Chapter 2

Department of Education and Early Childhood Development

Improving Student Performance: A New Brunswick Challenge

Contents

Summary	13
Audit Objective	14
Conclusions	14
Results in Brief	15
Key Findings	15
Recommendations	15
Background	27
Audit Scope and Approach	33
Appendix I – Organizational Chart for Delivery Education-Department	70
Appendix II – Provincial Assessments – General Information	71
Appendix III – Partners in Education and Learning	72
Appendix IV – Cost of the Public School Education	73
Appendix V – Work Performed by AGNB for his Audit	74
Appendix VI – About the Audit	75
Appendix VII – Criteria Used in Our Audit	76
Appendix VIII – Information on the 2016 Pan-Canadian Assessment	77
Appendix IX – Information on the 2015 Programme for International Student	78
Assessment (PISA)	
Appendix X – Examples of Public Reports on Assessment Results	79
Appendix XI – Anglophone Assessment Results over 10 Years – Grade 2 to 8	81
Appendix XII – Francophone Assessment Results over 10 Years – Grade 2 to 8	83

Department of Education and Early Childhood Development Improving Student Performance: A New Brunswick Challenge

2.1

Summary

and [the Province] as a whole. It lays the foundation for Significance of success at work and throughout life and benefits the education economy, society, and individual quality of life. Numerous studies indicate that well-educated citizens are better able to meet the demands of a modern economy, and are more likely to become productive, healthy, and participating members of society."¹ In 2017-2018, the cost of operating the school districts in the Province was over \$1 billion. Public school education accounts for over 15% of total government expenditures in New Brunswick. Structure for delivering 2.2 New Brunswick is Canada's only officially bilingual education province. Its education system "offers students the opportunity to learn in English and French through two

opportunity to learn in English and French through two parallel, but separate education systems."² New Brunswick's public education system has three levels of administration:

"Education is vital to the progress of both individuals

• the Department of Education and Early Childhood

¹ Report of the Auditor General of Canada to the Government of the Northwest Territories, May 2010 ² Department of Education and Early Childhood Development Annual Report 2015-2016

	 Development (Appendix I shows an organizational chart of positions and sections involved with education within the Department); 7 school districts (4 Anglophone; 3 Francophone); and approximately 300 schools.
Why we chose this topic	2.3 Education is a priority for New Brunswickers. Student performance goals have been in place, in successive provincial education plans, since 2002-2003. However, the goals set 15 years ago are still not met.
	2.4 We focused our audit on the management of student performance in reading, math and science, which is measured through provincial assessments. We consider these subjects to be the core of education because they are tested at the provincial, national and international levels.
Audit Objective	2.5 Our objective for this audit was to determine if the Department of Education and Early Childhood Development:
	 sets goals for student performance in reading, mathematics and science;
	 monitors student performance;
	 acts to improve student performance; and
	 publicly reports on student performance compared to goals.
Conclusions	2.6 We concluded the following:
	• In spite of the Department of Education and Early Childhood Development's efforts to plan, monitor and improve student performance, provincial assessment results for reading, math and science remain consistently below targets. The management cycle to improve student performance is not operating as intended.
	• The Department sets targets for student performance in reading, math and science and monitors performance. However, the Department, school districts and schools are not complying with the <i>Education Act</i> in carrying out all their responsibilities.
	• The Department does not hold school districts accountable for student performance as stipulated in the <i>Education Act</i> .

	• Frequent changes in education strategy create instability and shift focus away from educating students.
	• The Department publicly reports on student performance compared to goals. However, plans to improve performance are not provided to the public.
	• Overall, multiple complex factors affect student performance.
	2.7 We identified deficiencies at each stage of the management cycle to improve student performance, and we made recommendations for improvement.
Results in Brief	2.8 Results in brief are presented in Exhibit 2.1 .
Key used in this chapter	2.9 The following key is used to classify our findings:
	✓ represents a positive observation;
	★ represents an area needing improvement; and
	• represents other observations.
Key findings	2.10 In this chapter our key findings are reported in sections. Each key finding is supported with detailed findings and observations. Our findings and observations are listed in Exhibit 2.2 . Additional detail is provided in appendices.
Recommendations	2.11 Our recommendations to the Department of Education and Early Childhood Development along with the Department's responses to each recommendation are presented in Exhibit 2.3 . Our recommendations are addressed to the Department because the Minister is ultimately responsible for the <i>Education Act</i> . However, many recommendations involve collaborating with other parties.
	2.12 We believe, by implementing these recommendations, the Department will make improvements in:
	 the stability of the education system by minimizing disruptions;
	• identifying and addressing the root causes of inadequate student performance in reading, math and science; and
	• accountability and transparency in managing student performance in accordance with the <i>Education Act</i> .

Exhibit 2.1 – Results in Brief

Improving Student Performance: A New Brunswick Challenge

Why Is This Important?

- 98,000 students depend on the New Brunswick education system to prepare them for their future.
- Every year, over \$1 billion is spent on public school education and represents over 15% of government expenses in New Brunswick. The cost per student has increased by 25% in the last ten years.
- Student performance on provincial assessments has never met targets in the last 15 years.

What We Found

Overall Conclusions

- Frequent changes to the education system disrupt its stability and take focus away from educating students.
- The management cycle to improve student performance is not operating as intended.
- The Department sets targets, monitors and publicly reports on student performance, but does not hold school districts accountable.
- Overall, multiple complex factors affect student performance. More collaboration is needed between sectors, other departments and community-based organizations.
- Most New Brunswick students meet expectations on national tests and perform comparatively high on international tests.

Education system lacks stability

- Frequent changes cause disruption in education and take focus away from educating students, for example:
 - 3 major changes to French immersion program in 10 years
 - 5 different provincial education plans in 15 years

Rushed changes without considering implications

• Governments have introduced priorities without providing necessary supports, for example:

French immersion program:

- Only one year to implement the 2017 change in entry point
- Teacher demand exceeded labour market and resulted in hiring teachers lacking required language skills

Accountability process required by *Education Act* not followed

- Department does not hold school districts accountable
- Instances of incomplete or missing school district education plans
- School district performance reports not always done
- The lack of teacher performance reviews can go undetected for 20 years

Complex realities impact student performance

- Families experiencing difficult socioeconomic situations can lead to students with unaddressed basic needs
- Teachers are forced to focus on basic needs before teaching students
- Cases of chronic student absenteeism exist
- Some student behaviours exceed the professional training of a teacher

2.2	Key Findings with Detailed Findings and Observations
Paragra	ph # Overall findings:
2.27	✓ Planning, monitoring and reporting are done regularly by the Department.
2.28	 The Department has a 10-year education plan for each sector with annual implementation plans
2.29	✓ The Department monitors student performance in several ways
2.30	\checkmark The Department publicly reports on student performance in several ways
2.31	\checkmark Reports on provincial assessment results are easy to understand
2.32	× Plans to improve are not provided to the public
2.33	× The results of provincial assessments are difficult to find on the Department's website
2.37	✗ Student performance on provincial assessments in reading, math and science is significantly below targets.
2.38	× Targets in reading, math and science have never been met in 15 years
2.45	• We were challenged to determine what is being done to address unmet targets
	Several reasons why targets are not met:
2.48	➤ New Brunswick's education system suffers from a lack of stability.
2.49	★ Frequent changes disrupt the education system
2.51	★ There have been 5 different provincial education plans in 15 years
2.53	• The French immersion program adds to the complexity of operations in the Anglophone sector
2.54	✗ French immersion changes create instability in the Anglophone sector
2.55	Rushed implementation of the 2017 change to the French immersion entry point disrupted operations in Anglophone sector
2.60	★ The school districts reported challenges to meeting the targets.
2.61	× New Brunswick's socioeconomic situation has unaddressed needs
2.62	× Our inclusive education system has unaddressed needs
2.65	★ The Department does not monitor student absences
2.67	➤ The planning, monitoring and reporting cycle to improve student performance is not operating as intended.
2.69	× Not all schools prepare a school improvement plan as required by the Education Act
2.72	★ Most schools do not have a school performance report as required by the Act
2.73	× School districts do not plan, monitor and report as required by the Act
2.74	★ The Minister does not hold the school districts accountable as required by the Act
2.76	• Interviewees reported the Act may be outdated
2.77	× DECs' performance is not evaluated

Exhibit 2.2 - Key Findings with Detailed Findings and Observations

2.2	TZ.		
2.2	Key	Findings with Detailed Findings and Observations (continued)	
Paragraph # Several reasons why targets are not met (continued):			
2.83	x	School districts do not make sure all teachers have regular performance reviews.	
2.84		The School districts do not monitor to ensure all teachers have regular performance reviews	
2.85	נ	★ The lack of teacher performance reviews can go undetected by school districts for 20 years	
2.86	1	• Only 65% of teachers in the Anglophone sector reported receiving helpful feedback	
2.88	× (Constantly changing provincial student assessment programs impair usefulness of results.	
2.89	5	The provincial assessment programs lack stability	
		Other key findings:	
2.92		Most New Brunswick students meet expectations on national tests and rank comparatively high on international tests.	
2.95	`	Most New Brunswick students met the expected performance level on the 2016 pan-Canadian reading test	
2.96	1	★ New Brunswick's mean score in reading was one of the lowest in the country on the 2016 pan-Canadian reading test	
2.98	`	Internationally, New Brunswick students rank comparatively high	
2.101	1	The Department does not publicly report student performance results on national and international tests	
2.103	✓ [′]	The 2016-2026 education plans set objectives and measurable targets.	
2.104	•	Stakeholders were consulted when preparing the plans	
2.105	`	The education plans have objectives with performance indicators and targets	
2.109	`	90% of students passing provincial grade 2 reading assessments by 2025-2026 is a reasonable target	
2.110	•	Education professionals believe targets are reasonable	
2.111	•	 Plans provided autonomy to school districts 	
2.112		More collaboration is needed between the two sectors	

Exhibit 2.2 - Key Findings with Detailed Findings and Observations (continued)

2.2	Key Findings with Detailed Findings and Observations (continued)
Paragrap	h # Other key findings (continued):
2.114	• Observations on the French immersion program - Anglophone sector
2.116	 Several key issues emerged in a 2008 program review, including high dropout rates and low language proficiency success
2.117	 Only 10% of students who enrolled in the early French immersion program in 2005 achieved the Department's language proficiency goal
2.118	• 75% of students dropped out of early French immersion
2.120	 Students in French immersion programs outperform students in the English program in reading, science and math
2.121	• There are consistent significant gaps between English and French immersion students' performance in reading at grade 9
2.122	• There are significantly more students with personalized learning plans in the English program than in French immersion
2.123	• Observation: Combined classes (which are more challenging for teachers) are more common in the Anglophone sector.
2.124	• There were nine times more combined classes in the Anglophone sector in the 2017-2018 school year than in the Francophone sector
2.124	• Within the Anglophone sector, there are four times more combined classes in the English program than in French immersion

