State of the Nation:

K-12 E-Learning in Canada

2016 Edition

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CAN**eLearn**

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Teachers' Federation

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Executive Summary

The *State of the Nation: K-12 E-Learning in Canada* report continues to be Canada's unique benchmark for the expanding use of technology-supported blended and online learning in Canada. This ninth edition of the annual report continues the strong tradition of incisive analysis of the state of K–12 online education in Canada. This year also sees a return of brief issue papers, vignettes, and individual program survey. This expanded information provides considerable insight about innovation and new approaches emerging in online and blended practices in K-12 programs across Canada. All annual reports and associated papers have been published on a new project website (http://k12sotn.ca/), a shift from publication on the Canadian eLearning Network's website (http://CANeLearn.net) due to the extensive volume of the collection.

Canada continues to have one of the highest per capita student enrollment in online courses and programs of any jurisdiction in the world and was one of the first countries to use the Internet to deliver distance learning courses to students. In many ways Canada provides an interesting exemplar for the rest of the world, due in part to its division into 13 provinces and territories of widely varying population and geography, leading to a wealth of relevant comparisons with other countries/regions of similar population. Canada is also a part of the Commonwealth of Nations, leading naturally to comparisons with other English-speaking countries, but also with Quebec being linked to la Francophonie, leading to relevant role models for two major linguistic regions. And finally, Canada, through its offerings to indigenous communities, provides a role model for other countries for the provision of education to indigenes and minority populations.

The "issues" papers published on the website make particularly topical reading about the challenges and innovations underway in many places across the country. Another feature that serves to "ground" the report in the realities of blended and online learnings are the "vignettes" which feature some of the personalities of the online educators who are blending practice, creating learning programs and environments with a varied mix of classroom and online methodologies where students have some control over their own learning, increasing flexibility and access to learning for students.

The *State of the Nation: K-12 E-Learning in Canada* report, and its publication on the new project website, provides critical information and insight into how Canadian educational authorities and governments are integrating technology-supported approaches to prepare students for today's economy and a future society in which the use of technology will be ubiquitous. This report provides a benchmark for educators as it offers background, guidance and ideas for the improvement of policy and practice in online and blended learning. The Canadian eLearning Network is a proud supporter and partner of this research, its publication and dissemination.

1. Introduction

This is the ninth annual *State of the Nation: K-12 E-Learning in Canada* report. As with the past two years, the *State of the Nation: K-12 E-Learning in Canada* study continues to be conducted in partnership with the Canadian eLearning Network (CANeLearn). Following two years of abbreviated reports, the ninth edition of this annual study sees a return of several familiar features. Continuing are the annual examination of the level of activity of K-12 distance, online and blended learning and nature of the governance and regulation in each province and territory, as well as for First Nations, Métis and Inuit under federal jurisdiction. However, returning are the brief issue papers related to the provision of K-12 distance, online and blended learning in Canada; individual vignettes to illustrate a variety of those individuals and programs providing those learning opportunities; and the coast-to-coast survey of each of the K-12 distance, online and blended learning programs across the country.

The standard material (i.e., the annual update of activity and nature of governance) is described in complete detail in this printed version of the report. The brief issue papers and the vignettes are simply introduced or referred to in this report, but are presented on the *State of the Nation: K-12 E-Learning in Canada* website. The responses to the national individual programs survey are only available on the website.

Over the past few months, CANeLearn undertook revisions to its organizational website following the Board of Directors retreat and meetings this summer. As a part of this redesign, two separate websites were created: one for members, the annual symposium, professional learning opportunities, and one for the annual *State of the Nation: K-12 E-Learning in Canada* research study. Working with CANeLearn, the *State of the Nation: K-12 E-Learning in Canada* research team has created a new project website at:

http://k12sotn.ca/

The project website includes all the annual reports, as well as special reports focused on specific topics. It also includes details of all of the publications and presentations generated from this research study. The website includes a profile for each jurisdiction that is organized in the following manner:

- a detailed description of the distance, online and blended learning programs operating in that jurisdiction;
- a discussion of the various legislative and regulatory documents that govern how these distance, online and blended learning programs operate;
- links to previous annual profiles;
- an exploration of the history of e-learning in that jurisdiction;
- links to vignettes (i.e., stories designed to provide a more personalized perspective of those involved in K–12 e-learning) for that jurisdiction;
- links to any brief issues papers (i.e., more detailed discussions of specific issues related to the design, delivery and support of K–12 e-learning) in that jurisdiction;

- the most recent responses to the individual program survey; and
- an overview of the jurisdictions policies related to importing and exporting e-learning.

Finally, the website includes a blog that allows the research team to share relevant news and comment on issues related to K-12 distance, online and blended learning in Canada.

1.1 Methodology

The methodology utilized to collect the data for the 2016 study included:

- a survey that was sent to each of the Ministries of Education (see Appendix A for a copy of this survey);
- follow-up interviews to clarify or expand on any of the responses contained in the survey;
- an analysis of documents from the Ministry of Education, often available in online format; and
- follow-up interviews with key stakeholders in many of the jurisdictions.

During that data collection process, officials from the provincial and territorial Ministries of Education responded. The profiles were constructed based on these survey responses, along with information provided by key stakeholders involved in K-12 distance education in each respective province or territory, and in some instances an analysis of available documents. Table 1 indicates the history of data collection for the *State of the Nation: K-12 E-Learning in Canada* study.

Table 1. Data collection sources for the State of the Nation: K-12 E-Learning in Canada

Jurisdiction	2008	2009	2010	2011	2012	2013	2014	2015	2016
NL	KS / DA	MoE / DA	DA	MoE	DA	MoE / DA	MoE / DA	MoE	MOE / KS / DA
NS	DA	MoE / DA	MoE / DA	MoE / DA	MoE / DA	MoE	MoE	MoE	MoE
PE	DA	KS / DA	MoE	MoE	MoE	MoE	MoE	MoE	MoE
NB	DA	MoE / DA	MoE	MoE / DA	MoE	MoE	MoE	MoE	MoE
QC	KS	KS / DA	MoE / KS	MoE / KS	MoE / KS	MoE / KS	MoE	MoE	MoE / KS
ON	KS / DA	KS / DA	KS / DA	MoE / DA	MoE / DA	MoE / KS	MoE / KS	KS / DA	KS / DA
MB	KS	MoE / DA	MoE	MoE	MoE	MoE	MoE	MoE	MoE
SK	KS / DA	MoE	MoE	MoE / KS	MoE / KS	MoE / KS	MoE	MoE	MoE / KS
AB	DA	KS / DA	KS / DA	MoE	MoE / DA	MoE / DA	MoE / KS	MoE	MoE / DA
BC	MoE / DA	MoE / DA	MoE	MoE	MoE	MoE	MoE	MoE	MoE
YT	DA	KS / DA	MoE / DA	MoE	MoE	MoE	MoE	MoE	MoE / KS

Jurisdiction	2008	2009	2010	2011	2012	2013	2014	2015	2016
NT	DA	MoE / DA	DA	MoE	MoE	MoE	MoE	MoE	MoE
NU	DA	MoE	MoE	MoE	MoE	MoE	MoE / KS	MoE / KS	KS / DA
Federal	-	-	-	-	-	AANDC / KS / DA	AANDC / KS	INAC / KS	INAC / KS

MoE – Ministry of Education; KS – Key stakeholders; DA – Document analysis; AANDC – Aboriginal Affairs & Northern Development Canada/INAC – Indigenous and Northern Affairs Canada

Prior to publication drafts of each profile were provided to the Ministries along with any key stakeholders that provided information for the profile. These individuals were given the opportunity to suggest revisions, most of which were accepted by the researchers (and all of which were seriously considered).

In addition to the data collection for the provincial, territorial, and federal profiles, the researchers also undertook an individual program survey (see Appendix B for a copy of this survey). The individual program survey was sent to contacts from all of the K-12 distance, online, and blended programs across Canada that were able to be identified by the researchers. Between the contacts that have been developed by *State of the Nation: K-12 E-Learning in Canada* researchers over the course of this research project, in addition to contacts provided by the Canadian E-Learning Network and leads from key stakeholders, the researchers identified 251 different K-12 distance, online, and blended learning programs in Canada.

The survey was sent to all contacts on four occasions (i.e., early in September, October, November, and December). The response rate by jurisdiction is provided in Table 2.

