flexible series of activities and/or through engagement in longer-term programs.

Issues of time are not simply about number of hours dedicated to professional learning activities, but also about the balance of overall time involved in a teachers’ (and school and system leaders’) daily work compared to time available for their own development. If additional time is to be provided for professional development within the school day, there needs also to be attention to what other time is going to be reduced rather than further expanding workloads and absorbing work intensification. The study findings include promising and creative practices for scheduling, release time, and professional development days to support professional learning. However, issues and challenges of time were prevalent and require further attention to ensure that professional learning can be integrated into teachers’ working hours.

### 6.2.9 Inequitable Variations in Access to Funding for Teachers’ Self-Selected Professional Development Are Problematic

The availability and allocation of funding for professional development varied extensively within and across provinces, territories, districts, local associations, and schools. As teachers perceived an increasing proportion of their professional development was ‘mandated’ or directed by the education system they work in, the provision of government, district, or school resources to support release time and professional learning activities is vital. Targeted funding, subsidies, and grants can influence take up of specific professional learning opportunities. Every teacher organization in Canada has clauses concerning professional development in their collective agreements. However, the level of local professional development funds varied markedly. Adequacy of funding to cover the cost of professional development expenses, supply cover to enable teachers to leave their classroom, and travel (if required) were obstacles to participation, particularly in rural and remote areas and for beginning teachers or teachers without permanent contracts. Availability and costs of external expertise, in terms of supply cover and also professional development providers, were also obstacles to the provision and uptake of professional development. Overall, the study findings indicate that there were inequitable variations in access to funding for teachers’ self-directed professional development which requires attention.
6.2.10 System and School Leaders Have Important Roles in Supporting Professional Learning for Teachers and for Themselves

The study findings indicate that system leaders at the provincial level, in regions and in districts, and school leaders were actively engaged in supporting and contributing to teachers’ professional learning. Teachers appreciated when school, district, and provincial leaders supported their professional learning, took an interest in what they were learning, and celebrated their work. The appropriate engagement of formal leaders included consideration of when to be actively involved, when to be in a facilitating or enabling role, and when not to be directly involved to enable teachers to lead their own learning. Importantly, formal leaders in schools and districts also required support for their own professional learning.

Consistent with the findings for teachers, school and system leaders were engaged in and benefit from active and variable learning, collaborative learning, and job-embedded learning experiences. Challenges and issues of time, work load, and work intensification were identified as obstacles for system and school leaders engaging in their own professional learning, as well as facilitating and enabling their teachers’ and other staffs’ professional development. The availability of external support and/or mentoring for leaders at different stages in their career trajectory was also noted as a challenge. While there are formal leadership frameworks and standards in Canada for vice-principals and principals and for district officials, there is a need to further support ‘middle leaders’ such as Heads of Department, Instructional Coaches, Curriculum Coordinators, or specialist teachers.

6.3 What Enabling Conditions Are Present in Canada?

With regard to the question: “What are the enabling conditions for supporting research-based best practices for professional learning?” the study findings indicate high levels of support for the principle and practice of educators’ professional learning. Professional development is considered a legal right and responsibility for the teaching profession across Canada. Teachers in Canada are well-qualified; they have university-level qualifications in their pre-service and are expected to uphold high professional standards throughout their career. Commitments to collaboration and partnership working, while sometimes fragile, were common across Canada; including for creation and implementation of professional development policies, frameworks, standards, and programs. Collective agreements involving teachers’ federations varied in their detail concerning professional development rights and responsibilities. In all cases, however, professional organizations were playing an active role in advocating for, and providing, professional development to support their members. It is clear that the governments and Ministries/Departments of education also play a key role in developing (or not) enabling conditions for professional learning. In our case studies, government reforms of educational vision statements, curriculum, teaching policies, leadership frameworks, education strategies, and related initiatives all affected the context for, and content, of professional development.