Exhibit 2.2 - Key Findings with Detailed Findings and Observations (continued)

Exhibit 2.3 - Summary of Recommendations

	Department	Tongot data for	
Recommendation	ANGLOPHONE SECTOR	FRANCOPHONE SECTOR	Target date for implementation
Stabilize the education system			
We recommend the Department of Education and	Early Childhood Developmen	t:	
2.58 maintain the current 10-year provincial education plans until they expire in 2026, to allow the education system to stabilize and allow for evaluation of progress. Any adjustments to the plans should be collaborative.	For both linguistic sectors, the were developed after an exten with school districts and varie Department intends to mainta expiring in 2026, which serve implementation plans that are spirit of collaboration with sch stakeholders.	Ongoing	
 2.59 prior to implementing major changes that impact student performance, including changes to the French immersion program, prepare a detailed implementation plan with: a realistic time schedule; consideration of all supports that need to be in place for the change to be successful, such as human resources, curricula, teacher training, tools and methodologies; adequate funding; and a comprehensive risk assessment of the change's impact on operations and other ongoing initiatives at department, school district and school levels as well as risk mitigation strategies. 	 every effort to approach the implementation of changes impacting the education system with due diligence and consideration for the required supports enabling smooth transitions and ensuring successful implementation. Although EECD undertakes change initiatives that are to be performed within the mandate, timeframe and budget given by Government, the Department agrees that it is crucial to ensure the conditions for success are in place before rolling out a new project or initiative. 		Ongoing/Ad hoc

	Department's response		Tangat data fan
Recommendation	ANGLOPHONE SECTOR	FRANCOPHONE SECTOR	Target date for implementation
2.91 stabilize the provincial assessment programs to allow for trend analysis of student performance results for decision making.	The Anglophone sector is currently working on improving its assessment program, and reviewing new assessments that were developed between 2013- 2017. The Grade 2 standardized reading assessment will be replaced with a more authentic assessment methodology. This update was requested by the Provincial Curriculum and Evaluation Advisory Committee, and is required due to the introduction of Grade 1 French immersion. These improvements will allow for trend analysis for the coming years.	In the Francophone sector, a new provincial assessment program has been proposed to better meet the needs of the school environment. This update was done following a consultation process with the Department's partners (districts, teachers, parents, youth, etc.) further to the launch the 10-year education plan. This new program is in its second year of implementation and will remain stable for the coming years, allowing for trend analysis of student progress, and providing teachers with relevant information to improve their teaching interventions.	Ongoing

Exhibit 2.3 - Summary of Recommendations (cont	tinued)
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	Department's response Target data for		
Recommendation	ANGLOPHONE	FRANCOPHONE	Target date for implementation
	SECTOR	SECTOR	Impromotion
Hold the school districts accountable			
We recommend the Department of Education and I	Early Childhood Developmen	t:	
2.47 in collaboration with the school districts, analyze results of provincial assessments to identify root causes of poor performance and take corrective action to improve student performance in reading, math and science.	For both sectors, at the provincial or root causes to explain student progres conducive to proper corrective action school level, student achievement is th principal, and is framed within the co students needs and circumstances.	Ongoing	
e,	As such, the role of the Department and the school districts is to provide educators with appropriate tools, data and supports to identify and analyze learning challenges and adapt teaching methodologies. The Department is fully committed to continue providing that expertise, in collaboration with the school districts.		
	Furthermore, the Department has, ov Formal Management System (FMS), we success of the 10-Year Education plan approach that enables organizations a efforts, monitor results and sustain im-	which is one of the conditions for n. FMS is a proven, structured to lead the desired change, prioritize	
	FMS is being deployed across the education system to enable system leaders and staff to execute the 10-year plan, drive improvement and achieve results, and to position New Brunswick as a world-class leader in early learning and education. Implementation of the Formal Management system requires a culture shift to enable shared leadership, collective capacity, collaboration and accountability at all levels of the organization.		
	In addition, the Anglophone sector is working with district Data and Accountability Supervisors to determine a process to better analyse and use available data using the Education Plan Measures and other appropriate information as determined.	In addition, in the Francophone sector, each school establishes a school profile using provincial evaluation results and other available data. This profile informs the initiatives included in the school improvement plan, showing trends and areas requiring more focus and support.	

Exhibit 2.3 - Summary of Recommendations (cont	tinued)
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	Department's response		Tangat data far
Recommendation	ANGLOPHONE SECTOR	FRANCOPHONE SECTOR	Target date for implementation
2.66 work with school districts, other departments and community-based organizations where applicable to:	The Department, school districts and schools focus on sustained growth and improvement more than on aspirational targets.		Ongoing
 identify and address the challenges to achieving the provincial targets for reading, math and science; present to government options to address the challenges; 	The Department is working w reporting on a quarterly basis measures related to student as Kindergarten-Grade 2 literac government-wide units establi accountability.	s to government about chievement, particularly for y. This occurs through	
 develop standards for student absence tracking and measurement to better monitor student attendance; and take corrective action to improve student attendance. 	The Department's Anglophone sector does not track student absenteeism; however, work is underway with Data and Accountability Supervisors since 2017 to establish technical standards for attendance tracking, including PowerSchool Standards. This is already implemented, and data will be available by January 1, 2019. Corrective action will be undertaken by school districts where warranted.	The Francophone sector does not track student absenteeism. Corrective actions are undertaken by school districts where warranted.	

Exhibit 2.3 - Summary of Recommendations (continued)
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	Department's response		Toward Joda for	
Recommendation	ANGLOPHONEFRANCOPHONESECTORSECTOR		Target date for implementation	
2.113 facilitate the sharing of successes and best practices between the Anglophone and Francophone sectors.	The Department's approach to performance improvement facilitates more collaboration between both linguistic sectors and sharing of success. The Department is committed to further leverage the sharing of best practices between sectors. Currently, staff from the two sectors at the Department work closely together on areas of shared interest such as integrated service delivery, assessment and evaluation, autism training and interventions, and policy development. The Department will work with school districts to facilitate opportunities for further sharing of best practices at the school and district levels.		Ongoing	
 2.81 in collaboration with the school districts: ensure school improvement plans are prepared and reviewed annually as required by the Education Act, demonstrate school improvement plans 	Since the new 10-Year Education Plans have been in place, supported by the deployment of the Formal Management System, there is better alignment between the Department, school district and schools as the focus on a few objectives is well defined and communicated. They also include common performance indicators and measures.		September2020	
 align with the provincial education plan, and monitor the extent to which school improvement goals are being met. 	Also, in the Anglophone sector, work is underway to create a provincial improvement framework, which includes processes for monitoring improvement plans at every level.In the Francophone sector, it is current practice to ensure school improvement plans are prepared, aligned and monitored at every level.			

	Departm	ent's response	Target date for
Recommendation	ANGLOPHONE FRANCOPHONE SECTOR SECTOR		implementation
2.82 in collaboration with the District Education Councils, ensure District Education Councils self- evaluate their performance annually.	District Education Councils (DECs) are elected officials for a 4 year mandate through the DEC elections held at the same time as the municipal elections. In both sectors, DECs use policy governance to manage schools in their district, with the day-to-day operations delegated to the district superintendent. DECs already perform debriefing and self-evaluation through their governance policies to ensure continued improvement. This exercise is typically done on a semi-annual or annual basis.		Ongoing
Comply with the <i>Education Act</i>			
We recommend the Department of Education and I	Early Childhood Developm	ent:	
2.79 in consultation with school districts, review the <i>Education Act</i> in light of the current operating environment to ensure expectations are clear, relevant and realistic.	The Department is committed to ensuring its legislation always remains modern, relevant and responsive to the needs of an education system in constant evolution.		Ongoing
2.80 track, receive, review and take action on school district plans and reports, and hold all parties accountable as required by the <i>Education</i> <i>Act</i> .	In the Anglophone sector, the Department isThe Francophone sector, particularly since the launch of the 10-year plan, ensures their school district plans are prepared, reviewed, shared with partners and made public.Vertical improvement framework, which includes processes for monitoring improvement plans at every level.The Francophone sector, particularly since the launch of the 10-year plan, ensures their school district plans are prepared, reviewed, shared with partners and made public.		Ongoing

Exhibit 2.3 - Summary of Recommendations (continued)

Exhibit 2.3 -	Summary	of Recommendations	(continued)
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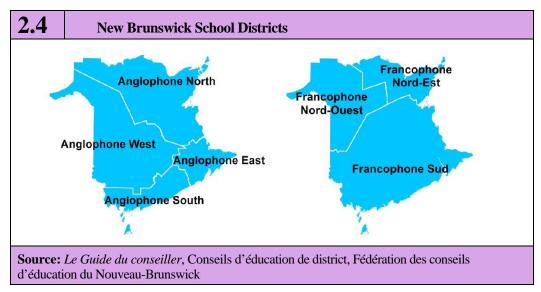
	Department's response		Tougot doto for	
Recommendation	ANGLOPHONE FRANCOPHONE SECTOR SECTOR		Target date for implementation	
 2.87 develop standards for teacher performance and provide tools to support the school districts in: evaluating staff performance regularly as required by the <i>Education Act</i>; and taking action to improve staff performance where needed. 	Under the Education Act, it is the responsibility of the district superintendent to select, appoint and direct, and suspend, dismiss or otherwise discipline, school personnel. It is also their responsibility to ensure that the performance of school personnel is evaluated. The Department is committed to collaborating with school districts and developing common evaluation tools for teachers. This would be developed in consultation with relevant stakeholders.		September 2021	
Improve public reporting				
We recommend the Department of Education and	Early Childhood Developmen	t:		
2.35 publicly provide plans to improve when assessment results show targets for reading, math and science were not met.	EECD's annual action plans are made public on the		Ongoing	
2.36 make it easy to find the results of provincial assessments by displaying them prominently on its website.	EECD already presents the provincial assessment results publicly on its Website; however, the Department is committed to ensuring the next results are linked directly on the front page in the future.		September 2019	
2.102 publicly report New Brunswick students' performance on national and international tests on its website and inform the public when these results are available.	The national and international test results are public and available on the Council of Ministers of Education, Canada (CMEC) Website. However, EECD will provide a link to these results on the Department's Website.		January 2019	

Background

New Brunswick's education system

- **2.13** New Brunswick is Canada's only officially bilingual province. To strengthen the capacity of each linguistic community and safeguard its heritage, the Province has distinct institutions where cultural, educational and social activities take place. Schools are an example. At the Federal level, Section 23 of the *Canadian Charter of Rights and Freedom* safeguards minority language educational rights.³ New Brunswick's education system is based on the principle of linguistic duality. Since the 1970's, the provincial education system has been comprised of the Anglophone and Francophone sectors.
- 2.14 In 2016-2017, the education system served nearly 98,000 students, 70% in the Anglophone sector and 30% in the Francophone sector. Exhibit 2.4 shows the school districts for each sector. There are four Anglophone school districts and three Francophone school districts which provide educational services to the entire province.