Table 2. Individual program survey responses

Jurisdiction	Total Number of Programs	Number of Programs Responding	Response Rate
NL	1	0	0%
NS	2	1	100%
PE	0	-	-
NB	2	1	50%
QC	4	4	100%
ON	82	10	12%
MB	38	5	13%
SK	21	8	38%
AB	21	11	52%
BC	75	26	35%
YT	1	1	100%

Jurisdiction	Total Number of Programs	Number of Programs Responding	Response Rate
NT	1	1	100%
NU	0	-	-
Federal	3	3	100%
Total	251	72	29%

Data as of the time the printed report was submitted for publication, as K-12 e-learning programs can update their information at any time.

The most recent responses that the *State of the Nation: K-12 E-Learning in Canada* researchers have received are included in the provincial, territorial and federal profiles located at http://k12sotn.ca/data/.

1.2 How to Read This Document

The goal of the 2016 *State of the Nation: K-12 E-Learning in Canada* report is to provide an overview of the state of K-12 e-learning in Canada. K-12 e-learning is broadly defined to include all forms of K-12 distance and online learning, as well as blended learning that may occur within the context of a face-to-face setting. As with previous reports, the 2016 *State of the Nation: K-12 E-Learning in Canada* report begins with an overview of the brief issue papers solicited for the ninth edition of this report. The brief issue papers are followed by a national overview of K-12 distance, online and blended learning in Canada and a discussion of the nature of regulation and level of activity in each provincial, territorial, and federal jurisdiction. Each profile includes:

- a description of the K-12 e-learning programs and their level of activity, and
- the nature of regulation (with a focus on any updates from the 2015 report).

Finally, the report concludes with any references that are used, a copy of the ministerial and individual program surveys, and a call for sponsors for the 2017 *State of the Nation: K-12 E-Learning in Canada* study.

In addition to the written report, the 2016 *State of the Nation: K-12 E-Learning in Canada* report includes a supporting website that is available at:

> *http://k12sotn.ca/*

The website is designed to provide a more developed version of the profiles for each of the provinces, territories, and federal jurisdictions. These profiles include:

- a description of the K-12 e-learning programs and their level of activity;
- the nature of regulation;
- a history of K-12 distance education;
- a variety of vignettes related to that jurisdiction;

- any brief issue papers that have been produced specific to that jurisdiction;
- the most recent responses to the individual program survey; and
- a discussion of how jurisdictions treat inter-provincial and international distance education.

It is our goal that the *State of the Nation: K-12 E-Learning in Canada* annual published report will be a shorter version of the updated changes that have occurred in each jurisdiction from the previous year. However, the online version of the *State of the Nation: K-12 E-Learning in Canada* will continue to be a more comprehensive resource for e-learning in each jurisdiction.

2. Brief Issue Papers

This section is a more detailed discussion of specific issues related to the design, delivery and support of K–12 distance, online and blended learning in Canada. The brief issue paper section first appeared in the third annual report. Each brief issue paper is written by an individual not directly associated with the research team. Most individuals were recruited by the research team to contribute a brief issue paper, often on a specific topic. Each brief issue paper is edited for style and length by the research team, but not for content. The content is solely the discretion of the brief issue paper author. For the ninth annual *State of the Nation: K-12 E-Learning in Canada* report, there were three brief issue papers that were received.

The first issue paper, *An Online Private School's Relationship with the Ontario Ministry of Education* written by Steve Baker, Principal of Virtual High School, highlights the importance of a strong relationship and effective communication between a provincial ministry and an independent private school. About six percent of the publicly funded schools in Ontario are private schools and the Ministry inspects the schools every two years to ensure it complies with Ministry standards. Yet, as Steve points out, "the Ministry claims that it does not regulate, license, accredit or otherwise oversee the operation of private schools." So private schools are not able to claim they offer Ministry approved curriculum. To ensure there is a clear and strong relationship between what private schools *offer* as curriculum and what is *approved*, Steve's advice is for schools to follow the Ministry's *Growing Success* document while maintaining quality instruction that ensures the Ontario Secondary School Diploma credits issued are of the highest possible standard. Read more at http://k12sotn.ca/papers/private-online-program/.

The second issue paper, *Improving Professional Development for Teachers – A Grassroots Solution* written by Margaret Dupuis, describes the evolution of LEARN's teacher-led professional learning model. The model incorporates individual teacher growth plans in a collaborative team approach. Regular staff meeting agendas have been refashioned so that information items are posted online in audio and/or video format so that teacher time is spent in group-based dialogue and discussion. Teachers share strategies, ideas, and research into practice they are implementing in their classrooms as they challenge themselves and each other to become "world class online educators." Read more at http://k12sotn.ca/papers/teacher-driven-pd/.

The final issue paper, *The Story of StudyForge* by Richard Bitgood, chronicles the transformation of passionate, dedicated teachers to business entrepreneurs. Backed by a supportive school and culture, it tells the story of the pursuit of two math teachers who challenged online learning conventions to improve learning for their students. With the support of their school, and by engaging students and teachers in their pursuit, they found that sharing with others quickly drew them out of their classrooms. They quickly found that their passion to share forced them to focus full time on sharing their successful strategies and technological solutions. Thus *StudyForge* was born. Find out more at http://k12sotn.ca/papers/classroom-to-studyforge/.

For these, and all of the previous issue papers, please go to http://k12sotn.ca/papers/.

3. National Overview

Nine years following the publication of the first *State of the Nation: K-12 Online Learning in Canada* report, there continues to be a great deal of consistency in the trends related to both the level of K-12 e-learning activity and the nature of governance and regulation of K-12 e-learning.

3.1 Level of Activity
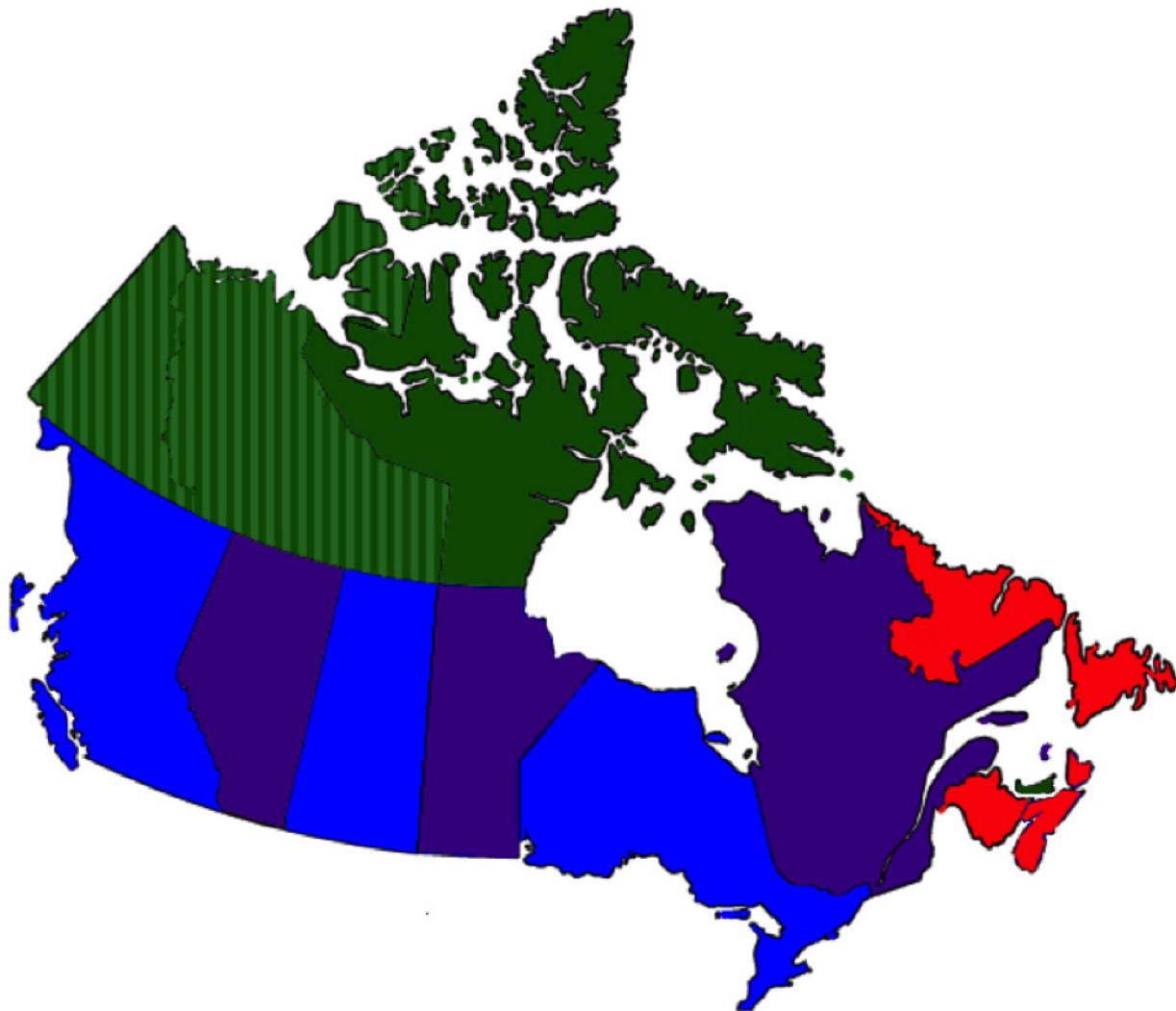
Single provincial program
Primarily district-based programs
Combination of provincial and district-based programs
Use online learning programs from other provinces

Students from all 13 provinces and territories continue to participate in K-12 distance, online, and blended learning opportunities. This is not to say that all 13 jurisdictions have individual programs in operation, as there continue to be no e-learning programs operating in Prince Edward Island or Nunavut. The landscape of Canadian K-12 distance, online, and blended learning continues to change. The total K-12 population in Canada for 2015-16 was approximately 5.1 million students. Based on actual and estimated enrollment data, the number of students engaged in K-12 distance and online learning was 293,401, or 5.7% of the overall K-12 student population.