More broadly, political and economic shifts in provinces and territories, and in Canada’s wider national and international context mattered. Canadians generally support education, including the professionals that work in education, and support expenditure and policies to support the
development and well-being of our children, young people, and adults. At the same time, economic downturns and austerity have affected the prioritization and level of funding for education in general and for professional development. Professional development conditions were also affected by social contexts; for example the importance of educators being equipped to support all students to succeed in highly diverse communities and classrooms, and the vital importance of acting on the Truth and Reconciliation Commission’s recommendations to ensure awareness and understanding of Aboriginal knowledge, history, culture, and traditions, and also to ensure Indigenous populations are better served by our current and future education systems. For educators, the political, economic, and social contexts of their work mattered. Furthermore, across our research, we also heard that the emotional contexts mattered. Whether teachers felt valued, trusted, and respected mattered and this included the specifics of the policies and conditions surrounding teachers’ ability to access, choose, and direct their professional learning. Educators are learners and a culture valuing professional learning is vital. This must move beyond general statements to substantive resource commitments to fund quality content and processes for professional learning, for release time, for supplying teachers to enable educators to leave their classrooms and schools, for access to expert facilitators for professional learning, and to ensure all educators have equitable access to high quality, differentiated, and practical professional learning experiences throughout their careers.

6.4 What Implications Arise from This Study to Further Advance and Improve the State of Educators’ Professional Learning in Canada?

We turn now to conclude with our final research question: What implications arise from this study to further advance and improve the state of educators’ professional learning in Canada?

The State of Educators’ Professional Learning in Canada study’s starting point was a recognition of the importance of educators’ professional learning, yet limited pan-Canadian research or data on this topic. Beyond the specific findings, perhaps as importantly, our study benefited tremendously from engaging in discussions within and across Canada, sharing of experiences, and potential for learning together. We encourage further pan-Canadian research, dialogue, and action in collaboration between research, professional, and policy communities.

In the context of debates and contention about approaches to teacher and leadership development globally and within Canada, this study investigated “what is the current state of educators’ professional learning in Canada?” The findings indicate a mosaic of professional learning experiences, opportunities, promising practices, and challenges within and across Canada. The research concludes that there is no “one size fits all” approach to professional learning and nor should there be; the findings indicate the importance of differentiation for professionals’ and students’ needs rather than standardization of approaches. Nevertheless, there are commonalities across the findings within
Canada linked to features of effective professional learning: the importance of combining evidence, inquiry, and professional judgement to inform professional learning; the priority of developing teachers’ knowledge and practices to support diverse learners’ needs; the valuing of a broad range of students’ and professionals’ learning outcomes; the need for relevant, practical, and collaborative learning experiences within and beyond school walls; and the role of system and school leaders in engaging in their own learning and supporting teachers’ and students’ learning. There are many exemplary and promising practices to share and learn from within Canada. There are also common challenges: time for professional learning integrated within the work day; inequities in access to, and funding for, professional learning; and contentions in the balance between system-directed and/or self-selected professional learning for teachers.

To address these challenges, our findings include examples from schools, districts, and systems that have successfully targeted funding for professional learning, resourced release time and professional development days, adapted school schedules for collaborative learning time, developed a range of professional learning encompassing system-, school- and self-directed opportunities, and created professional development experiences across career stages, professional needs, and personal circumstances. That is not to say that all issues have been addressed. Indeed, where there are persisting challenges, inequities, and issues, we suggest further dialogue and action are required across Canada to raise these priorities and seek solutions. The issues are not limited to only one location or one group; there is a priority need for collective attention and action.