Exhibit 2.4 – New Brunswick School Districts



2.15 The two sectors have the same structure but work independently. They each have a 10-year (2016-2026) education plan, with different objectives, targets, and priorities reflecting their individual challenges. Exhibit

³ Mahe v. Alberta, [1990] 1 S.C.R. 342

2.5 shows the targets for provincial assessment results in reading, math and science for both sectors. Results on provincial assessments are the indicators used to measure progress on the Department's objectives to improve students' skills in reading, math and science. Appendix II provides general information on provincial assessments.

2.5	Targets for Student Perfo	rmance on Provincia	l Assessments in Readin	ng, Math and Science	
Anglophone Sector's Target for % of Students Passing (Note 2)Francophone Sector's Target for % of Students Passing (Note 3)					
Readin	g Grade 2	90%	Grade 2 & 3	90%	
	Grade 4 & 6	90%	Grade 4 & 7	85%	
	Grade 9	90% (first attempt)	Grade 11	80%	
Math	Grade 4, 6 & 10	90%	Grade 3, 6 & 8	85%	
			Grade 10	80%	
Science	e Grade 4, 6 & 10	90%	Grade 8	85%	

Exhibit 2.5 – Targets for Student Performance on Provincial Assessments in Reading, Math and Science

Notes:

1. Targets are for 2025-2026.

2. Passing the assessment for the Anglophone assessment program is considered achieving appropriate achievement (appropriate level for grade 2 reading, and 64% for all other assessments).

3. Passing the assessment for the Francophone assessment program is considered achieving the expected level (level 3) for elementary level reading, and achieving the acceptable level (55%) for all other assessments.

Source: Table created by AGNB from information provided in the Department's 2016-2026

French immersion	2.16 The French immersion program adds to the complexity of operations in the Anglophone sector. In September 2016, 20% of the Province's students were in French immersion. This is equivalent to nearly 30% of students in the Anglophone sector.
Statistics	2.17 In the 2016-2017 school year, there were approximately 98,000 students and 7,400 teachers in 302 schools. The breakdown by sector, along with other general statistics for New Brunswick's public school education, is shown in Exhibit 2.6 .

2.6	6 Statistics for New Brunswick Education 2016-2017				
	Anglophone Francophone Total				
Students		68,922	28,920	97,842	
Educators*(77% female; 23% male)		5,143	2,240	7,383	
Schools		210	92	302	
School districts		4	3	7	
Student	Student enrolment by grade Range from 7,069 (kindergarten) to 8,467 (grade 12)				
Numbe	r of classes by grade	Range from 361 (grade 8) to 486 (grade 1)			
Averag	e class size	Kindergarten: 17.3 Grades 1 to 8: 17.8 to 22.9		: 17.8 to 22.9	
Pupil: I	Educator* ratio	13.3:1			
Gradua	ntes in 2016	7,268 (87%)			
Dropou	Dropouts in 2016 (grades 7-12) 569 (1.2%)				
Source: Excerpts from <i>Education Outline 2017</i> (Department of Education and Early Childhood Development) *Most recent data for educators available is for 2015-2016					

Exhibit 2.6 – Statistics for New Brunswick Education 2016-2017

2.18 The student population has decreased by over 30% since 1992-1993, when there were almost 140,000 students as shown in **Exhibit 2.7**.

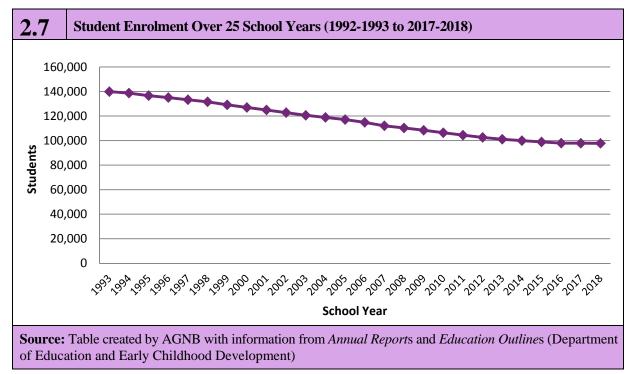
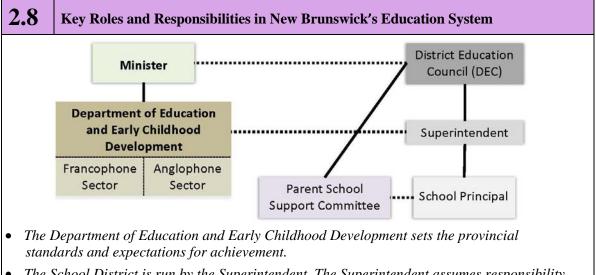


Exhibit 2.7 – Student Enrolment Over 25 School Years (1992-1993 to 2017-2018)

Partners in education and learning	including students, par District Education Cou	ex and involves many partners, rents, teachers, school districts, uncils, communities and ix III shows the key partners in esponsibilities.
Three levels of administration	2.20 The administration system takes place at t	of New Brunswick's education three levels:
	• the Department of Development (De	f Education and Early Childhood epartment);
	• school districts an	nd District Education Councils; and
	schools and Paren	nt School Support Committees.
	The key roles and respon level are shown in Exhi b	nsibilities of entities involved at each bit 2.8 .

Exhibit 2.8 – Key Roles and Responsibilities in New Brunswick's Education System



- The School District is run by the Superintendent. The Superintendent assumes responsibility for all of the [District's] employees and is the operational leader of the District.
- District Education Councils [DECs] ensure that the District operates effectively and efficiently and reflects community desires and needs.
- The School is run by the Principal who is the educational leader and administrator responsible for the school, teachers and school employees. The Principal is accountable to the Superintendent and must oversee the educational progress of students in the school.
- The Parent School Support Committee is involved in the improvement of [the] school. The PSSC has an important position working with both the DEC and the school to provide guidance in setting education goals and the learning environment of students.

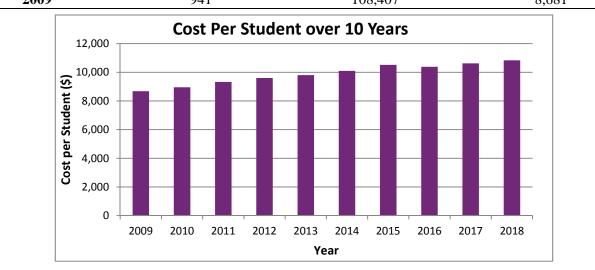
Source: Chart created by AGNB with information from the Department and excerpts from *Parent School Support Committee Handbook*, September 2013 (District Education Councils)

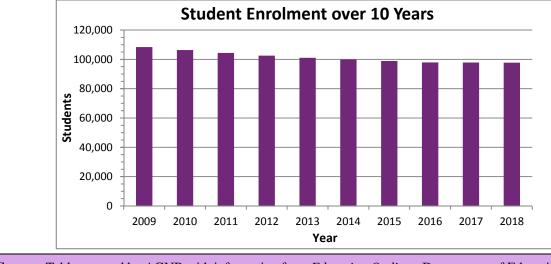
Cost of public school education	2.21 The cost of New Brunswick's public school education is shown in Appendix IV. It shows that education accounts for over 15% of total government expenditures. In 2017-2018, the cost of operating the school districts was over \$1 billion.
The cost per student has increased by 25% in the last 10 years	2.22 Both the cost of school district operations and the cost per student have increased significantly over the last 10 years. Exhibit 2.9 shows the following:
	• The cost of school district operations has increased by 13% during the past 10 years. However, the student population has decreased consistently over the same time period, dropping by 10%.

• The cost per student has increased significantly over the last 10 years. Since 2009, the cost per student rose from \$8,681 to \$10,837, an increase of 25%.

2.9 School	District Cost of Operations per St	udent over 10 Years	
Year	School District Cost of Operations (\$ million)	Student Enrolment	Cost per Student (\$)
2018	\$1,059	97,755	\$10,837
2017	1,040	97,842	10,625
2016	1,017	97,912	10,384
2015	1,040	98,906	10,519
2014	1,009	99,921	10,099
2013	990	101,079	9,801
2012	984	102,579	9,602
2011	974	104,421	9,328
2010	952	106,394	8,955
2009	941	108,407	8,681

Exhibit 2.9 – School District Cost of Operations per Student over 10 Years





Source: Tables created by AGNB with information from *Education Outlines*, Department of Education and Early Childhood Development

Note: Numbers have not been adjusted for inflation.

Audit Scope and Approach

Our audit included both the Anglophone and Francophone sectors **2.23** Our audit covered both the Anglophone and Francophone education sectors within the Department of Education and Early Childhood Development, and included all seven school districts. We visited three school districts (Anglophone South, Anglophone West and Francophone Sud), which together represent over 60% of all students. Our audit focused on the 2015-2016 and 2016-2017 school years.

2.24 Our audit approach involved interviews, documentation review and analysis. Our audit procedures included:

- interviews with selected staff from the Department and the school districts (superintendents, principals, chairpersons of District Education Councils, etc.);
- review of documentation provided by the Department and districts; and
- analysis and corroboration of observations and findings.

Further details of our audit work are shown in **Appendix V**.

- **2.25** Our audit was performed in accordance with Canadian Standard for Assurance Engagements CSAE 3001 established by the Chartered Professional Accountants of Canada. Accordingly, we carried out such tests and other procedures as we considered necessary in the circumstances. Other information about the audit can be found in **Appendix VI**.
- **2.26** We developed criteria to use as the basis for our audit, which are shown in **Appendix VII**. The criteria were reviewed and agreed upon by the Department.

Key Finding: ✓ Planning, monitoring and reporting are done regularly by the Department.