Table 3. Summary of the K-12 distance and online learning activity by jurisdiction for 2015-16

Jurisdiction	# of K-12 students	# enrolled in distance education	Percent involvement
NL	66,800	1,105	1.7%
NS	119,383	~2,500	2.1%
PE	20,131	89	<0.1%
NB	98,906	2,527	2.5%
QC	1,003,322	~41,000	4.1%
ON	2,003,253	~94,500	4.7%
MB	183,304	~8,000	4.4%
SK	176,301	~12,000	6.8%
AB	691,876	~60,000	8.7%
BC	635,037	69,735	11.0%
YT	5,122	149	2.9%
NT	8,367	81	1.8%
NU	9,728	325	3.3%
Federal	~108,000	1,390	1.3%
Total	*5,129,530*	*293,401*	*5.7%*

The highest level of activity in distance and online learning by raw numbers is in Ontario (based on recent estimates), but by proportion of students involved British Columbia continues to lead the country. In both jurisdictions there are a substantial number of district-based public programs, along with a significant number of independent or private programs. Estimates also continue to indicate that Alberta and Saskatchewan had higher than average levels of participation in K-12 distance and online learning.

An examination of the data from individual jurisdictions indicates the following trends:

- the proportion of distance and online learning participation has remained quite consistent in most jurisdictions, and
- the exception to this trend are: Alberta; British Columbia; the Yukon; and the federal jurisdiction which all saw decreases.

The decrease in the level of participation reported in distance and online learning in these four jurisdiction can be attributed to a variety of reasons. In some cases it is due to the ability of better data allowing researchers to make more educated estimates of activity (e.g., Alberta). In other instances, it

may represent the transition of programs from distance and online learning to blended learning (e.g., Alberta and British Columbia) – as some jurisdictions fund distance education at lower levels than classroom-based education. In the case of the Yukon, the decrease is likely due to the transition from a reliance on external programs to building their own internal capacity. Finally, for the First Nations, Métis and Inuit programs under federal jurisdictions it probably represents the closure of several distance and online learning programs in recent years.

It should be noted that 293,401 or 5.7% K-12 students enrolled in some form of distance and online learning during the 2015-16 school year represents a decrease from previous school years (see Table 4).

Table 4. Summary of the K-12 distance and online learning activity over the past three years

Jurisdiction	2013-14		2014-15		2015-16	
	# enrolled in distance education	Percent involvement	# enrolled in distance education	Percent involvement	# enrolled in distance education	Percent involvement
NL	884	1.3%	947	1.4%	1,105	1.7%
NS	~2,720	2.2%	~2,300	1.9%	~2,500	2.1%
PE	108	0.5%	44	<0.1%	89	<0.1%
NB	2615	2.6%	~2455	2.4%	2,527	2.5%
QC	~32,856 [1]	2.5%	~43,736	3.9%	~41,000	4.1%
ON	78,095	3.9%	~87,000	4.3%	~94,500	4.7%
MB	~10,200 [1]	5.6%	~8,000 [1]	4.4%	~8,000	4.4%
SK	~10,000	5.8%	~11,000 [1]	6.3%	~12,000	6.8%
AB	~75,000	12.2%	~75,000	11.4%	~60,000	8.7%
BC	77,912	12.3%	78,499	12.4%	69,735	11.0%
YT	182	3.5%	421	8.2%	149	2.9%
NT	228	2.8%	150	1.8%	81	1.8%
NU	33	<0.1%	96	1.0%	325	3.3%
Federal	~1,800	0.1%	~2,000	1.9%	1,390	1.3%
Total	290,185 [1]	5.4%	311,648 [1]	6.0%	293,401	5.7%

[1] Adjusted from previous published reports based on updated information

The Canadian Teachers Federation (2000) appear to have provided the first published estimates K-12 distance and online learning participation levels in Canada. Since 2008-09, the annual *State of the Nation: K-12 E-Learning in Canada* reports have provided estimations of the level of K-12 distance and online learning in Canada (see Table 5).

Table 5. K-12 distance and online learning student enrollment in Canada

Year	# of distance education students	% of students engaged in distance education
1999-2000	~25,000	0.5%
2008-09	~140,000	2.7%
2009-10	150,000-175,000	2.9%-3.4%
2010-11	207,096	4.2%
2011-12	245,252	4.9%
2012-13	284,963	5.2%
2013-14	290,185	5.4%
2014-15	311,648	6.0%
2015-16	293,401	5.7%

It is difficult to determine whether this actually represents a slowing of the growth of distance and online learning, although it may. We believe that this decrease can be accounted for based on three possible explanations:

1. the variability in the accuracy of data collection by the individual provinces and territories, as well as by the researchers for this study;
2. the shift from distance and online learning to more blended learning contexts; or
3. an actual decrease in participation in distance and online learning.

On the first point, the variability in the data indicates it is difficult to ascertain the exact level of growth. The first levels of K-12 distance and online learning were presented as estimated approximate totals (i.e., 1999-2000 and 2008-09), while the level of K-12 distance and online learning in 2009-10 was presented as a range. While the total participation from 2010-11 to the present has provided a specific figure, this data is no less an approximation than the earlier estimates. For example, the data for this year's report was based on estimations in seven of the 14 jurisdictions. In fact, only 75,240 of the 293,401 total enrollments for 2015-16 were based on specific figures. The remaining 75% of K-12 distance and/or online learning activity was based on estimations.

Simply put, even though this report represents the ninth annual *State of the Nation: K-12 E-Learning in Canada* study, this lack of reliable data continues to persist in many jurisdictions. There are some jurisdictions that maintain dependable lists of K-12 distance and online learning programs and counts of students involved. There are also several jurisdictions where the data is unreliable, dated, or simply not collected. Finally, there are other jurisdictions that do not collect data on the number of K-12 distance and online learning enrollments. However, the responsibility does not rest solely with the provincial or territorial governments to maintain, or in the case of this study, provide data related to K-12 e-learning. For example, since 2011 the *State of the Nation: K-12 E-Learning in Canada* researchers have conducted an individual program survey of the K-12 distance, online, and blended education programs across the country and those individual e-learning programs have often been unresponsive.

Table 6. Summary of the number of K-12 e-learning programs that have participated

Jurisdiction	Total Number of Programs	2011	2012	2013	2015	2016	Overall Number	Percentage
NL	1	1	0	1	0	0	1	100%
NS	2	2	1	1	0	1	2	100%
PE	1 / now 0	1	-	-	-	-	1	100%
NB	2	1	2	1	0	1	2	100%
QC	3 / now 4	3	3	3	1	4	4	100%
ON	82	0	8	14	5	10	27	33%
MB	38	8	2	2	2	5	9	24%
SK	21	1	1	5	4	8	13	62%
AB	21	1	2	4	2	11	13	62%
BC	75	0	6	11	6	26	36	48%
YT	1	0	1	1	0	1	1	100%
NT	1	0	1	1	1	1	1	100%
NU	0	-	-	-	-	-	-	-
Federal	5 / now 3	1	2	5	2	3	5	100%
Total	251	19	29	49	23	72	115	46%

Over the six year period noted in the table, these numbers represent the following response rates:

- 8% in 2011,
- 12% in 2012,
- 20% in 2013,
- 9% in 2015, and
- 29% in 2016.