The study’s conclusions are that the overall state of educators’ professional learning is vibrant – there is high interest and activity to support professional learning in Canada. The features of effective professional learning identified in the research literature review are evident within and across Canada. There are also opportunities for further development of professional learning including continued dialogue, sharing of promising practices, and attention to common challenges on a pan-Canadian level, as well as action within provinces and territories. This is vital to inform evidence grounded in practice of the possibilities for effective professionally-led professional learning on a global stage of debates concerning educator quality and development. It is our collective responsibility to ensure that Canada’s educators and students have equitable access to, and engagement in, the highest quality learning opportunities and experiences.
References


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APPENDIX 1:
State of Professional Learning in Canada: Study Methodology

The State of Professional Learning in Canada study employed a multi-method design in order to investigate educators’ professional learning across Canada. First, we conducted an extensive literature review of publicly available documents. This included a review of provincial and territorial policy documents concerning professional development practices and protocols, collective agreements between teacher federations and Departments of Education, and frameworks for professional learning (where available) for all ten provinces and three territories in Canada. In addition, we reviewed research reports and survey analyses from the CTF and their jurisdictional counterparts (professional associations, federations, and/or unions across Canada). We reviewed relevant pan-Canadian information from the Canadian Ministers of Education Council (CMEC), plus international analyses and comparisons of professional development through the OECD’s TALIS and PISA. A review of the academic literature was also completed using the following search terms within the University of Toronto’s online journal database: teacher professional development (name of jurisdiction); teacher professional learning (name of jurisdiction); teacher PD (name of jurisdiction); teacher professional learning Canada; teacher professional development Canada.

In light of limitations on the extent of publicly-available data concerning teachers’ professional learning across Canada, we decided also to contact individuals in each province and territory to seek their advice and access to other documents and data that may exist. Through CTF, we held two focus group conference calls with members of the National Teacher Education Research Network, involving a representative from teachers’ federation in Canada’s provinces and territories. We also asked our study’s Advisory Group to send relevant research, data, documents, and examples of promising practices (see Appendix 2 for invitation) and their professional networks. This resulted in submission of additional information (both publicly and not publicly available) from organizations located in eight provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Prince Edward Island, Newfoundland and Labrador), one territory (Northwest Territories), and one pan-Canadian organization (CTF). In addition, New Brunswick Teachers’ Association (NBTA) offered us the opportunity to add survey items to their NBTA Council Day survey; we designed new survey items focused on teachers’ professional learning (see Appendix 3) and received new survey items focused on teachers’ professional learning (see Appendix 3) and received responses from 741 survey participants. The Manitoba Teachers’ Society (MTS) also offered us the opportunity to gather original fieldwork during a MTS conference including their Professional Development Chairs; we conducted four focus groups in person including 41 MTS Professional Development Chairs. In addition, Manitoba Learning Forward participated in a focus group.

Further supplementing our reviews of literature, data and information across Canada, three in-depth case studies were conducted to gain deeper insights into the specific professional learning experiences of teachers in three jurisdictions: Alberta, Ontario, and British Columbia (B.C.). These jurisdictions were chosen in part because of their highly developed systems of professional learning and their strong performance on international measures of student achievement. While each case study aimed to utilize similar data collection techniques, the unique nature of organizational relationships, priorities, and educational practices in each jurisdiction resulted in nuances across the three cases with respect to data collection.

In Alberta, six focus groups (n=31) and two individual interviews (n=2) were conducted, for a sum of 33 participants. With respect to focus
groups, participants included 13 principals, 1 vice-principal, and 17 teachers. Focus groups varied, with some groups containing a mixture of teachers and administrators and others comprised of school administrators only. All participants in each focus group were involved in a specific professional learning initiative at either the school or the district level. Participants were primarily recruited through existing contacts with the Alberta Teachers' Association (ATA), who identified the groups as being involved in innovative teacher learning initiatives. Individual interviews were also conducted with a representative from the ATA who works in the area of professional development and an Executive Director of one of the Regional Professional Development Consortia. The case was also informed by existing data from interviews with a second Regional Consortia Director, the ATA's Director of Research and six teachers, which had been conducted for an earlier provincial case study on teacher policy (Zeichner, Hollar & Pisari, 2017). Interview data was supplemented with data from the ATA’s bi-annual professional development survey as well as a number of research reports and publicly available policy documents around teacher professional development in the province.