Why this is important	2.27 Planning contributes to efficiently using resources to meet objectives and targets. Monitoring ensures services are delivered consistently and conform to laws, quality standards, policies and procedures. Reporting contributes to accountability by holding someone responsible for the use of resources and the success of a program or service.
✓ The Department has a 10-year education plan for each sector with annual implementation plans	2.28 The Department has a 2016-2026 education plan for each sector and prepares annual implementation plans supporting the 10-year education plans. Various school district and Department staff meet regularly regarding implementing the provincial plans and ongoing initiatives and operations.
✓ The Department monitors student performance in several ways	2.29 The Department's priorities, for the first two years of the current 10-year provincial education plans, were reading and math improvement in kindergarten to grade 2 for the Anglophone sector, and literacy and career and life readiness for the Francophone sector. Regular monitoring of student performance by the Department includes the following:
	• The school districts submit quarterly performance reports on implementation initiatives, including those relating to student performance. The reports are reviewed by Department staff and discussed with the districts.
	• Provincial assessments are administered yearly in reading, math and science at set grades according to an annual schedule. More information on provincial assessments is in Appendix II.
	• New Brunswick students participate in both national and international testing. The Department coordinates this testing and reviews the results. More information on these tests is in Appendices VIII and IX.
	• Both sectors conduct student and teacher surveys to collect information on various performance indicators such as career readiness and teaching practices.
✓ The Department publicly reports on	2.30 Reports relating to student performance available on the Department's website include:
student performance in	 ✓ Student performance on provincial assessments;
several ways	\checkmark The Department's annual report (which has a section on

34

	student performance);
	✓ Grade 12 Exit Survey reports; and
	✓ The annual Summary Statistics report showing "Dropouts and Enrolment by School District for Grades 7 – 12", as well as an annual Dropout Statistics report which provides reasons for leaving and historical data.
✓ Reports on provincial assessment results are easy to understand	2.31 Each sector publishes reports showing the provincial assessment results in reading, math and science. The reports show results at the province, school district and school levels. We found these reports easy to understand, with targets and actual results over several years, allowing for performance comparisons over time. Appendix X shows examples of public reports on assessment results at the provincial level.
× Plans to improve are not provided to the public	2.32 We noted limited explanations for unmet targets are available publicly in District Education Council meeting minutes. However, we found neither the Anglophone nor Francophone sector provides plans to improve results in reading, math and science to the public.
× The results of provincial assessments are difficult to find on the Department's	2.33 While the results of provincial assessments are available publicly, they are not easy to find on the Department's website.
website	2.34 We believe it would be easier for the public to access provincial assessment results if they were linked and labelled in simple language directly on the Department's home page.
Recommendations	2.35 We recommend the Department of Education and Early Childhood Development publicly provide plans to improve when assessment results show targets for reading, math and science were not met.
	2.36 We recommend the Department of Education and Early Childhood Development make it easy to find the results of provincial assessments by displaying them prominently on its website.

Key Finding: × Student performance on provincial assessments in reading, math and science is significantly below targets.

Why this is important	2.37 <i>"School success has a significant impact on quality of life and economic well-being.</i> " ⁴ Provincial assessments provide data to inform policy and programming. The assessments allow the Department to report on how well students have achieved provincial standards at given points in their schooling, and assist schools, districts, and the Province in monitoring student learning. Assessment information helps in making decisions for improving student performance. More information on provincial assessments is in Appendix II.
× Targets in reading, math and science have never been met in 15	2.38 There have been targets for provincial assessment results in reading, math and science for 15 years. None of the targets have been met.

2.39 The new provincial education plans were implemented in the 2016-2017 school year. The plans have provincial assessment targets for 2025-2026.

2.40 Exhibits 2.10 and 2.11 show actual results compared to targets for provincial assessments for the school year 2016-2017 for the Anglophone and Francophone sectors respectively. The exhibits show student performance was below targets.

years

⁴ Provincial Education Plan 2013-2016, Department of Education and Early Childhood Development

2.10	Student Perfo	ormance on 2016-2017 Provir	ncial Assessments – An	glophone Sector
% of Students Who Passed Assessment*			ssed Assessment*	
Assessment		Department's Target	Actual Results	Performance Gap
Grade 2 Reading		90%	76%	14%
Grade 6 Reading		90%	62%	28%
Grade 9 English Language Proficiency		90%	81%	9%
Grade 6 Math		90%	38%	52%
Grade 6 Science		90%	32%	58%

Exhibit 2.10 - Student Performance on 2016-2017 Provincial Assessments - Anglophone Sector

* Passing rate is considered appropriate achievement (appropriate level for grade 2 reading, and a mark of 64% for all other assessments).

Source: Table created by AGNB from information provided by the Department

2.41 Exhibit 2.10 shows mixed results for Anglophone students on 2016-2017 reading assessments. Only 62% of grade 6 students achieved the appropriate level or higher, while 81% of grade 9 students achieved the appropriate level or higher. Anglophone students performed poorly in math and science assessments at grade 6. Only 32% of students achieved the appropriate level or higher in science, 58 percentage points below the target of 90%. In math, student performance was 52 percentage points short of the target.

2.11 s	Student Perf	formance on 2016-2017 Pro	ovincial Assessments – Fr	ancophone Sector	
	% of Students Who Passed Assessment*				
Assess	sment	Department's Target	Actual Results	Performance Gap	
Grade 2 Re	eading	90%	77%	13%	
Grade 4 Reading		90%	63%	27%	
Grade 8 Reading & Writing		85%	71%	14%	
Grade 11 Reading & Writing		80%	57%	23%	
Grade 3 M	ath	85%	82%	3%	
Grade 6 Math		85%	63%	22%	
Grade 8 Math		85%	75%	10%	
Grade 10 Math		80%	55% (stream A**)	25%	
			71% (stream BC**)	9%	
Grade 8 Sc	cience	85%	77%	8%	

* Passing rate is considered achieving the expected level (level 3) for elementary level reading, and the acceptable level (a mark of 55%) for all other assessments.

******Stream A is designed for students who wish to pursue post-secondary education where practical math is necessary (example: arts, carpentry) or who will enter the workforce directly; stream BC is designed for students who wish to pursue post-secondary education where theoretical or applied math is necessary.

Source: Table created by AGNB from information provided by the Department.

2.42 Exhibit 2.11 shows on reading and writing assessments, only 57% of grade 11 students achieved the acceptable level or higher, while 71% of grade 8 students achieved the acceptable level or higher. Students performed relatively well on the grade 3 math assessment, with 82% reaching the acceptable level. However, poor performance in the Francophone sector is observed in math assessments at grade 6 and 10. At grade 6, 63% of students achieved the acceptable level or higher, 22 percentage points below the target of 85%. At grade 10, only 55% of students in stream A achieved the acceptable level or above, compared to a target of 80%.

2.43 Exhibit 2.12 shows the grade 2 reading assessment results over ten years in the Anglophone and Francophone sectors. The target of 90% of students reading at the expected level or above was set 15 years ago, in 2002-2003 with a slight change in the francophone sector for three years. It has never been met.

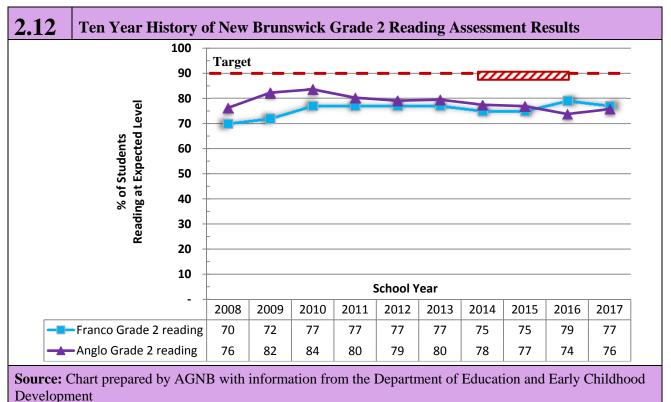


Exhibit 2.12 – Ten Year History of New Brunswick Grade 2 Reading Assessment Results

2.44 While the two sectors have consistently assessed reading at grade 2, a key assessment point, they have assessed math and science at different grade levels over the years. Appendices XI and XII show results for elementary level provincial assessments over the last ten years for the Anglophone and Francophone sectors respectively. Student performance on provincial assessments in reading, math and science has not met targets.

• We were challenged to determine what is being done to address unmet targets 2.45 We expected the Department and school districts would have a process to identify and address the root causes of poor student performance in reading, math and science. While we noted the Francophone sector provides more detailed assessment results that can be analyzed at the classroom level, in some cases we were challenged to determine what is being done to address unmet targets in both sectors.

- **2.46** However, we recognize the education system is complex and overwhelmed with many challenges. Many are noted in this report. A concerted effort by multiple departments and stakeholders will be needed to address these challenges.
- Recommendation
 2.47 We recommend the Department of Education and Early Childhood Development, in collaboration with the school districts, analyze results of provincial assessments to identify root causes of poor performance and take corrective action to improve student performance in reading, math and science.

Key Finding: × New Brunswick's education system suffers from a lack of stability.

Why this is important	2.48 It is difficult for schools and school districts to operate effectively in a constantly changing environment. Many interviewees (both in the Department and the school districts) informed us the instability causes much frustration that wears on our education system. Constant change was reported to us as a significant challenge to achieving the provincial targets in reading, math and science as it takes focus away from educating students.
★ Frequent changes disrupt the education system	2.49 As demonstrated by the timeline in Exhibit 2.14 , New Brunswick's education system has undergone significant changes in recent years. The events commonly reported to us for disrupting the education system were: changing provincial education plans (which changes the priorities for the districts), changes to the French immersion program in the Anglophone sector, and the amalgamation of 14 districts into seven in 2012.
	2.50 Frequent changes in priorities take focus away from educating students. Interviewees reported that successive governments have introduced different priorities such as literacy and changes to the French immersion program.
* There have been 5 different provincial education plans in 15 years	2.51 The Province adopted a number of different education plans over the last 15 years. The first 10-year education plan was for 2002-2012. Since then, there have been four other provincial education plans, as shown in Exhibit 2.14 . While the 2002-2012 education plan was intended to be in place until 2012, two other plans were developed during its time frame. Further, while the plan for 2010-2013 was not fully implemented because of a change in government in September 2010, it consumed time and resources to develop the plan and prepare for its implementation.
	2.52 Changing the provincial plan impacts education. A student starting school in September 2004 would have experienced five education strategies, each with different priorities, by the time they graduated.
• The French immersion program adds to the complexity of operations in the Anglophone sector	2.53 The French immersion program exists only in the Anglophone sector and adds to the complexity of operations in the sector. (There is no comparable program in the Francophone sector.)

× French immersion changes create instability in the Anglophone sector

× Rushed implementation of the 2017 change to the French immersion entry point disrupted operations in Anglophone sector

- **2.54** The entry point to the French immersion program has changed repeatedly. Each change to the program disrupts all levels of operation in the Anglophone sector. There have been three major changes to the program in the last 10 years. A prominent example is the change to the program's entry point announced in 2016 and implemented in 2017.
- **2.55** Although the change to the entry point for the French immersion program from grade 3 to grade 1 was supported by a task force recommendation in 2012, it was announced in 2016 to fulfil a political platform promise made in the 2014 provincial elections. Its implementation in 2017 was reported as being a major challenge for the following reasons:
 - There was not adequate implementation time. The change was announced in September 2016 to be operating in the following school year starting in September 2017.
 - As a result, French immersion teachers who do not have the required language skill level were hired, which is non-compliant with the Department's policy.
 - Although the change was not part of the new 10-year provincial education plan, it was implemented concurrently with the plan.
- **2.56** This change disrupted all levels of operations in the Anglophone sector. It meant more French immersion teachers were needed. With only one year to implement, the labour market could not meet the demand. As a result, teachers who lacked the language skills required by Department policy were hired. All four superintendents in the Anglophone sector informed us their school district was not in full compliance with this policy. This may have a negative impact on the quality of the program and student performance.
- 2.57 Due to recurring changes to French language programs in the Anglophone sector, there were seven cohorts in the Anglophone sector during the school year 2017-2018, as shown in **Exhibit 2.13**. (A cohort is a group of students sharing the same education path through the grade levels.) Schools and principals have to manage the administrative burden of preparing classes and hiring teachers for different groups of students that have entered the French immersion program at different points.