If one was to combine all of the unique programs that have responded during any of the five years the surveys were administered, there was still only 46% of the total K-12 distance education programs in the country that have provided data to the *State of the Nation: K-12 E-Learning in Canada* researchers at any point in time. The fact is that better data are needed.

Interestingly, one area where more jurisdictions are beginning to track data is in blended learning activity. For example, some jurisdictions track the number of classroom-based student users in their learning management system that were accessing the Ministry's asynchronous course content. In some jurisdictions, the programs that provide distance and/or online learning also provide their content to students and teachers to use in blended learning contexts. Some jurisdictions manage specific blended learning program options through their Ministry and/or Department.

However, we must indicate that at present the vast majority of jurisdictions do not formally track the use of blended learning. Even in jurisdictions where we have some data available, that does not necessarily mean that blended learning is occurring. For example, Newfoundland and Labrador

report that there were 7267 teacher registrations and 261 principal registrations in the K-12 e-learning program's portal. In theory all of these registrants could be using portions of the asynchronous course content with their students. If we assumed that each teacher was using that content with only 15 students it would represent 109,005 students or more than 100% of the total number of students in the province. The truth is there is no way of measuring how many of these teachers are actually using this content for blended learning or how many unique students are included in that usage. Similarly, Nova Scotia, New Brunswick and Ontario are able to report the number of student registrations in their province-wide learning management system that are not distance education students. However, there is also no way to measure if a) these students are actively using this asynchronous course content, b) these students are using this asynchronous course content on their own, or c) these students are using this asynchronous course content under the guidance of their teacher in a blended learning context.

With that being said, we provide some estimates for the level of blended learning activity in some jurisdictions.

Table 7. Summary of estimated K-12 blended learning activity over the past two years

Jurisdiction	2014-15		2015-16	
	# engaged in blended learning	Percent involvement	# engaged in blended learning	Percent involvement
NL	9360*	14%	10,905*	16%
NS	54,000**	45%	95,500**	80%
PE	***	-	***	-
NB	5208	5%	4171**	4%
QC	36,500**	3%	44,500**	4%
ON	237,930**	12%	237,930**	12%
MB	***	-	***	-
SK	***	-	***	-
AB	***	-	***	
BC	***	-	8278****	1%
YT	379	7%	653	13%
NT	***	-	***	-
NU	***	-	***	-
Federal	***	-	***	-
Total	*343,377*	*6.6%*	*401,937*	*7.8%*

* Estimate based on existing data

** Data provided by Ministry

*** Unable to estimate level of activity

**** Data extracted from individual program survey response

The known level of blended learning activity from 2015-16 was 401,937 students or 7.8% of the total K-12 student population in Canada. If the student population from the seven jurisdictions where we were unable to generate an estimate were removed, 401,937 students represent 10.2% of the K-12 students in the remaining seven provinces and territories.

- It should be noted that there was additional data from the 2015-16 that we have available that was not reported above.
- Manitoba: 1 e-learning program reported 24 students engaged in blended learning (out of 869 schools)
- Saskatchewan: 4 e-learning programs reported 1895 students engaged in blended learning (out of 798 schools)
- Alberta: 3 e-learning programs reported 1463 students engaged in blended learning (out of 2152 schools)

These figures were not included in the table above because the data represent such a small sample from the possible population that could be engaged in blended learning. However, if these students were added to Table 7, there would have been 405,319 known students engaged in blended learning that represent 7.9% of the total population of K-12 students.

It is important to underscore that this estimation of blended learning activity is a first attempt at trying to quantify this activity, beyond the issues of whether teachers or students enrolled in provincial learning management systems are engaged in blended learning discussed earlier. This data largely represents information obtained from programs that were also engaged in distance and/or online learning. The examples of Manitoba, Saskatchewan and Alberta above highlight this fact. These three provinces have 3819 schools in total, which represents tens of thousands of teachers, many of whom may be involved in blended learning. Yet the researchers for this study have information from only distance and/or online programs from eight school districts. The estimation of blended learning activity in this report does not begin to scratch the surface of the level of blended learning in most jurisdictions

3.2 Nature of Regulation

There continues to be little change in the nature of regulation governing K-12 distance education, online and blended learning over the past school year.

Table 8. Summary of the K-12 distance education regulation by province and territory

Province/Territory	Type of Regulation	Nature of Regulation
NL	None	
NS	Collective agreement	• Provisions related to workload, professional development and quality of life issues
PE	Ministerial directive	• Guidelines for the use of distance education
NB	Policy handbook	• Outlines responsibilities for distance education stakeholders at all levels
QC	None	
ON	Ministerial contracts and policy handbook	• District school boards agree to follow the policies outlined in the *Provincial E-Learning Strategy*

Province/Territory	Type of Regulation	Nature of Regulation
MB	Legislation and policy handbook	• Minister of Education can approve distance education • Regulations are related to the use of the Ministry distance education options
SK	None	
AB	Legislation and policy handbook	• Minister of Education can make regulations related to distance education • Regulations primarily focus on amount of instructional time
BC	Legislation and Ministerial contracts	• Substantial regulations related to funding, quality and almost all other aspects of the delivery of distributed learning
YT	Legislation and memorandums of understanding	• Minister of Education can approve distance education and charge student fees for such courses • Individual agreements are between the territorial government and individual distance learning providers
NT	Legislation, policy handbook and memorandums of understanding	• Allows education authorities to create or engage in distance education programs • Provides series of requirements for distance education programs • Individual agreements are between the territorial government and individual distance learning providers
NU	Legislation and memorandums of understanding	• Defines what constitutes distance education • Individual agreements are between the territorial government and individual distance learning providers
Federal	None	

Many provinces and territories continue to have some reference to distance education in the *Education Act* or *Schools Act*. In most instances these references simply define distance education or gives the Minister of Education in that province or territory the ability to create, approve or regulate K-12 distance education. Many of these references have also become antiquated, given the present realities of K-12 distance, online, and blended learning.

In many jurisdictions there exist no additional regulations beyond those contained in the *Education Act* or *Schools Act*. In jurisdictions where regulation does exist, one trend is the use of contracts or policy handbooks to regulate K-12 distance, online, and blended learning. In most instances these handbooks are in jurisdictions where schools participate in some form of province-wide program and the handbook outlines the requirements for participation in that program.

The two exceptions to these general trends continue to be Nova Scotia (e.g., collective agreement signed between the Government of Nova Scotia and the Nova Scotia Teachers Union) and British Columbia (e.g., section 3.1 and section 75 (4.1) of the *School Act, 2006*, as well as section 8.1 of the *Independent School Act, 2006*).

3.1 Newfoundland and Labrador (NL)

Population: 526,977

Number of K-12 Schools: 262

Number of K-12 Students: 66,800

Number of K-12 E-Learning Programs: 1

Number of K-12 E-Learning Students: 1105

K-12 E-Learning Programs

The Centre for Distance Learning and Innovation (CDLI) is the sole provider of K-12 distance education in the province. During the 2015-16 school year there were 1105 students registered and 1715 course registrations in 38 different courses representing 103 different schools. Distance learning at the K-12 level is delivered using a combination of synchronous and asynchronous tools, with synchronous instruction being the primary method. The CDLI also offered online course reviews for students in a variety of courses throughout the secondary level. The reviews utilized recorded instruction and solutions to sample questions related to provincial learning outcomes.

While blended learning occurs primarily at the post-secondary level in Newfoundland and Labrador, the CDLI does allow any provincial educator, including classroom teachers, to register in their portal and use the CDLI's asynchronous course materials with their face-to-face students. While the CDLI does track the number of educators that are registered in the portal, an account in the system does not necessarily mean that the person uses the resources in their classroom. During the 2015-16 school year there were 7267 teacher registrations and 261 principal registrations in the CDLI portal.

Governance and Regulation

According to the Government of Newfoundland and Labrador, "distance education is delivered by the Department of Education and Early Childhood Development's Centre for Distance Learning and Innovation." As a component of the Department, it receives a block funding allocation from the provincial government that funds the administration, all teacher and staff salaries, course development activities, Internet/network connectivity costs for schools, K-12 technology integration for the provincial K-12 school system. The CDLI also purchases and deploys all hardware and software required for the delivery of its online learning program, including all required computer equipment, video-conferencing equipment and other learning resources that enhance the distance learning experience. Finally, the CDLI outlines a number of conditions that participating schools must accommodate in order to participate in the distance education program (e.g., accommodation of the school's schedule to the CDLI's timetable, the designation of one or more teachers or staff as mediating teachers or members of the mediating team, etc.).

At this time there is no language in the *Education Act* related to K-12 distance education. There are also no policies or regulations specifically related to K-12 distance education within the Ministry of Education beyond those utilized by the CDLI itself. The Ministry of Education continues to track the method of delivery that students complete their studies with, and this data is available through the *K-12 School Profile System*.