In Ontario, interviewees were selected based on their potential to discuss a range of perceptions and experiences of providing, contributing to, and/or engaging in professional development at the provincial level and/or in school districts, schools, and through professional networks. Two focus groups were held with government officials in the Ontario Ministry of Education – one with a cross-Ministry group responsible for transforming the Ministry’s approach to professional learning (n=5) and one with senior leaders in the Student Achievement Division responsible for approaches to professional learning linked to literacy, numeracy, and high school student success strategies across the province (n=4) for a total sample of 9 government officials. One of the government officials was also interviewed individually to provide greater details on teacher development policies. To reflect on the role of professional organizations, a focus group was held with representatives from Ontario’s three principals’ associations (n=3) and two individual interviews were conducted with relevant officials from teachers’ federations (n=2). Interviews were held with a range of district and school leaders (n=6) who had responsibility for aspects of professional development within their district, for example Supervisory Officers and System Principals. Twelve teachers engaged in forms of collaborative professional learning (n=6) and in providing mentoring and induction support (n=6) were also interviewed. A total of 33 (n=33) individuals were interviewed or participated in focus groups for this case study. In addition, a range of policy documents and professional resources were reviewed. The Ontario case study has also drawn on relevant current and existing research that the authors are engaged in concerning professional learning, leadership development, and educational improvement in Ontario, including additional interviews with government officials, teachers’ federations, provincial organizations, school principals, and teachers (Campbell et al., 2017).

The overarching State of Professional Learning in Canada study was funded by Learning Forward to inform discussions during Learning Forward’s 2016 Annual Conference, held in Vancouver, B.C., and beyond to understand professional learning in Canada, across North America, and internationally. In our study, therefore, we provide an extensive focus on professional learning in B.C. To learn more about the state of professional learning in B.C., we partnered with the B.C. Education Collaborative including the experiences and values of educators, administrators, trustees, and school business officials, education organizations formed the B.C. Education Collaborative - comprised of the Association of B.C. Deans of Education (ABCD), B.C. Association of School Business Officials (BCASBO), B.C. Principals’ and Vice-Principals’ Association (BCPVPA), B.C. Teachers’ Federation (BCTF), B.C. School Superintendents Association (BCSSA), B.C. School
Trustees Association (BCSTA), the Federation of Independent School Associations (FISA), Learning Forward BC (LFBC), and the Ministry of Education (MOE). These organizations worked collaboratively to construct a comprehensive overview and analysis of B.C.’s education system and the state of professional learning in the province. As a result of this multi-organizational effort, this case study includes the following components:

- Reporting and analysis of key B.C. education system indicators and statistics
- Review of systemic barriers and challenges to professional learning in B.C.
- Detailed portrayal and discussion of individual and multi-organizational contributions and activities in professional learning from participants in the BC Education Collaborative
- Qualitative focus groups (seven groups, totalling 79 participants across the B.C. Education Collaborative)
- An online survey questionnaire, with participants from the BC Education Collaborative
- Analysis of qualitative feedback provided by teachers to the BCTF submitted to the Ministry of Education in response to redesigned curriculum change documentation.

In all three case studies, participants were informed that participation in the study was completely voluntary and that they could withdraw from the study with no penalty. Letters of informed consent were provided to and signed by participants prior to the conduct of their focus group or interview. Interviews and focus groups utilized a similar interview schedule and protocol (see Appendix 4 for samples) which was adapted depending on whether the interviewee was a provincial leader, district official, school leader, or teacher. Interviews and focus groups were recorded with participants’ permission and transcribed verbatim prior to analysis, which consisted of qualitative coding and organization of relevant passages that then informed the structure and content of the specific cases.
APPENDIX 2:
Invitation to Advisory Group to Submit Data, Documents and/or Promising Practices

Study of the State of Professional Learning in Canada: Request for Information on Professional Learning Activities in Your Jurisdiction

Dear Member of the Professional Learning in Canada Study Advisory Committee,

By way of this letter, we are reaching out to ask if you have information relating to your province/territory/organization that you could share with use for our research study examining the State of Professional Learning in Canada. This is an opportunity to showcase the exciting professional learning activities underway for teachers and school principals in Canada. As you are aware, this project is being led by Dr. Carol Campbell, Ontario Institute for Studies in Education (OISE), and is funded by Learning Forward – a North American association devoted exclusively to advancing professional learning for student success.