2.	13	Cohorts in the School Ye	ear 2017–2018 (Anglophone Sector)
	Cohort		Program Timeline
1	Frend	ch Immersion – Grade 1	2007: Last year Grade 1 is offered; phased out in every grade thereafter
1	Entry	(former program)	June 2019: Last cohort to graduate from old program
2	French Immersion – Grade 3		2010: First year of implementation
-	Entry	/	June 2028: Last cohort to graduate
3	French Immersion – Grade 6 Entry		1994: Policy 309 moves Late FI entry point to Grade 6
4	French Immersion – Grade 1 Entry (new program) (new curriculum 2017)		2017: First year of implementation June 2029: First cohort to graduate
5	5 Core French		2015: Last cohort to graduate from nearly all schools. Some small schools continued for one or two additional years with the program. By 2017-18 all students who had Core French should be out of the system.
6	Intensive French (IF) without Pre-Intensive French (PIF)		2008: First year of official provincial implementation of Grade 5 IF program (pilots started in 2002). Students in Grade 5 in 2008, 2009 and pilot schools prior to 2008 experienced IF without PIF June 2016: First full cohort to graduate
7		sive French with Pre- sive French	2009: First year of official provincial implementation of pre-Intensive French
Sou	irce: T	able prepared by AGNB with	h information provided by the Department of Education and Early Childhood

Exhibit 2.13 – Cohorts in the School Year 2017–2018 (Anglophone Sector)

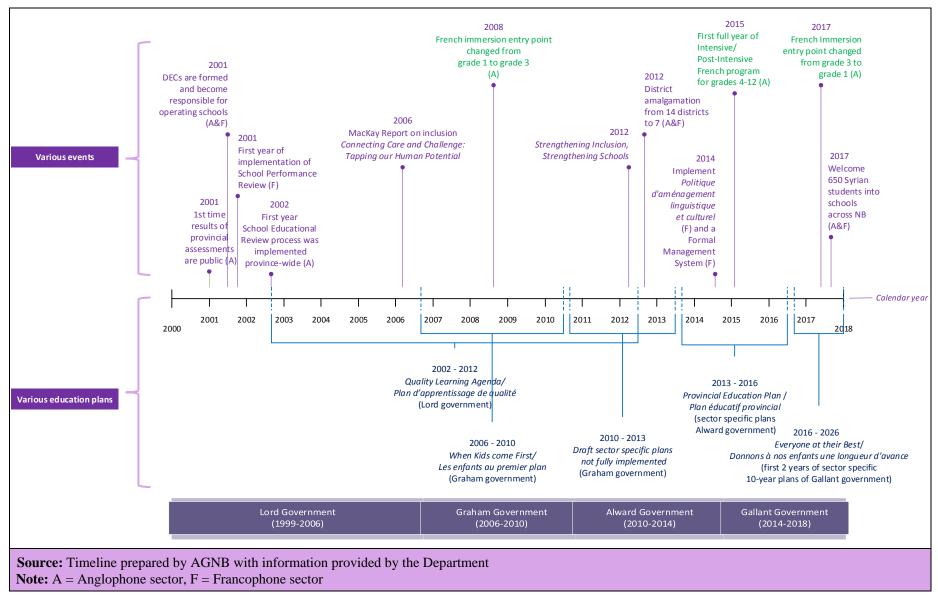
Source: Table prepared by AGNB with information provided by the Department of Education and Early Childhood Development

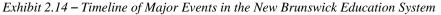
Recommendations

2.58 We recommend the Department of Education and Early Childhood Development maintain the current 10year provincial education plans until they expire in 2026, to allow the education system to stabilize and allow for evaluation of progress. Any adjustments to the plans should be collaborative.

- 2.59 We recommend the Department of Education and Early Childhood Development, prior to implementing major changes that impact student performance, including changes to the French immersion program, prepare a detailed implementation plan with:
 - a realistic time schedule;
 - consideration of all supports that need to be in place for the change to be successful, such as human resources, curricula, teacher training, tools and methodologies;
 - adequate funding; and
 - a comprehensive risk assessment of the change's

impact on operations and other ongoing initiatives at department, school district and school levels as well as risk mitigation strategies.





Key Finding: × The school districts reported challenges to meeting the targets.

Why this is important	2.60	Identifying the challenges to meeting the targets is a
	р	rerequisite to taking corrective actions to improve student
	р	erformance. While interviewees agreed the provincial targets
	fe	or reading, math and science were reasonable; they provided
	n	nany challenges to achieving them, including cyberbullying,
	SI	ubstance abuse, mental health issues, and other issues
	d	etailed below.

x New Brunswick's socioeconomic situation has unaddressed needs
 2.61 Poverty, adult illiteracy and other socioeconomic issues exist in our Province. Such challenges add to the complexity of the education process and ultimately affect student performance. For example, educators indicated they often need to deal with students who arrive at school hungry, without proper clothing, and late. Interviewees revealed often teachers must focus on these basic needs before they can focus on teaching. Teachers need help. More collaboration with other departments and local communities is required to address basic needs to ensure teachers' efforts are devoted to student learning.

2.62 School districts reported challenges associated with the Province's inclusive education system. We were informed during our interviews that the complexity and diversity of student needs and behaviours exceed teachers' professional training. This puts strain on teachers' time and abilities, which impacts the performance of all learners.

2.63 The Department provides a global budget to each school district, calculated using a funding model. Educational assistant positions are one of the cost drivers in the model. Four school district superintendents informed us there was a gap between the number of educational assistants allocated in the Department's funding model and the actual number present in the school district. (Educational assistants have a vital role in helping students learn in an inclusive, safe and supportive environment.) One district informed us that 86 of their 717 (12%) educational assistants in the 2017-2018 school year were over the number allocated by the Department. Another district informed us that 41 of their 272 (15%) educational assistants were over their allocation. The school districts had to fund these positions from unspent areas of their budgets, such as special projects, transportation and minor repairs.

× Our inclusive

education system has

unaddressed needs

2.64 The Department informed us it is aware of the funding gap and provided several explanations. For example, the funding calculation for educational assistants is based on historical information. While additional funding has been provided, the growing need, caused in part by earlier identification of students' needs, has outpaced the budget allocated to school districts. As shown in **Exhibit 2.15**, the total number of education assistant positions has increased by 19% in the last five years.

2.15 Number of Education Assistant Positions in School Districts 3,000 2,500 # of Positions 2,000 1,500 Francophone Sector 1,000 Anglophone Sector 500 0 2012 2013 2014 2015 2016 2017 **School Year** Sept 30 **Anglophone Sector Francophone Sector** Total 2017 1,902.9 830.3 2.733.2 2016 1,809.9 813.3 2,623.2 2015 1,662.1 827.5 2,489.6 2014 1,685.5 775.0 2,460.5 772.1 2,420.9 2013 1,648.8 2012 1,584.4 706.8 2,291.2 Source: Chart created by AGNB with information from Summary Statistics, Department of Education and Early Childhood Development

Exhibit 2.15 – Number of Education Assistant Positions in School Districts

× The Department does not monitor student absences **2.65** When students miss school, they miss the learning opportunity. "Chronic student absenteeism" is defined as "*missing 10% or more of the available school days*".⁵ Research indicates it is the point where missing school will affect a child academically. We found chronic student absenteeism is present in at least one district, as shown in

⁵ ASD-S Report Card for 2016-2017, Anglophone South School District

Exhibit 2.16. We were informed the Department does not monitor student absences. This is because schools measure and enter absence data in the system inconsistently. The data is not comparable therefore not usable for overall monitoring.

Exhibit 2 16 _ Example of Chronic	Student Absenteeism at One District
Exhibit 2.10 - Example of Chronic	Siudeni Absenieeism di One Disirici

School Type	Absence Rate
k-2	13%
k-5	13%
6-8	15%
9-12	27%
9-12	21%

Recommendation

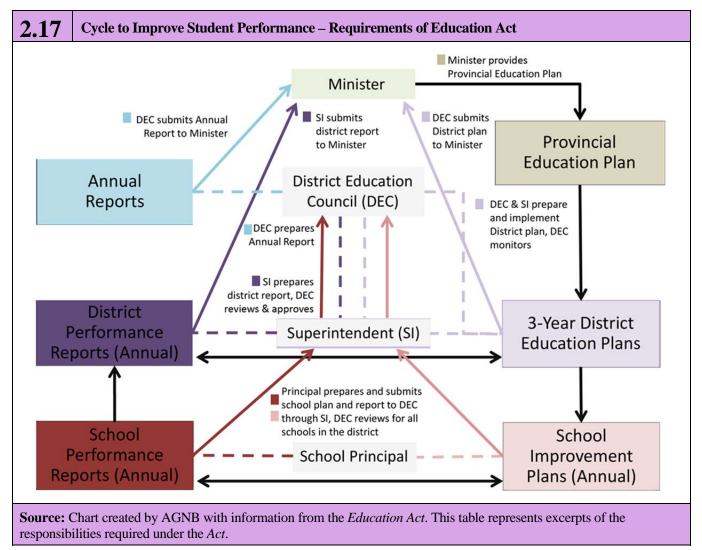
2.66 We recommend the Department of Education and Early Childhood Development work with school districts, other departments and community-based organizations where applicable to:

- identify and address the challenges to achieving the provincial targets for reading, math and science;
- present to government options to address the challenges;
- develop standards for student absence tracking and measurement to better monitor student attendance; and
- take corrective action to improve student attendance.

Key Finding: × The planning, monitoring and reporting cycle to improve student performance is not operating as intended.

- Why this is important
 2.67 The Education Act states planning, monitoring and reporting requirements for principals, superintendents, District Education Councils (DECs) and the Minister. Planning contributes to efficiently using the Department's resources to meet education objectives and targets; the Act requires a plan at each of the three levels: a provincial education plan, district education plans and school improvement plans. Monitoring ensures education services are delivered according to set laws, policies and plans. Reporting contributes to accountability by holding someone responsible for meeting performance targets.
 - **2.68** Exhibit 2.17 shows the complex cycle to improve student performance as stipulated in the *Education Act*.

Exhibit 2.17 – Cycle to Improve Student Performance – Requirements of Education Act



× Not all schools prepare a school *improvement plan as* required by the **Education Act**

- 2.69 "The School Improvement Plan is a tool used by schools to ensure there is continuous, incremental improvement in the learning of all students over time."⁶ It indicates the school's targeted areas for improvement, along with measures, objectives and actions. Every school is required by the Education Act to have a school improvement plan. The DEC is required to review the improvement plan for each of the schools in the district.
- 2.70 We found not all schools prepare a school improvement plan as required. In one Anglophone district, we found five schools did not have an improvement plan in January 2018 for the 2017-2018 school year. These five schools were responsible for educating 19% of the district's students. The district's two largest schools still did not have a plan by April 2018, two months before the end of the school year.
- 2.71 We found school improvement plans are not adequately monitored in three Anglophone school districts. These school districts could not provide documentation showing that all school improvement plans had been reviewed. Without adequate monitoring, there is no assurance all schools plan adequately to improve student performance. We found Francophone school districts had improved in this area in recent years and had implemented monitoring tools to help in tracking improvement plans.
- 2.72 The Education Act requires each school prepare a performance report however does not specify the content of these reports. We expected the reports would indicate how the school performed in relation to the previous year's goals in its improvement plan. We found most schools do not prepare a school performance report.