3.2 Nova Scotia (NS)

Population: 942,926

Number of K-12 Schools: 395

Number of K-12 Students: 119,383

Number of K-12 E-Learning Programs: 2

Number of K-12 E-Learning Students: ~2,500

K-12 E-Learning Programs

There are two distance education programs in the province. First, the Nova Scotia Virtual School (NSVS) provided online courses to approximately 1300 students from the seven English-speaking school boards and the *Conseil scolaire acadien* provincial during the 2015-16 school year. Second, the correspondence studies program provided courses to approximately 1200 students enrolled in courses through the correspondence study program. Close to half of these 1200 students attend a public school, while the other half are adult students, home-schooled students or students living outside of Nova Scotia. Currently, work is ongoing to transition these correspondence courses to an online delivery format.

There were also a number of blended learning initiatives in Nova Scotia that are being implemented in the school system. There are increasing expectations that students at all grade levels will utilize technology and online resources to demonstrate achievement of curriculum outcomes. For example, *Google Apps for Education* is now available to all students, teachers, and administrators province-wide and at the end of the first year of implementation approximately 80% of students and teachers in the province have accounts. Further, the Department provides a blended learning platform through the learning management system *Moodle* that was extensively used in classrooms around the province to support instruction as well as to support professional learning communities for teachers.

Finally, the *2015 Nova Scotia Action Plan for Education* makes additional commitments to the growth of online and blended learning. Specifically, the Plan indicates that the Department will:

- continue to improve program delivery in the Nova Scotia Virtual School to provide students with even more flexible options and teaching support;
- provide students with varied learning opportunities with school technology, including the use of digital learning resources, completion of online course offered by the Nova Scotia Virtual School, participation in bring-your-own-device learning activities, and completion of blended learning projects; and
- offer online learning opportunities to middle school students to prepare them for online courses in high school.

Governance and Regulation

The Learning Resources and Technology Services division of the Education Innovation, Programs and Services branch of the Department of Education and Early Childhood Development manages distance education programs in Nova Scotia and works cooperatively with a Management Board representing all school boards in the province.

The provision of distance education through the Nova Scotia Virtual School continues to be governed by the 11 provisions included in the agreement between the Government of Nova Scotia and the Nova Scotia Teachers Union. As a contract between the government and teachers' union, most of the provisions deal with teacher certification and quality of life issues. For example, there are provisions related to defining the workday, professional development requirements, program oversight, and class size.

[Note that there is a new vignette from Nova Scotia available at the http://k12sotn.ca/ns/ focused on Steven Van Zoost, Nova Scotia Virtual School. In this vignette, we explore how Steven uses synchronous eChats as a part of the instructional model he employs in his online English courses.]

3.3 Prince Edward Island (PE)

Population: 145,211

Number of K-12 Schools: 63

Number of K-12 Students: 20,131

Number of K-12 E-Learning Programs: 0

Number of K-12 E-Learning Students: 89

K-12 E-Learning Programs

At present there are no K-12 distance education programs in Prince Edward Island. Through an inter-provincial agreement students in Prince Edward Island have the ability to access online courses offered by the distance education program offered by the New Brunswick Department of Education and Early Childhood Development. During the 2015-16 school year there were 19 French first language students and 70 English-language students enrolled in online courses through this program.

According to the Department, there was no intentional blended learning (i.e., specific projects or initiatives) occurring in public schools. However, the Department recognizes that it is a national trend and is actively investigating avenues to both foster and account for blended learning in the province.

Governance and Regulation

Internal regulation continues to be driven by *Ministerial Directives No. MD 2008–05*, which apply to courses delivered during the regular school day. The directive broadly defines distance education and outlines a series of beliefs about the nature of distance education instruction. Further, individual schools and districts that participate in distance education programs must adhere to guidelines found in the provincial *Distance Education Handbook* document. The updated document specifies the use of distance education for students in particular circumstances.

[Note that there is a new vignette from Prince Edward Island available at the http://k12sotn.ca/pe/ focused on the École Pierre-Chiasson and its use of Google Apps for Education, video conferencing and a partnership with New Brunswick's asynchronous course delivery system to enable students to take a variety of courses that would not be available to them. Supervision and support from the school principals is integral to this approach.]

3.4 New Brunswick (NB)

Population: 755,464

Number of K-12 Schools: 307

Number of K-12 Students: 98,906

Number of K-12 E-Learning Programs: 2

Number of K-12 E-Learning Students: 2527

K-12 E-Learning Programs

Both the Anglophone and Francophone sectors of the Department of Education and Early Childhood Development manage K –12 distance learning programs. These programs service secondary students in New Brunswick in either of the province's two official languages. During the 2015-16 school year there were approximately 1800 students enrolled in the Anglophone program and 727 students enrolled in the Francophone program. One area of particular growth has been in the First Nations language courses; and, as the Department adds the intermediate level courses online, grade 9 and 10 students are able to access the introductory level courses online. Interestingly, while the number of actual students engaged in distance learning has remained consistent in recent years, the demand for online courses for students wanting to work offsite has been increasing (with student anxiety being the most commonly cited reason).

The content that has been created for all of the distance learning courses is available to all teachers in the province as a professional learning resource. During the 2015-16 school year there were 1100 English and 3071 French face-to-face students registered in the learning management system using online courses in a more blended learning model under the direction of their local school's classroom teachers.

Finally, the distance learning infrastructure continues to be used to support teacher professional learning. By the end of the 2015-16 school year over half of all educational assistants had completed an online Autism Spectrum Disorder course (which has been used by all four provinces in Atlantic Canada). The Healthy Learner Nurses program in schools also uses the provincial learning management system. The distance learning program also supports the up-grading of courses for a limited number of students from across the province.

Governance and Regulation

There remains no specific legislation that governs K-12 distance education in New Brunswick. The system continues to operate based on collaboration between the Ministry of Education and individual school districts. The Ministry has published a policy handbook, different for both the English and French systems, that outlines the responsibilities of a variety of individuals at the Ministry, district and

school level to ensure the orderly implementation of the distance education program. Interestingly, in addition to school officials such as a registrar and local site facilitator, there are specific responsibilities outlined for both distance education students and the parents of students who are enrolled in distance education programs.

3.5 Quebec (QC)

Population: 8,263,600

Number of K-12 Schools: 3,102

Number of K-12 Students: 1,003,322

Number of K-12 E-Learning Programs: 4

Number of K-12 E-Learning Students: ~41,000

K-12 E-Learning Programs

During the 2015-16 school year, there were four e-learning programs in the province of Quebec. The largest distance education program was the *Société de formation à distance des commissions scolaires du Québec* (SOFAD) that primarily develops and produces correspondence distance learning materials that school boards utilize in their own district-based programs. SOFAD also provides an e-learning platform (i.e., EduSOFAD) that offers many of the courses online for the students who prefer to work online. SOFAD served 30,072 adult students who are 16 years or older during the 2015-16 school year, including 3231 course enrollments in EduSOFAD). The *Centre d'apprentissage en ligne de la CSBE* is the distance education program offered by the Beauce-Etchemin School Board and had 1041 students enrolled in 21 remedial and 10 full-time online courses. Finally, the Leading English Education and Resource Network (LEARN) provides a variety of distance learning opportunities to approximately 9,400 English-language students from all nine English-speaking school boards in the province.

LEARN also provides its services and resources – such as tutoring, tailored pedagogical content, training, community learning centres' support, academic peer review articles, curated resources, and enrichment activities – to stakeholders across the province in a blended format. During the 2015-16 school year approximately 39,500 students accessed these blended learning services. Finally, the Écoles en réseau (i.e., Networked Schools) has 350 teachers in 275 schools, and connected more than 5000 students through use of Knowledge Forum and various synchronous tools in a manner than blends face-to-face instruction with online tools and collaboration.

Governance and Regulation

The *Education Act* in Quebec makes no reference to distance education and since 1995 school boards have held the primary responsibility for distance education policies and regulations. In fact, at present the *Loi sur l'education publique* stipulates students must be physically present and connected to a recognized school and school board, which prevents any formal full-time online learning (and relegates supplemental online learning programs to being a provider that must co-operate with the brick-and-mortar schools).

However, private schools are regulated by a different act (i.e., *Loi sur les établissements privés*), that contains provisions pertaining to online education. Essentially a private school can request a "derogation" allowing students to be "virtually attending," which would in theory allow for the formal creation of a virtual school. To date, the Ministry has yet to receive a request for an online initiative that meets the conditions stated in the *Loi sur les établissements privés* for them to approve.