The aim of the project is to provide research results that will support the importance of educators having opportunities for high quality, evidence-informed professional learning within and across the provinces and territories of Canada and internationally. Furthermore, the project is guided by the following key research questions:

The main research question is “What is the current state of educators’ professional learning in Canada?” Key sub-questions to be addressed include:

1. Why is a study of the state of professional learning in Canada needed and important?
2. What does existing research literature and available international, national and provincial/territorial data indicate about the nature, experiences, and quality of professional learning within Canada?
3. What can be identified about the experiences of educators’ engagements in professional learning? What benefits, challenges, and potentially promising practices from educators’ experiences of professional learning can be identified?
4. How are school and system leaders engaging in and enabling professional learning within schools and for teachers?
5. What are the enabling conditions (policies, resources, capacity) for supporting research-based best practices for professional learning?
6. What implications arise from this study for the development of professional capital to enhance educators’ and students’ learning and to further advance and improve the state of professional learning in Canada?
The research team has already conducted a comprehensive literature review, however, the public availability of resources on the state of professional learning in Canada is limited and uneven. To help the research team include a Pan-Canadian perspective in all aspects of the study, we are writing to request your assistance in acquiring some additional resources in support of the project. Specifically, we are seeking three sources of data that are relevant in addressing the project’s major research questions: 1) relevant policy and program documents; 2) samples of exemplary practices; and 3) professional learning data. More information on each of these sources is provided below:

**Documents for analysis** – related policy and program documents that highlight the current state of professional learning context in your jurisdiction. These resources will be used as part of a document analysis.

**Exemplary practices** – samples of professional learning practices either being developed or currently in use. We are seeking examples that display features of effective professional learning (see Appendix I). These practices may be incorporated in the project as vignettes to showcase exemplary practices in each jurisdiction.

**Professional learning data** – relevant data to help us shed light on professional learning activities in your jurisdiction. We recognize that each jurisdiction has different mechanisms in place for collecting data, so any data that you can provide us will be greatly appreciated. To help you in your consideration of available data, we have attached a list of foundational indicators that, according to your review of the literature, your organization/ministry/department may be collecting (Appendix II).

We are seeking your assistance either by sharing some of these data sources if you have access, or connecting us with a representative(s) in your jurisdictions with whom we can request such resources.

If you have any questions about this opportunity, please contact Dr. Carol Campbell by phone (416) 978-1266 or email carol.campbell@utoronto.ca. Please send all relevant data to Dr. Brenton Faubert, Brenton.faubert@uwo.ca.

We thank you for your consideration.

Dr. Carol Campbell
# APPENDIX 3:
Key Research-Informed Components and Principles of Effective Professional Learning

<table>
<thead>
<tr>
<th>Key Components</th>
<th>Principles and Practices for Effective Professional Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality Content</strong></td>
<td>Subject-specific and pedagogical content knowledge</td>
</tr>
<tr>
<td></td>
<td>A focus on student outcomes</td>
</tr>
<tr>
<td></td>
<td>A balance of teacher voice and system coherence</td>
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<td></td>
<td>Evidence-informed</td>
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<tr>
<td><strong>Learning Design and Implementation</strong></td>
<td>Active and variable learning</td>
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<td></td>
<td>Collaborative learning experiences</td>
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<td></td>
<td>Job-embedded learning</td>
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<tr>
<td><strong>Support and Sustainability</strong></td>
<td>Ongoing in duration</td>
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<tr>
<td></td>
<td>External support and facilitation</td>
</tr>
<tr>
<td></td>
<td>Supportive and engaged leadership</td>
</tr>
</tbody>
</table>
APPENDIX 4:
State of Professional Learning in Canada