2.73 We found, during our audit period:

- 4 of 7 school districts' education plans (in both sectors) did not have the required contents, for example, objectives and a work plan. Two plans did not use provincial assessment results as performance indicators.
- District Education Councils in both sectors do not review school improvement plans and school performance reports.

× Most schools do not have a school performance report as required by the Act

× School districts do not plan, monitor and report as required by the Act

50

⁶ District Education Councils, Parent School Support Committee Handbook, September 2013

Two DEC chairs informed us it was not reasonable to do so because of the size of the amalgamated school districts. (These school districts each have approximately 70 schools.) In some districts, a summary of the school reports is provided to the DEC.

- School districts in both sectors could not provide evidence they submitted education plans, performance reports and annual reports to the Minister each year.
- Most school districts did not have a performance report.

2.74 Specific reporting requirements, to ensure accountability, are specified in the *Education Act* (see **Exhibit 2.17**). The DECs are accountable to the Minister. Each DEC must submit a district education plan and a report on student performance each year to the Minister. The Minister must meet with the DEC chairs and superintendents at least twice each year. These requirements are a means of holding the DEC accountable for student performance. We found the Department does not have processes to track, receive, review and take action in regards to district reports. The Minister does not enforce the Act by ensuring he receives the following:

- 3-year district education plan from each DEC by July 1st each year;
- District performance report prepared by each superintendent each year; and
- Annual report explaining educational performance for the previous school year from each DEC.
- **2.75** Three Anglophone DECs do not have a student member. The *Education Act* states that the Minister will appoint a student living in the school district as a councilor to each DEC. While each of the three Francophone DECs has a student member, only one of the four Anglophone DECs reported having a student member. (We were informed the Francophone student federation facilitates the election of student DEC members; there is no student federation in the Anglophone sector.)
- **2.76** When discussing cases where the requirements were not met, interviewees stated the Act requirements may be outdated and may not reflect current practices.

x DECs' performance is not evaluated 2.77 Conducting annual board evaluations and member peer assessments is a best practice of a Board of Directors. We found the DECs' performance is not evaluated. We believe each DEC's performance should be evaluated, as their role includes setting direction, developing policies and ensuring the

× The Minister does not hold the school districts accountable as required by the Act

• Interviewees

be outdated

reported the Act may

school district is meeting its goals, risks are being managed, and district resources are being used responsibly.

- **2.78** These deficiencies increase the risk that school districts and schools will fail to implement the provincial education plans and will be unable to assess progress and take appropriate corrective actions to improve student performance.
- Recommendations
 2.79 We recommend the Department of Education and Early Childhood Development, in consultation with school districts, review the *Education Act* in light of the current operating environment to ensure expectations are clear, relevant and realistic.
 - 2.80 We recommend the Department of Education and Early Childhood Development track, receive, review and take action on school district plans and reports, and hold all parties accountable as required by the *Education Act*.
 - 2.81 We recommend the Department of Education and Early Childhood Development, in collaboration with the school districts:
 - ensure school improvement plans are prepared and reviewed annually as required by the *Education Act*,
 - demonstrate school improvement plans align with the provincial education plan, and
 - monitor the extent to which school improvement goals are being met.
 - 2.82 We recommend the Department of Education and Early Childhood Development, in collaboration with the District Education Councils, ensure District Education Councils self-evaluate their performance annually.

Key Finding: × School districts do not make sure all teachers have regular performance reviews.

Why this is important	2.83 " <i>Learners are not at their best unless educators are at their best.</i> " ⁷ Regular staff performance reviews contribute towards professional growth and the delivery of quality services. Principals are required (by the <i>Education Act</i>) to evaluate the performance of all school personnel. The Act also requires superintendents ensure performance reviews are done.
× The school districts do not monitor to ensure all teachers have regular performance reviews	2.84 While each of the school districts we visited has a policy requiring the evaluation of teachers with stated frequencies, we found school districts in both sectors do not monitor to ensure all teachers have regular performance reviews.
* The lack of teacher performance reviews can go undetected by school districts for 20 years	2.85 For example, in one school district, a formal performance review is required every five years at a minimum for teachers with a permanent contract. We selected a school at random in this district for testing, and we found one teacher had not received a performance review for over twenty years. Another teacher in the school was last evaluated in 2007, over ten years ago. Three other teachers had not received a performance review in over five years.
* Only 65% of teachers in the Anglophone sector reported receiving helpful feedback	 2.86 The Department conducts an annual school improvement survey of teachers in the Anglophone sector. In 2016-2017: 65% of teachers agreed with the following statement in the survey, "School leaders provide helpful feedback to assist me to improve my practice and to reinforce my strengths." 16% of teachers disagreed; and

• 19% of teachers neither agreed nor disagreed.

The Francophone districts each conduct a separate survey of teachers with results aggregated at the district level.

⁷ Excerpt from 10-year education plan – Everyone at their best (Anglophone sector), August 2016

Recommendation	2.87 We recommend the Department of Education and
	Early Childhood Development develop standards for
	teacher performance and provide tools to support the
	school districts in:

- evaluating staff performance regularly as required by the *Education Act*; and
- taking action to improve staff performance where needed.

Key Finding: × Constantly changing provincial student assessment programs impair usefulness of results.

Why this is important	2.88 The Department administers provincial assessments to gather the information needed to make programming and policy decisions. Over time, this information " <i>helps to identify trends and develop strategies for improved learning</i> ". ⁸
★ The provincial assessment programs lack stability	2.89 While we found this was more prevalent in the Anglophone sector, we found subjects and grades of provincial assessment frequently change in both sectors. Only two Anglophone assessments (grade 2 and 9 reading) and three Francophone assessments (grade 2 reading, grade 8 math and grade 11 reading and writing) have remained stable since 2005. Changing the grade level at which a subject is assessed prevents further trend analysis, as consistent data is lost.
	 2.90 As an example, while the Anglophone sector has had a target for student performance in science since 2002-2003, provincial testing in science has been sporadic: 2003 through 2008 – none 2009 & 2010 – grade 6 2011 through 2015 – none 2016 & 2017 – grade 6 expected at grade 10 in 2018 This is also demonstrated in Appendices XI and XII.
Recommendation	2.91 We recommend the Department of Education and Early Childhood Development stabilize the provincial assessment programs to allow for trend analysis of student performance results for decision making.

⁸ Department of Education and Early Childhood Development website, *Provincial Assessments (brochure)*

Key Finding: ✓ Most New Brunswick students meet expectations on national tests and rank comparatively high on international tests.

Why this is important2.92 Measuring New Brunswick student performance against national and international standards provides useful insight into how well New Brunswick compares nationally and internationally and which areas require further improvement.

2.93 "It is imperative that New Brunswick students be competitive on national and international levels in reading, mathematics and scientific literacy. These areas are recognized globally as the essential skill areas as evidenced by the Pan-Canadian Assessment Program (PCAP) and the Programme for International Student Assessment (PISA)."⁹

2.94 On the Canadian level, results from the PCAP test help inform how well provincial education systems are meeting the needs of students. The nature and random sampling of the tests are not to measure individual student achievement, but provide provinces with a basis for examining their curriculum and improving their assessment tools. General information on the Pan-Canadian assessment Program (PCAP) is provided in **Appendix VIII.**

2.95 The most recent results from PCAP are from 2016, when reading was the primary focus. Based on pan-Canadian curriculum expectations in reading, the expected level of performance or baseline level of reading proficiency for Grade 8 students is "Level 2".¹⁰

2.96 Exhibit 2.18 shows the PCAP 2016 mean scores in reading for Canada and its provinces. New Brunswick's mean score in reading was one of the lowest of the country. However, every provincial mean score, (including New Brunswick's) was well within the expected "Level 2" performance range. The majority of New Brunswick students (82%) performed at the expected level or above (level 2 and level 3).



✓ Most New Brunswick students met the expected performance level on the 2016 pan-Canadian reading test

★ New Brunswick's mean score in reading was one of the lowest in the country on the 2016 pan-Canadian reading test



⁹ Document obtained from the Department, *Realignment of the Provincial Assessment Program (Anglophone Division) Proposal and Recommendations*, April 2014

¹⁰ PCAP 2016 - Report on the Pan-Canadian Assessment of Reading, Mathematics, and Science, Council of Ministers of Education, Canada, 2018

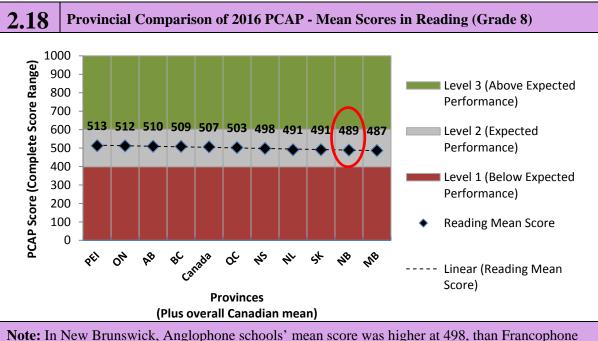


Exhibit 2.18 – Provincial Comparison of 2016 PCAP - Mean Scores in Reading (Grade 8)

schools at 467, on the 2016 PCAP reading test.

Source: Chart created by AGNB with information from *PCAP 2016 - Report on the Pan-Canadian Assessment of Reading, Mathematics, and Science*, Council of Ministers of Education, Canada.