3.6 Ontario (ON)

Population: 13,537,994

Number of K-12 Schools: 4,893

Number of K-12 Students: 2,003,253

Number of K-12 Distance Education Programs: ~81

Number of K-12 Distance Education Students: ~94,500

K-12 E-Learning Programs

Each of the 60 English-speaking and 12 French-speaking school boards have the ability to offer some form of online learning using the Ministry-sponsored learning management system combined with the online curricular materials provided or their own. Many of the school boards also participate in one or more consortia designed to allow its school board members to work together to maximize their online offerings by sharing course offerings, resources and students. Additionally, the Independent Learning Centre (ILC) continues to provide correspondence distance education opportunities to adolescent and adult students throughout the province. Finally, there are as many as eight different private or independent K-12 online learning programs, some of whom have formed their own consortium.

The last year the Ministry of Education provided data to researchers was for the 2013-14, when they reported that there were approximately 52,095 students taking e-learning courses (including summer school). Based on less than 10 responses to the individual program survey that indicated an average growth in public school board programs of 15%, researchers estimated that there were approximately 60,000 students taking e-learning courses during the 2014-15 school year. Data from more than 20 school board programs over the past two years have indicated that those programs have experienced a 30% to 35% growth in enrollment over the past two years. Based on this information, it is estimated that there are approximately 67,000 students taking e-learning courses during the 2015-16 school year. It is also estimated the ILC had approximately 20,000 students enrolled in their correspondence courses. Finally, the most recent data available indicated there were approximately 7,500 students enrolled in private online schools.

It should also be noted that in their last response to researchers, the Ministry of Education also indicated that there were approximately 237,930 unique blended learning logins in their system during the 2013-14 school year.

Governance and Regulation

Since 2006, the *Provincial e-Learning Strategy* has guided the Ministry to provide school boards with various supports necessary to provide students with online and blended learning opportunities, as well as providing e-learning leadership within the provincially funded school system. Under this policy,

the Ministry provides school boards with access to a learning management system and other tools for the delivery of e-learning, asynchronous course content and a variety of multimedia learning objects, and a variety of other technical and human resource supports. School boards, that are responsible for the actual delivery of e-learning, must sign a "Master User Agreement" (e.g., see http://www.edu.gov. on.ca/elearning/MasterUserAgreement.pdf) to access all of the services that the Ministry provides.

Private online schools operate as a business in Ontario, independent of the Ministry of Education. Those schools offering credits towards the Ontario Secondary School Diploma require an inspection. Inspectors look for evidence of ongoing interactions between the teacher and students in the online learning environment, and for a direct link between the specific and overall curriculum expectations being taught and assessed in compliance with Ministry policy and observed practices. Inspectors review online courses for compliance with Growing Success, 2010.

[Note that there is a new vignette from Ontario available at the http://k12sotn.ca/on/ focused on the eLearning at the Upper Canada District School Board (UCDSB), supported by the Ontario eLearning Consortium. The vignette provides a testimony to the effectiveness of the consortium as the UCDSB has tripled their e-learning offerings and expanded to offer a Continuing Education program as well. They did this while addressing geographical and technological challenges. By joining the consortium, the UCDSB not only expanded its course offerings, but improved networking, collaboration, and professional learning opportunities for teachers.]

3.7 Manitoba (MB)

Population: 1,272,000

Number of K-12 Schools: 869

Number of K-12 Students: 183,304

Number of K-12 E-Learning Programs: ~38

Number of K-12 E-Learning Students: ~8000

K-12 E-Learning Programs

Manitoba Education and Training continued to support three distance learning options in 2015-16: Independent Study Option (ISO), Teacher Mediated Option (TMO) and Web-Based Course (WBC) Option. The ISO (i.e., print) continued to offer 52 courses in English and 11 courses in French for grades 9-12 students. The TMO, which is managed by rural school divisions through the TMO Consortium in partnership with Manitoba Education and Training, offered 19 English courses for grades 9-12 students. The WBC Option provided access to 43 courses in English and 4 courses in French. Each school division in the province has participated in one or more of the above distance education program options; however, participation varies from year to year depending on the changing needs of students and schools. The numbers outlined for the 2015–16 school year indicate 1596 students accounted for 2668 enrollments in the ISO, approximately 100 students from 23 different schools accounted for 421 enrollments in the TMO and 6500 student enrollments in the WBC Option. Overall, there were approximately 9589 distance education enrollments in programs directly supported by Manitoba Education and Training, and students could be enrolled in more than one program.

In terms of blended learning, Manitoba Education and Training provides teachers with access to the provincial learning management system in order to support and supplement their classroom teaching practices. Teachers make requests for courses (and to add students to those courses) through an online WBC Request System. As such, school divisions and schools develop their own blended learning programs and determine how to infuse technology into their classrooms to best suit the needs of their learners. Additionally, Manitoba Education and Training assists teachers in understanding the pedagogy of blended and online learning through training workshops and presentations.

Governance and Regulation

The only reference in the *Public Schools Act* regarding distance education is mention that the Minister of Education can approve courses of study, including correspondence and other courses. Manitoba Education and Training has issued other regulatory and policy documents, along with handbooks for each of the three distance learning options.

Manitoba Education and Training has created a framework that allows for a virtual collegiate to operate in Manitoba. The formation of the virtual collegiate occurred as part of a three-year pilot collaboration among educational entities already recognized and operating distance education programs in the province. A signed Memorandum of Understanding (MOU) with the province governs the collaboration. To date, the Manitoba First Nations Education Resource Centre (MFNERC) has signed an MOU with the province and was granted a Manitoba school code for Wapaskwa Virtual Collegiate effective September 2014. Recently, InformNet Virtual Collegiate, which offers 9-12 online courses through two school divisions, signed an MOU and received a school code that took effect in September 2016.

3.8 Saskatchewan (SK)

Population: 1,150,632

Number of K-12 Schools: 798

Number of K-12 Students: 176,301

Number of K-12 E-Learning Programs: 16

Number of K-12 E-Learning Students: ~12,000

K-12 E-Learning Programs

During the 2015-16 school year there were 13 school divisions and three other providers of distance education in Saskatchewan based on the Saskatchewan Distance Learning Course Repository (i.e., a centralized online course directory that is coordinated by the Ministry of Education). The Ministry indicates that it only gathers data for students taking online distance education courses that count towards completion of a secondary diploma at the 10, 20, 30 levels (i.e., grades 10 to 12). During the 2015-16 school year, there were 9784 secondary course enrollments involving 5235 unique students and 6418 credits were earned. The Ministry also indicated there were students in kindergarten through grade 9 taking courses online through a variety of providers, but the Ministry did not collect data about their involvement. Based on the most recent responses to the annual individual program survey, 13 of the 16 e-learning programs report approximately 11,000 students engaged in some form of e-learning.

At this time, the Ministry does not track individual blended learning programs in the province. All 28 school divisions are implementing the *Saskatchewan Technology in Education Framework* (*TEF*) and are working to ensure students have access to the tools they require to succeed in school, including access to technology. Within school divisions, teachers have the choice to deliver instruction using a variety of teaching methods, including blended learning, to best meet the needs of their students. Many school divisions are currently building blended learning modules and resources to support teachers in blending instruction in their classrooms.

Governance and Regulation

The delivery of distance education, online learning, and blended learning in the province is guided by the *TEF* which outlines the roles and responsibilities of the education sector with regards to the use of technology in education. It contains a number of outcomes and indicators that guide the use of technology in the province in the areas of teaching and learning, administrative operations and infrastructure. In particular, the *TEF* requires that school divisions ensure distance and online learning opportunities are available to students, that intra- and inter-school division learning opportunities are available to students with local support provided, that distance learners have success rates that

are equivalent to students in traditional classroom environments, and that assistive technology and technical support is available to students with intensive needs and/or school personnel supporting them.

[Note that there is a new vignette from Saskatchewan available at the http://k12sotn.ca/sk/ focused on the Sun West School Division. In this vignette, we hear how Sun West Distance Learning Centre supports educational assistants who supervise students taking online courses that has pushed student success rates up significantly. The Learning Centre has also supported the implementation of blended learning practices to activate three types of learning: online, blended and personalized.]