List of potential indicators
* Breakout data by full-time teachers/part-time teachers, if possible
* Request data for 2014-15 school year, or most recent academic year having reliable data

Professional development
- # of weekly hours dedicated to professional development
  • primary
  • junior
  • intermediate/senior
- Average # of professional development days per teacher per year
  • primary
  • junior
  • intermediate/senior
- Participation rates (% of teachers) in professional development by panel (primary, junior, intermediate/senior)
  • courses and workshops
  • education conferences or seminars
  • participating in networks of teachers
  • individual or collaborative research
  • in-service training in outside organizations
  • other
- Duration (# of days/hours) spent by teachers on professional development activities per academic year
  • courses and workshops
  • education conferences or seminars
  • participating in networks of teachers
  • individual or collaborative research
  • in-service training in outside organizations
  • other
- # of compulsory (i.e., set by ministry department or school board) professional development days in an academic year
  • # of compulsory activities (list compulsory activities)
  • # of elective professional development activities available during the school year (list elective)
    • participation rates for the three most enrolled elective PD activities

Induction/mentorship programs
- Is there a provincial/territorial induction program in place?
- If so, % of teachers working in province/territory where formal induction program is in place
  • % of teachers participating in formal induction program
  • time spent (# of hours/days) in the induction program
- % of teachers working in province/territory where a mentoring program is in place
  • % of teachers participating in mentoring programs
  • time spent (# of hours/days) with the mentor
- % of teachers who receive appraisal through feedback from principal
  • # of times in a year

Funding
- Total dollars invested by the Ministry/Department in professional development for a specific academic year
- And/or % of operating revenue provided to school boards dedicated to professional development activities
- And/or Average FTE professional development expenditure for a specific academic year
- Any other data related to funding
APPENDIX 5:
Survey Items Provided to New Brunswick Teachers’ Association

Professional Development
For the purposes of this survey, professional development is broadly conceived as activities that are focused on enhancing teachers’ skills, knowledge, and expertise. This includes both formal and informal activities that range from courses and workshops to participation in networks and collaborative learning communities.

1. Approximately how many professional development opportunities have you participated in over the past year? (0-2; 3-5; 5-8; 8 or more)

2. Approximately how many hours per week have you spent on professional development over the past year? (0, 1, 2, 3, 4, 5 or more)

3. How much of your engagement professional development opportunities has been mandated? (None, some, most, all)

4. How has your level of autonomy in choosing your own PD changed over the past five years?
   a. Less autonomy, more mandated PD
   b. More autonomy, less mandated PD
   c. Stayed the same (high autonomy)
   d. Stayed the same (low autonomy)

5. Which providers have hosted the professional development you have participated in over the past year? (check all that apply)
   a. Department of Education
   b. School District
   c. Teacher Federation
   d. Post-secondary institution
   e. Private provider
   f. Other external organization

6. Which providers do you check with first when looking for PD opportunities? (Check 3)
   a. Department of Education
   b. School District
   c. Teacher Federation

7. Which models of professional development have you participated in over the past year? (check all that apply)
   a. Workshop (one day/one topic)
   b. Institute (multiple days/one topic)
   c. Conference
   d. Mentoring/coaching
   e. University course work (Master’s or doctoral level)
   f. Collaborative inquiry/action research (school-based, with colleagues)
   g. Individual research/inquiry on a topic of self-interest
   h. Observation visits to other schools
   i. Professional network/learning community (external to your school)
   j. Other __________________