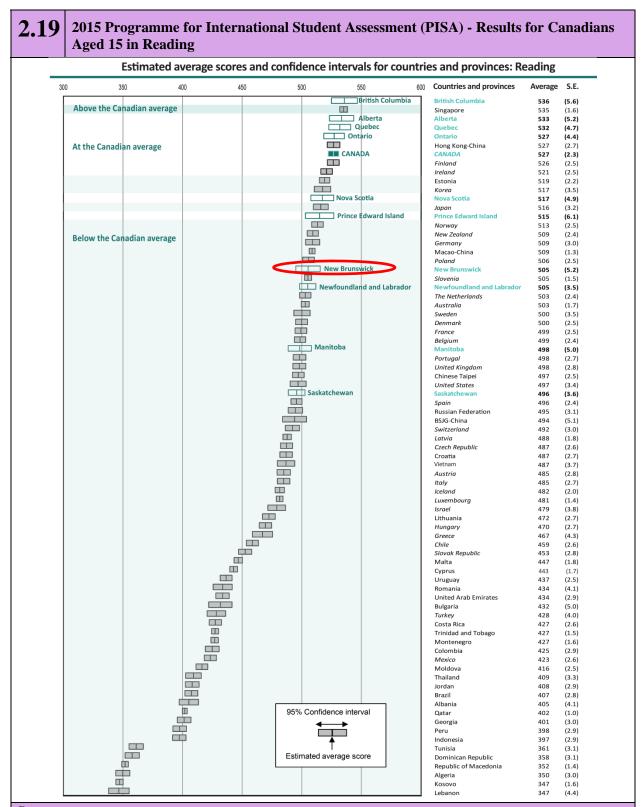
✓ Internationally, New Brunswick students rank comparatively high

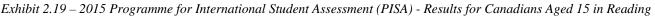
- **2.97** The Programme for International Student Assessment (PISA) involves over 70 countries and measures students' skills in reasoning, problem solving, and communication to help prepare students for the future. General information on the 2015 PISA is provided in **Appendix IX**.
- **2.98** On the international scale, Canadian students are some of the world's top performers. **Exhibit 2.19** shows 2015 PISA results by country for students aged 15. Of 72 countries, Canadian students had the second highest average in reading.
- **2.99** If Canadian provinces were considered sovereign countries on the 2015 PISA, New Brunswick would rank the fifteenth highest average in the world, with British Columbia taking the top spot. Therefore, even with New Brunswick performing below some of its Canadian counterparts, the Province still had a higher average than countries such as Australia, Sweden, France, the United Kingdom and the United States.
- **2.100** On the same test, Canada ranked seventh in science and tenth in math. As a sovereign country, New Brunswick would have ranked twentieth and twenty-third respectively. New Brunswick scored better than the United States, Spain and Italy in all three subjects. The Province also scored at a very

similar level as France and the United Kingdom in all three subjects.

x The Department does not publicly report student performance results on national and international tests
 2.101 We found the Department had not publicly reported New Brunswick student performance on national tests since the 2010 PCAP, which was publicly reported only in the Francophone sector. The Department also has not publicly reported New Brunswick student performance on international tests.
 2.102 We recommend the Department of Education and Early

tion 2.102 We recommend the Department of Education and Early Childhood Development publicly report New Brunswick students' performance on national and international tests on its website and inform the public when these results are available.





Source: Measuring up: Canadian Results of the OECD PISA Study - The Performance of Canada's Youth in Science, Reading, and Mathematics - 2015 First Results for Canadians Aged 15, 2016 (Council of Ministers of Education, Canada)

Key Finding: ✓ The 2016-2026 education plans set objectives and measurable targets.

Why this is important

consulted when

preparing the plans

2.103 The Education Act requires the Minister to set educational goals and standards and provide a provincial education plan. The Act defines an education plan as, "a detailed plan establishing priorities for the improvement of pupils' educational performance towards the achievement of prescribed learning goals for the official linguistic community". Currently, there are two 10-year provincial education plans, one for the Anglophone sector and the other for the Francophone sector.

✓ Stakeholders were Educational priorities are stated as "key objectives" in 2.104 each sector's plan. In setting educational priorities, the Department carried out extensive consultations with educators, parents and other key stakeholders, which resulted in reports presenting recommendations, on which the objectives of each sector were based.



- ✓ The education plans have objectives with performance indicators and targets
- 2.105 We found the 10-year education plans contain measurable performance indicators with targets for measuring progress towards meeting objectives.
 - 2.106 The plans include a vision, a mission, principles for learning, priorities, and conditions for success. The priorities are stated as objectives. Each objective has performance indicators with targets for 2025-2026, and key areas of focus. Both the Anglophone and Francophone sector plans have objectives that directly relate to improving student performance on provincial assessments in reading, math and science.

2.107 Targets in the 10-year education plans were created using the SMART¹¹ framework, past targets and the "stretch" principle. Research suggests a stretch goal can change thinking and behaviours. Several targets already existed from past provincial plans. Other targets were developed by staff members, including educators and experts employed by the Department.

2.108 Targets are ambitious given some recent assessment results, such as 38% of Anglophone grade 6 students passing the math assessment, and 57% of Francophone grade 11 students passing the reading and writing assessment in 2016-2017. However the timeframe is 2026, which gives a 10-year time period from the beginning of the education plans to make progress towards meeting the targets.

✓ 90% of students 2.109 In both sectors, the target for grade 2 reading is 90% of the students will achieve appropriate/acceptable passing provincial grade performance (or higher). The Department told us that 2 reading assessments "appropriate" or "acceptable" performance equates to by 2025-2026 is a reasonable target "passing". We found a target of 90% of students passing the reading assessment is reasonable. The percentage chosen includes the expectation that some students will not be able to achieve the target, as the Province's education system is fully inclusive. This is why none of the student performance targets are set at 100%.

Education professionals believe targets are reasonable
 2.110 Users of the 10-year education plans include people in the school districts (the District Education Council members, the superintendents, district staff, principals and teachers) and staff members in the Department working with the school districts to implement the provincial plan. The majority of education professionals we interviewed believed the targets were reasonable.

• *Plans provided autonomy to school districts* 2.111 It is our understanding the provincial plans were intended to provide autonomy to school districts and schools, allowing districts to determine the actions needed to achieve the provincial targets in their own area. Each district is able

¹¹ The SMART framework refers to goals having the following characterics: S=Strategic and Specific (goal is written simply and clearly defines what to do); M=Measurable (goal is measurable, resulting in tangible evidence the goal has been accomplished); A=Attainable (goal is achievable but should stretch lightly so as to be challenging); R=Realistic and Relevant (goal measures outcomes, not activities); T=Timebound (goal is linked to a timeframe, and results in tension between the current reality and the vision of the goal)

to set its own short-term targets.

× More collaboration is	2.112 During our interviews, we were told the Anglophone and
needed between the two	Francophone sectors rarely communicate with one another.
sectors	We also found school districts have various initiatives to
	improve their operations that could be adapted and
	implemented by other districts. For example, the
	Francophone Sud school district has implemented a
	monitoring process to closely monitor and improve student
	performance indicators. It involves quarterly monitoring of
	student performance targets as well as monthly evaluation of
	performance improvement initiatives. The strategy has since
	been rolled out to the other Francophone districts. As
	another example, the Anglophone South school district has
	recently started verifying the quality of its data such as
	records of student absences so it can be better used in
	making decisions. Currently, there are no forums or tools to
	facilitate collaboration and sharing of practices and
	successes like these between the two sectors.
Recommendation	2.113 We recommend the Department of Education and
	Early Childhood Development facilitate the sharing of
	successes and best practices between the Anglophone
	and Francophone sectors.

Observations on the French immersion program - Anglophone sector

Why this is important	2.114 French immersion is a significant program in New
	Brunswick's education. In September 2017, over 30% of
	students in the Anglophone sector were in French
	immersion. This is over 20% of the Province's students.
	Exhibit 2.20 shows the number of students in the program
	and in both sectors.

2.20	Number of Students in F	rench Imme	rsion and in Both Sector	rs (September 2017)
	Anglophon	ie	Francophone	Province
	English	46,048	-	
	French Immersion	22,749	-	
Τα	otal	68,797	28,958	97,755
Source:	Education Outline 2017, Depar	tment of Educa	tion and Early Childhood De	velopment

Exhibit 2.20 – Number of Students in French Immersion and in Both Sectors (September 2017)

- 2.115 Although the French immersion program was not the main focus of our audit, we were able to make general observations from the information we obtained during our audit of student performance. This section of the report provides basic information on the French immersion program together with our observations.
- Several key issues emerged in a 2008 program review
 2.116 Exhibit 2.21 shows observations from a review of French Second Language Programs in 2008. At the time, the dropout rate of students who registered for early immersion in Grade 1 was nearly 72%, and only 16% achieved the goal of advanced or above.

Exhibit 2.21 – Several Key Issues Emerged in a Comprehensive Review of French Second Language Programs in 2008

2.21 Several Key Issues Emerged in a Comprehensive Review of French Second Language Programs in 2008

"During the commissioner's review of second-language instruction, several key issues emerged:

- Between 1995 and 2006 (from the start of Grade 1 to start of Grade 12), the dropout rate of students who registered for early immersion in Grade 1 is nearly 72 per cent (down to 414 in 2006 from 1,469 in 1995)
- Of the 1,469 students who entered into an early immersion program in 1995, only 234 or **15.9 per cent** achieved the Policy 309 goal of advanced or above by the spring of 2007.
- Of the 4,063 students who enrolled in the FSL core program at Grade 1 in 1995, only 4.6 per cent remained in FSL in 2007 and less than 0.7 per cent attained the Policy 309 minimal goal of intermediate proficiency."

Source: Communications New Brunswick, News Release: French Second Language Commission - Changes recommended to French second-language programs and services (Anglophone sector) (February 27, 2008)

• Only 10% of students The Provincial French Second Language Oral Proficiency 2.117 who enrolled in the Assessment is mandatory for early French immersion grade early French immersion 12 students since the 2014-2015 school year. The program in 2005 Department's minimum proficiency target is advanced or achieved the better for early French immersion students by the end of Department's language Grade 12. Of the 1,624 students who entered into an early immersion program in 2005, only 10% achieved the goal of proficiency goal advanced or above by the end of grade 12 in 2017. Of the 408 students who remained in the program at grade 12 in 2016-2017, 40.2% achieved the goal. **2.118** Of the 1,624 students who entered into an early • 75% of students immersion program in 2005, 75% dropped out of the dropped out of early French immersion program by the end of grade 12. 2.119 We were pleased to find the new 10-year education plan has performance targets for the French immersion program. The Department intends to measure indicators including the following: % of Grade 12 students achieving appropriate or higher • levels on the provincial French Second Language oral proficiency assessment (target of 90%); and

• % of students who continue to participate in FSL language programs through to Grade 12 (plan indicates baseline data and target will be established by fall 2018.)

 Students in French 2.120 **Exhibit 2.22** shows provincial assessment results by program at grade 6 for the school year 2015-2016 in the *immersion programs* outperform students in Anglophone sector. It shows 71% of students in the early the English program in French immersion program met or exceeded the appropriate reading, science and reading level in grade 6, compared to only 41.5% of students in the English program, a gap of 29 percentage points. math Exhibit 2.22 also shows that students in French immersion programs outperform students in the English program in all subjects.

Exhibit 2.22 – Anglophone Students in French Immersion Programs Outperform Students in the English Program in Reading, Science and Math

2.22 Anglophone Students in French Immersion Programs Outperform Students in the English Program in Reading, Science and Math

Results by Program: % of students that met or exceeded the appropriate achievement level (2015-2016 Provincial Assessment at Grade 6)

Anglophone Program	Reading	Science	Math	
Early French Immersion (Grade 3 entry)	71.1%	34.9%	25.2%	
Late French Immersion (Grade 6 entry)	63.2%	26.5%	22.5%	
English	41.5%	20.1%	16.7%	
All Anglophone Programs	54.1%	25.7%	20.2%	
Variance between Early French Immersion and English Programs	29%	15%	8%	

Source: Chart created by AGNB from mormation provided by the Depart

• There are consistent significant gaps between English and French immersion students' performance in reading at grade 9

2.121 French immersion students consistently outperformed English program students since 2011 on the grade 9 provincial reading assessment. The Grade 9 English Language Proficiency Assessment assesses all students in English. Exhibit 2.23 shows provincial assessment results by program for reading at grade 9 over a 6-year period. It shows significant gaps in the programs' performance. Consistently since 2011, significantly more students in the French immersion programs reach the appropriate level or above in grade 9 reading, compared to students in the English program. Results for 2017 were within one percentage point of the 2016 results.