3.9 Alberta (AB)

Population: 4,025,074

Number of K-12 Schools: 2,152

Number of K-12 Students: 691,876

Number of K-12 E-Learning Programs: ~20

Number of K-12 E-Learning Students: ~60,000

K-12 E-Learning Programs

It is believed that approximately 20 school divisions in the province offer an assortment of online learning, catering mostly to students in their own geographic jurisdiction. Some of these district-based programs manage students in other regions of the province, but at present there is only one single province-wide program (i.e., the Alberta Distance Learning Centre [ADLC]) that offers courses to over 44,000 students in the province. The Ministry reports that the provincial student information database indicated that there were 9,985 students enrolled in online programs during the 2015-16 school year, but many school authorities currently do not code their students as being online. Accordingly, the actual number of students engaged in some form of distance or online learning across all education authorities is unknown. Based on the most recent responses of the annual individual program survey from 11 of the e-learning programs, there were approximately 50,000 students engaged in distance and/or online learning.

While the Ministry of Education does not collect enrollment data for blended learning, it is believed that the level of blended learning is growing in the province. For example, blendED – a conference focused on fostering the growth of quality blended learning opportunities for students in Alberta that began two years ago – has attracted approximately 300 participants each year from outreach programs, learning centres, distance learning programs or classrooms that are using the online environment to expand and extend learning opportunities and building flexibility to student learning. This past year the Alberta's BlendEd Learning Society was organized to support the annual blendED conference specifically to promote structured dialogue and share emerging practices while providing opportunities for networking.

Governance and Regulation

At present, the *School Act* grants the Minister of Education the authority to make regulations with respect to public and private distance education programs. The Ministry has generally not exerted that authority beyond outlining some specific requirements primarily related to the amount of required instructional time as a part of its annual *Guide to Education*.

The service agreement for ADLC has been extended for a period up to and including August 31, 2018. The extension allows the Ministry to engage in work that will inform the next steps for the future of distance, online and blended learning in Alberta, and will enable the Ministry to share more robust information in the future. The *Centre francophone d'éducation à distance*, the online service provider for the five Francophone school boards in the province, operates under an annual conditional grant from the Ministry with other operational funds secured from the Francophone boards and adult education service provision.

It should be noted that since 2007 there have been consultation initiatives related specifically to distributed learning policy, that was later included as a part of the consultations on the 2011 *Inspiring Action in Education* initiative. These consultations were followed by a two-year review of distance education programs and services offered in the province conducted by an external consulting firm with the goal of recommending a provincial model for distance education delivery. In 2016 an online learning advisor was appointed by the Ministry to address the need for changes in policy, as well as the establishment of standards, guidelines and quality indicators in online and blended learning. In addition, efforts are underway to identify more accurate data regarding e-learning throughout the province.

[Note that there is a new vignette from Alberta available at the http://k12sotn.ca/ab/ focused on the role of the online learning advisor that was appointed by the Ministry in 2016.]

3.10 British Columbia (BC)

Population: 4,683,139

Number of K-12 Schools: 1930

Number of K-12 Students: 635,037

Number of K-12 E-Learning Programs: 75

Number of K-12 E-Learning Students: 69,735

K-12 E-Learning Programs

In 2015-16 there were 59 district-level public distributed learning schools (distance education providers) and 16 independent (or private) distributed learning schools that enrolled approximately 69,735 unique students in one or more courses. LearnNowBC has ceased operations, and its main services to schools (e.g., school, course, trades finders and *Collaborate*) have been transferred to the Ministry and are operated by Open School BC. Additionally, Open School BC also provides provincial content and online hosting services on a cost-recovery model to school districts lacking the capacity or desire to manage their own.

The Ministry of Education has not yet begun to gather data on blended learning programs, but can report anecdotally that blended learning is on the increase. At present, the BC Learning Network, a consortium of school districts providing online courses in distributed learning schools, is in year two of its major content development three-year plan with the goal of creating online content and digital resources that can be used in all school learning environments.

Governance and Regulation

The distributed learning landscape in British Columbia has remained relatively stable over the past years. The legislative language in section 3.1 and section 75 (4.1) of the *School Act, 2006*, as well as section 8.1 of the *Independent School Act, 2006*, still govern the operation of distributed learning programs. Both pieces of legislation contain similar language concerning the establishment of distributed learning schools "only with the prior agreement of the Minister." As such, these agreements between the Ministry and the school districts or independent schools serve as the main governance documents for distributed learning in British Columbia. In addition to these agreements, the Ministry also has a series of policy documents that outline the regulations that distributed learning schools must follow.

In 2013, minor changes were made to legislation and funding to allow students in grades 8 and 9 to enroll in both a program at a neighbourhood school as well as courses provided by a distributed learning school, as long as the distributed learning school is operated by another school district.

The current funding model in British Columbia does not differentiate between distributed learning and blended learning, or between face-to-face and blended learning. However, there are different funding amounts for face-to-face courses and programs, as compared to distributed learning courses. Under the current policy, the delivery method is considered distributed learning as long as the student is at a distance from the teacher for the majority of the time. A "majority of the time" is not explicitly defined under the current regulations.

[Note that there is a new vignette from British Columbia available at the http://k12sotn.ca/bc/ focused on the Abbotsford Virtual School. In the vignette, we learn about how Abbotsford Virtual School, one of many BC Distributed Learning Schools, began to adopt a blended learning program based on a STEM (science, technology, engineering and mathematics) program and moved to an inquiry-based, technology enhanced and socially engaging program.]

3.11 Yukon (YT)

Population: 36,700

Number of K-12 Schools: 28

Number of K-12 Students: 5,122

Number of K-12 Distance Education Programs: 2

Number of K-12 Distance Education Students: 149

K-12 Distance Programs

While continuing to sign MOUs with the existing partner school districts in British Columbia and Alberta, Yukon Education is increasing the scope of distance and online program delivery through the Aurora Virtual School (AVS). In 2015-16 AVS managed courses for 57 grade 8-12 students taking at least one of the 35 online courses. Additionally, there were 55 full-time and 37 supplemental students enrolled in distributed learning programs from British Columbia. There was no information provided that the Francophone school utilized any distance learning provided from Alberta-based programs.

Yukon Education also supports and tracks blended learning programs. During the 2015-16 school year, blended learning was practiced in 16 of the territory's 30 schools, with a total of 653 students enrolled in a blended learning option (representing more than 20% of Yukon's grade 5-12 student population). Additionally, many Yukon teachers use informal blended learning approaches for which Yukon Education does not keep data.

Governance and Regulation

There have been no recent changes to the governance and regulation of K-12 distance education in the Yukon. The *Education Act, 2002* still allows the Minister of Education to provide distance education courses and charge fees for students to access those courses. However, the 2003 decision to provide these distributed learning courses at no cost to students up to the age of 21 continues to be followed.

Yukon Education also continues to govern the operation of individual distance education programs through individual Memorandums of Understanding (MOUs) that it signs with each individual program.

[Note that there is a new vignette from the Yukon available at the http://k12sotn.ca/yk/ focused on the Aurora Virtual School. In the vignette we learn how the Yukon went from using out-sourced online programs to developing their own in-house program. Based on a researched mix of both synchronous and asynchronous activity, Aurora Virtual School has quickly become an exemplar, for online learning approaches, but most importantly for engaging remote students in learning opportunities successfully. Enrollment has doubled in the last year of the program, and the future for its success shines.]

3.12 Northwest Territories (NT)

Population: 43,672

Number of K-12 Schools: 49

Number of K-12 Students: 8367

Number of K-12 E-Learning Programs: 1

Number of K-12 E-Learning Students: 81

K-12 E-Learning Programs

At present the Beaufort Delta Education Council eLearning Program, which the Department of Education, Culture and Employment has been piloting over the past few years, is the primary provider of e-learning in the Northwest Territories. During the 2015-16 school year, 51 students were enrolled in one or more of the eight courses it offered. The territorial government has actually made the development of and support for this pilot project a priority over the next four years, with the published mandate of the Minister of Education, Culture and Employment stating that "expanding the NWT distance learning pilot project to increase access for NWT senior secondary students in all communities" was one of his commitments (p. 2).

Additionally, there were still 31 students enrolled in distance learning courses offered through the Alberta Distance Learning Centre.

Governance and Regulation

The *Education Act, 2009* allows various educational bodies to "authorize, supervise and evaluate the use of distance learning programs in the provision of the education program" (p. 72). Since 2004, the Department of Education, Culture and Employment has had a Memorandum of Understanding with the Alberta Distance Learning Centre for Northwest Territories students to use their courses and, since 2010, the regional boards of education took on the funding of these courses. Finally, Section 3.3 of the *Northwest Territories School Handbook* outlines a series of requirements that schools must adhere to in order to participate in distance learning.

[Note that there is a new vignette from the Northwest Territories available at the http://k12sotn.ca/nt/ focused on the Beaufort Delta Education Council eLearning program in partnership with Northwest Territories Department of Education, Culture And Employment. In the vignette we learn about how the six-year-old program has continued to expand synchronous and asynchronous learning options to communities in some of the most remote regions of Canada, surpassing both pedagogical and technological challenges.]