8. Which models of professional development do you find to have the most impact on your practice? (Check 3)
   a. Workshop (one day/one topic)
   b. Institute (multiple days/one topic)
   c. Conference
   d. Mentoring/coaching
   e. University course work (Master’s or doctoral level)
   f. Collaborative inquiry/action research (school-based, with colleagues)
   g. Individual research/inquiry on a topic of self-interest
   h. Observation visits to other schools
   i. Professional network/learning community (external to your school)
   j. Other __________________
9. Which models of professional development do you find to have the least impact on your practice? (Check 3)
   a. Workshop (one day/one topic)
   b. Institute (multiple days/one topic)
   c. Conference
   d. Mentoring/coaching
   e. University course work (Master’s or doctoral level)
   f. Collaborative inquiry/action research (school-based, with colleagues)
   g. Individual research/inquiry on a topic of self-interest
   h. Observation visits to other schools
   i. Professional network/learning community (external to your school)
   j. Other ____________________

d. Multi-age classrooms
e. Digital citizenship
f. Supporting diverse learners
g. Classroom assessment
h. Classroom management
i. Equity/social justice education (LGBTQ/GSA, racism, poverty, reconciliation education, gender issues)
j. Leadership development
k. Peer coaching/mentoring
l. Conflict management
m. Examining student data/data analysis
n. Collaborative inquiry/action research
o. Other ____________________

10. When choosing professional development for yourself, what characteristics do you look for? (Check 3)
   a. Collaborative in nature
   b. Ongoing in duration
   c. Evidence-informed
   d. Job-embedded
   e. Sustained duration
   f. Active and variable learning
   g. Alignment with school and system goals
   h. Focus on student outcomes
   i. Other ____________________

   a. Subject-matter content (pull down list of subjects)
   b. Instructional methods (pull down list of subjects/approaches – using technology, play-based learning, problem-based learning, indigenous methodologies, etc.)
   c. Curriculum planning
   d. Multi-age classrooms
   e. Digital citizenship
   f. Supporting diverse learners
   g. Classroom assessment
   h. Classroom management
   i. Equity/social justice education (LGBTQ/GSA, racism, poverty, reconciliation education, gender issues)
   j. Leadership development
   k. Peer coaching/mentoring
   l. Conflict management
   m. Examining student data/data analysis
   n. Collaborative inquiry/action research
   o. Other ____________________

11. In which areas are you in need of additional professional development? (check all that apply)
   a. Subject-matter content (pull down list of subjects)
   b. Instructional methods (pull down list of subjects/approaches – using technology, play-based learning, problem-based learning, indigenous methodologies, etc.)
   c. Curriculum planning
   d. Multi-age classrooms
   e. Digital citizenship
   f. Supporting diverse learners
   g. Classroom assessment
   h. Classroom management
   i. Equity/social justice education (LGBTQ/GSA, racism, poverty, reconciliation education, gender issues)
   j. Leadership development
   k. Peer coaching/mentoring
   l. Conflict management
   m. Examining student data/data analysis
   n. Collaborative inquiry/action research
   o. Other ____________________

12. In which areas do you not need additional professional development? (check all that apply)
   a. Subject-matter content (pull down list of subjects)
   b. Instructional methods (pull down list of subjects/approaches – using technology, play-based learning, problem-based learning, indigenous methodologies, etc.)
   c. Curriculum planning
   d. Multi-age classrooms
   e. Digital citizenship
   f. Supporting diverse learners
   g. Classroom assessment
   h. Classroom management
   i. Equity/social justice education (LGBTQ/GSA, racism, poverty, reconciliation education, gender issues)
   j. Leadership development
   k. Peer coaching/mentoring
   l. Conflict management
   m. Examining student data/data analysis
   n. Collaborative inquiry/action research
   o. Other ____________________
13. What obstacles are there to your participation in quality professional development? (check all that apply)
   a. Increasing workload
   b. Inconvenient timing
   c. Difficult to find relevant/quality PD
   d. Reduced autonomy in choosing PD
   e. Model of PD is not engaging
   f. Content is not engaging
   g. Lack of information about opportunities
   h. Family commitments
   i. Cost/financial reasons
   j. Other ______________________

14. Taking into account all the professional development opportunities you participated in over the past year, please indicate your views: (Strongly Agree, Agree, Disagree, Strongly Disagree)