3.13 Nunavut (NU)

Population: 35,591

Number of K-12 Schools: 42

Number of K-12 Students: 9,728

Number of K-12 E-Learning Programs: 0

Number of K-12 E-Learning Students: ~325

K-12 E-Learning Programs

Nunavut does not have its own K-12 distance education program, but the territory government has entered into agreements with several programs from other provinces. For example, during the 2015-16 school year the Alberta Distance Learning Centre (ADLC) indicated that there were 313 students enrolled in courses they offered. Although this figure includes students in both K-12 schools and other post-secondary settings. Additionally, students attending four schools in three communities could access an online version of the CISCO program delivered through Connected North. Contact North is an Ontario-based program that offers an academic and trade-based curriculum to students in K-12, adult basic education, and post-secondary settings. It is expected that the territory's participation in Contact North will expand to include six schools in five communities next year.

At present, the Department of Education is not involved in any blended learning initiatives.

Governance and Regulation

The *Education Act, 1999* allows various educational bodies to "authorize, supervise and evaluate the use of distance learning programs in the provision of the education program" (p. 75). Additionally there are territorial agreements signed with individual distance education programs authorized to provide services to Nunavut students in the K-12 system. At present students wishing to enroll in distance education courses contact their school principal.

The Department of Education is in the early stages of consideration of a delivery plan for distance education that involves several moving parts that once finalized will determine the capacity and direction distance education will take in Nunavut. This is the latest effort that began around 2012 with attempts to develop a ministerial directive regarding access to and delivery of distance education.

3.14 Federal

Population: 1,400,685

Number of K-12 Schools: 435

Number of K-12 Students: ~108,000

Number of K-12 E-Learning Programs: 3

Number of K-12 E-Learning Students: 1,390

K-12 E-Learning Programs

At present there are a total of three K-12 distance education programs designated as First Nations, Métis and/or Inuit programs. One of these is located in Ontario (i.e., Keewaytinook Internet High School), one in Manitoba (i.e., Wapaskwa Virtual Collegiate), and one in Alberta (i.e., SCcyber E-learning Community). There are other First Nations, Métis and Inuit organizations that have been exploring the adoption of K-12 distance education. However, for a variety of reasons – lack of bandwidth or connectivity, lack of community buy-in, lack of expertise for implementation and others – they have not yet established distance education programs.

Over the past three years, two First Nations, Métis and/or Inuit programs have ceased operations (i.e., Credenda Virtual High School following the 2012-13 school year and Gai hon nya ni: the Amos Key Jr. E~Learning Institute around 2014-15).

Governance and Regulation

Approximately 60% of First Nations students attend schools on reserve. In support of these students Indigenous and Northern Affairs Canada (INAC) provides funding support directly to Band Councils and First Nations education organizations. First Nations, or their respective regional organizations, have responsibility for managing and delivering education programs and services in band-operated schools on reserve. For students who live on reserve but attend provincial schools off-reserve, INAC pays the tuition that the applicable province charges for non-Aboriginal students. This is paid to the First Nation in question or directly to the provincial Ministry of Education depending on the agreement in place.

INAC requires that each of the educational programs (including K-12 distance education) work with the individual Ministry of Education in the province or territory in which they operate in order to gain accreditation. The accreditation process involves a validation that the education program is using provincial curriculum, which allows the program to grant provincial credit. As Ministries cannot fund enrollment in federal education programs, the First Nations education programs (including K-12 distance education programs) must also enter into agreements with individual school districts/divisions to serve off-reserve students.

As a part of the most recent budget, INAC invested $2.6 billion over four years to support primary and secondary education on reserve, including funding to address immediate financial pressures and to keep pace with growth in the medium term (such as population and cost for services pressures). The investment also included targeted funding for special needs education, language and culture, literacy and numeracy, and funding to support the transformation of First Nation education and the establishment of new First Nation-controlled systems. INAC continues to engage with First Nations and education leadership to determine how best to gather input on how to proceed on the future of First Nations education. E-learning and other alternatives to traditional classrooms can certainly be a key area of discussion, both as a means of meeting individual student needs and incorporating these approaches into new education systems.

4. Bibliography

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5. Appendix A

Ministry of Education Survey

Please review the provincial or territorial profile from the 2015 edition of the *State of the Nation: K-12 E-Learning in Canada* report.

1. Have there been any changes in the legislative regime related to K-12 online distance education?

2. Have there been any changes in the regulatory regime related to K-12 online distance education?

3. (a) Are there additional online distance education programs, not mentioned in the 2015 report that should be included in an updated report?

(b) Are there additional blended learning programs, not mentioned in the 2015 report that should be included in an updated report?

4. (a) How many students were involved in K-12 online distance education during the 2015-16 school year?

(b) How many students were involved in K-12 blended learning during the 2015-16 school year?

5. Are there any additional issues related to K-12 distance education, not mentioned in the 2015 report that should be included in an updated report?

6. Is there any information in the 2015 report that you feel should be updated or revised?

6. Appendix B

Individual Program Survey

What is the name and website of your K–12 distance learning program?

The following questions are about your 2015-16 e-learning program, not the current program.

1. Describe the methods of delivery for your distance learning program (indicate all that apply).
[   ] Print materials   [   ] Instructional television   [   ] Web-based/Online   [   ] Other:

2. How many students were enrolled in your distance learning program?

3. How many different courses did your distance learning program offer?

4. (a) How many full-time teachers were employed by your distance learning program?

(b) How many part-time teachers were employed by your distance learning program?

5. (a) Did your program use a blended learning approach (where some part of your program required onsite instruction)?   [   ] Yes   [   ] No

(b) How many students were enrolled in your blended learning program?

(c) How many different courses did your blended learning program offer?

(d) How many teachers were employed by your blended learning program?

6. Please indicate whether your program was primarily synchronous (time dependent) or asynchronous (time independent), select only one.
[   ] Synchronous   [   ] Asynchronous   [   ] A balance of asynchronous and synchronous

7. Please indicate how registration in your program is managed.
      [   ] Continuous entry (student intake occurs throughout the school year)
      [   ] Specific entry dates and/or completion dates

8. Please add any additional information about your program you believe would be of benefit to our research.

If there are any follow-up questions, or you would like to be included in one of the e-learning vignettes profiling your program, who would be the best person for the researcher to contact?

Name: Title: E-mail address: Telephone number:

7. Call for Sponsors – 2017 State of the Nation: K-12 E-Learning in Canada Study

Canadian eLearning Network (CANeLearn) is seeking funding for the 2017 K-12 e-learning study of Canada. If your organization is interested in participating through sponsorship by supporting the tenth anniversary edition of the State of the Nation Study: K-12 E-Learning in Canada, please contact Michael Barbour at mkbarbour@gmail.com, or Randy LaBonte at rlabonte@CANeLearn.net.

Your participation as a sponsor helps support more widespread participation from online and blended programs across the country in the K-12 e-learning in Canada project and is an ideal opportunity to demonstrate your organization's interest in and commitment to supporting online and blended learning. Your company or organization will be recognized for its support of virtual schools seeking to effectively expand educational options for K-12 students across Canada.

CANeLearn is a new Canadian registered not-for-profit society. CANeLearn's mission is to provide leadership that champions student success by supporting organizations and educators involved in online and blended learning through networking, collaboration and research opportunities. CANeLearn provides members with networking, collaboration and research opportunities.

Please review the sponsor benefits and opportunities for the *State of the Nation: K-12 E-Learning in Canada* study:

- Recognition in all post-study press releases, presentations and distribution of information;
- Opportunity to provide input into the program survey;
- Participate in project conference calls;
- Project sponsor name and logo listed on all promotional materials;
- Project sponsor name and logo listed on the final report;
- Receive hard copies of the final report;
- Receive Executive Summary of the final report for use on company website and for marketing purposes;
- Receive recognition as a thought leader for cutting-edge research of K-12 e-learning in Canada for sponsoring the research study; and
- Sponsor recognition during CANeLearn events highlighting the study.

The plans for the 2017 study include an updating of the K-12 policy and activity reports for each of the provinces, as well as the addition of new brief issue papers, new vignettes, and updated responses to the individual program survey. Finally, there will be a greater development of the new online version of the report.For-profit and non-profit institutions, organizations, individuals, foundations and companies are welcome to partner with CANeLearn for sponsoring the study. Please consider sponsorship of this important survey and report to be conducted annually. Your consideration is deeply appreciated.