   Professional development has impacted:
   1. My confidence in my ability to advance the learning of the most disadvantaged students
   2. My belief that it is a teacher’s responsibility to support students’ academic, social and emotional well-being
   3. My ability to keep my teaching up to date with current educational research and effective practices
   4. My ability to develop new skills sets and talents
   5. My ability to gain the feedback I need to improve my own professional practice
   6. My ability to readily access and consult with specialists
   7. The influence I have on decision-making related to student learning
   8. My belief in collectively taking responsibility for the learning of all students
   9. My belief in having high expectations for the learning of all students
   10. Access to opportunities to examine and improve my practice with other teachers
   11. Access to opportunities to examine student work with other teachers
   12. Access to opportunities to work with other teachers to solve problems of practice
   13. Access to opportunities to provide feedback to my colleagues
   14. Access to opportunities to share new teaching methods with my colleagues
   15. Access to opportunities to collaboratively reflect on my practice with other teachers
   16. Access to opportunities to discuss issues of teaching and learning with people in other roles such as administrators
   17. The development of an extensive set of teaching strategies I can use to adapt my instruction to the needs of my students
   18. My confidence that when a lesson isn’t going well, I can change the plan without losing the intended objectives
   19. My ability to provide evidence of what worked and what didn’t in my lessons
   20. My ability to reflect on how well my lessons are going while I’m teaching
   21. My ability to figure out how to do a lesson differently next time when things don’t go as well as I had hoped
   22. My confidence in my ability to mentor or coach other teachers
   23. My ability to accept feedback from my colleagues on my teaching
   24. Overall, professional development has improved my knowledge of student learning
   25. Overall, professional development has improved my leadership skills
   26. Overall, professional development has been worth my time to attend
   27. Overall, professional development has a positive and lasting impact on my classroom practice
   28. Overall, my professional development has had a positive impact on student learning
APPENDIX 6:
Sample Interview Schedules
Learning Forward Project: State of Educators’ Professional Learning in Canada

Focus Group and Interview Questions:
Provincial Level

1. Tell me about the current professional learning that your organization is providing or collaborating on?

2. Describe for us the purpose and intentions behind these professional learning activities?

3. What sorts of activities are teachers engaged in as a result of the project? What can be identified about the experiences of teachers’ engagements in professional learning?

4. What benefits and potentially promising practices from teachers’ experiences of professional learning can be identified?

5. How have school and/or Ministry leaders supported and enabled teachers’ professional learning activities?

6. What additional supports have been required (including from government/Ministry)?

7. What challenges for teachers’ engagement in and experiences of quality professional learning currently exist? How have you dealt with those challenges?

8. What are the enabling conditions (policies, resources, capacity) for supporting research-based best practices for professional learning? To what extent do these currently exist in Ontario?

9. What suggestions do you have for improving future professional learning in the province?

Focus Group and Interview Questions:
District and School

1. Tell me about the current professional learning that you are engaged in?

2. Describe for us the purpose and intentions behind this professional learning?

3. What sorts of activities are teachers engaged in as a result of this professional learning?

4. How have school and/or district leaders supported and enabled professional learning/mentoring?

5. What additional supports have been required?

6. What challenges have you encountered along the way and how have you dealt with those challenges?

7. What has been the most impactful aspect of the project/program? What other benefits have come about? In what ways has it impacted (teacher leadership, teacher knowledge, skills/practices, student learning)?

8. Is this project typical of professional learning in the province? Do most teachers have access to this sort of learning activity? What are the dominant types of learning teachers are engaged in?

9. What qualities do you look for when choosing professional learning activities?

10. What suggestions do you have for improving future professional learning in the province?
Learning Forward is a nonprofit, international membership association of learning educators committed to one vision in K–12 education: Excellent teaching and learning every day. To realize that vision Learning Forward pursues its mission to build the capacity of leaders to establish and sustain highly effective professional learning. Learning Forward’s Standards for Professional Learning, adopted in more than 35 states, define the essential elements of professional learning that leads to changed educator practices and improved outcomes for students. Information about membership, services, and products is available from:

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