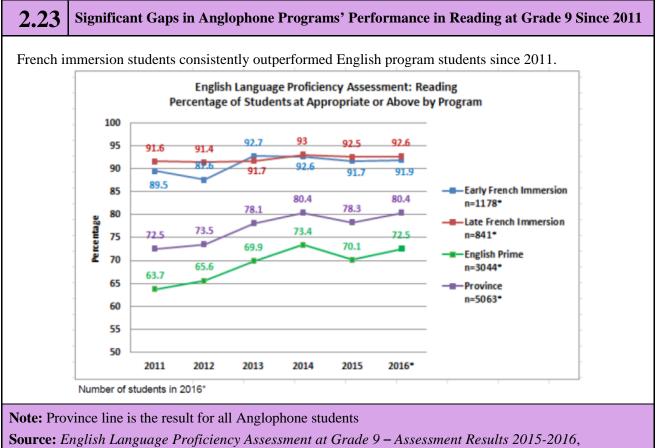


Exhibit 2.23 – Significant Gaps in Anglophone Programs' Performance in Reading at Grade 9 Since 2011

Department of Education and Early Childhood Development

• There are significantly more students with personalized learning plans in the English program than in French immersion

2.122 A Personalized Learning Plan (PLP) is used when a student experiences difficulties over an extended period of time and is not making progress even with the extra help from the teacher. The Department reported the number of students with PLPs is significantly lower in the French immersion program compared to the English program. In 2015-2016, 2% of students in the French immersion program had a PLP, compared to 14% of those in the English program. Exhibit 2.24 shows the number of students with PLPs in the Anglophone sector. It shows 93% of the students with PLPs were in the English program for 2016 -2017.

2.24	Number of Students with Pe	rsonalized Learning	Plans in the Anglophone Sect	or	
Students with Personalized Learning Plans (PLPs)					
		2015-16	2016-17		
	French Immersion	467	559		
	English	6,985	7,045		
	Total PLPs	7,452	7,604		
	% French Immersion	6%	7%		
	% English	94%	93%		
Source:	Chart created by AGNB from info	ormation provided by th	e Department		

Exhibit 2.24 – Number of Students with Personalized Learning Plans in the Anglophone Sector

Observation: Combined classes (which are more challenging for teachers) are more common in the Anglophone sector.

- 2.123 Typically, combined classes are more challenging for teachers because they include students from more than one grade level taught in the same classroom by the same teacher. The Department told us combined classes generally exist for financial reasons because of low numbers of students. While combined classes provide opportunity for flexibility and students helping students, traditional teaching practices result in these classes being treated as two or more groups with separate curricula and projects. The Department suggested combined classes may impact student performance.
- 2.124 While we did not audit combined classes or the Department's statistics, we made the following observations from our review of *Summary Statistics School Year 2017-2018*, available on the Department's website:
 - There are significantly more combined classes in the Anglophone sector compared to the Francophone sector. There were 344 combined classes in the Anglophone sector and there were 37 in the Francophone sector in the 2017-2018 school year.
 Exhibit 2.25 shows that while the typical ratio for the Anglophone to Francophone sector is 2:1, there were nine times as many combined classes in the Anglophone sector as the Francophone sector in the 2017-2018 school year.
 - Some combined classes have three grade levels taught in the same classroom by the same teacher. **Exhibit 2.26** shows there were 18 combined classes with three grade levels in the same class in the Anglophone sector and two in the Francophone sector, in the 2017-2018 school year.
 - Within the Anglophone sector, there are more combined classes in the English program than the French immersion program. There were 273 combined classes in the English program and 71 in the French immersion program in the 2017-2018 school year. (Over 30% of Anglophone students are in the French Immersion program.)

• There were nine times more combined classes in the Anglophone sector in the 2017-2018 school year than in the Francophone sector

• Within the Anglophone sector, there are four times more combined classes in the English program than in French immersion

	Anglophone	Francophone	Ratio (Anglophone:Francophone)
Combined Classes	344	37	9:1
Total Classes	2,300	1,049	2:1
Total Schools	206	90	2:1
Total Students	68,797	28,958	2:1
Total Teachers	5,161	2,244	2:1

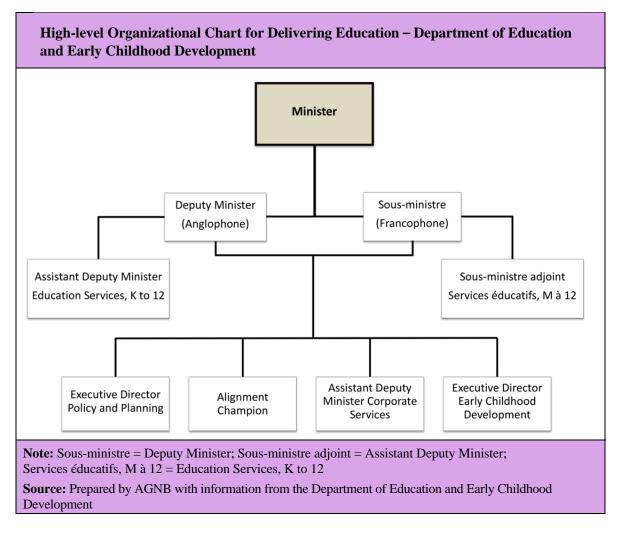
Exhibit 2.25 – Combined Classes and Other Ratios for School Year 2017-2018

Exhibit 2.26 – Number of Combined Classes with More than Two Grade Levels Combined in 2017-2018

	Number of Combined Classes with More than Two Grade Levels Combined in 2017-2018				
Number of Grade Levels Combined	Grade Combinations	Anglophone	Francophone	Total	
3	K-1-2	7	1	8	
3	K-2-3	1	-	1	
3	2-3-4	1	-	1	
3	3-4-5	2	1	3	
3	6-7-8	7	-	7	
	Total	18	2	20	

Department of Education and Early Childhood Development

Appendix I – High-level Organizational Chart for Delivering Education – Department of Education and Early Childhood Development



Appendix II – Provincial Assessments – General Information

Provincial Assessments – General Information

- The Assessment and Evaluation Branch is responsible to report large-scale assessment results to the Minister of Education. Data and information from large-scale provincial, national and international assessments are obtained for the purposes of public accountability and improving programs and services.
- Provincial assessments function as a reasonable and cost-effective gauge of an individual student's or school's overall achievement.
- The objective ... is to improve teaching and learning and to keep the public informed about the educational system's general health.
- Results You can see how individual schools and districts performed on provincial assessments by referring to the reports published each year by the Department of Education and Childhood Development.
- Think of assessment as "measuring success."
- Within the education system, "assessment" means the regular measurement of progress and the sharing of these results with students, parents, teachers, administrators and policy makers so that further progress can be achieved.
- The Department of Education and Early Childhood Education carries out regular provincial assessments to gather the large amount of information required to make programming and policy decisions at the provincial, district and school levels. Over time, this information helps decision makers to identify trends and develop strategies for improved learning.
- Why do we assess? Assessment tells us how well things are working now and helps us identify how to make things work better in the future. We rely on assessment to identify and direct our progress towards becoming the best education system in Canada.

Source: Excerpts from the Department's website – September 2017

Appendix III – Partners in Education and Learning

Partners in Education and Learning

Learners must:

- pursue, with effort and enthusiasm, every opportunity to learn
- understand the connection between education and their own prosperity, and set high achievement goals for themselves
- accept increasing responsibility, as they mature, for their own learning, choices and behaviour

Parents must:

- ensure that the fundamental needs of their children are met so they can learn
- read to, talk to and teach their children from the time they are born
- recognize and instill in their children the value and love of learning, and have high expectations for their educational achievement, from pre-school through post-secondary education
- support their school's educational efforts on behalf of their children

Educators must:

- set high expectations for themselves, their schools and each student's achievement
- teach the prescribed program of studies, and identify and implement learning and evaluation strategies to help each student acquire desired learning outcomes
- take an active role in maintaining their professional competence
- maintain safe, positive and effective learning environments in which everyone is motivated to perform at their best

DECs and school districts must:

- provide parents and communities with a voice in education decision-making
- establish local policy and administrative direction, and ensure local accountability, including school improvement planning

Communities must:

- provide learning opportunities locally, where people can access them easily
- contribute time and resources to support dynamic and effective learning activities involving schools

Government must:

- set the highest possible educational and services standards for public education, and provide the necessary financial, organizational and policy supports for the provision of educational programs and services
- develop strategic partnerships to pursue common learning objectives with communities, post-secondary institutions, organizations, the private sector and other governments
- create a social and economic environment in which learning and education are valued and pursued

Source: Excerpts from *Quality Learning Agenda*, Department of Education and Early Childhood Education, April 2003

Appendix IV – Cost of Public School Education

Cost of Public School Education (in \$ millions)			
Fiscal Year	2015-2016	2016-2017	2017-2018
Anglophone School Districts (Approximate)	\$695	\$710	\$721
Francophone School Districts (Approximate)	322	330	338
School District Ordinary Cost of Operations	\$1,017	\$1,040	\$1,059
Corporate and Other Education Services*	53	56	54
Pension Plan	78	80	95
Debt Service Costs – Department's Portion	107	105	116
Provincial Cost of Public School Education	\$1,255	\$1,281	\$1,324
Total Provincial Ordinary Expenditures	\$8,092	\$8,395	\$8,129
Expenditure on Education as % of Government	15.5%	15.2%	16.3%
*Includes Department's management, education and su Source: Table created by AGNB with information provi Childhood Development		tment of Educat	ion and Early

Appendix V – Work Performed by AGNB for this Audit

Work Performed by AGNB for this Audit

Our work for this audit included the following:

- reviewing education legislation and policies;
- interviews with staff from the Department of Education and Early Childhood Development, specifically the Kindergarten to Grade 12 division in the Francophone & Anglophone sectors;
- interviews with school district office staff and reviewing relevant documents (both sectors);
- interviews with four principals and reviewing relevant documents (both sectors);
- interviews with selected staff from five school districts and four DEC chairpersons (both sectors); and
- reviewing, analyzing and corroborating information provided by the Department's corporate office and the seven school districts composing the Francophone and Anglophone sectors.

Appendix VI – About the Audit

About the Audit

This independent assurance report was prepared by the Office of the Auditor General of New Brunswick on the Department of Education and Early Childhood Development's (the Department) planning, monitoring and reporting on student performance. Our responsibility was to provide objective information, advice, and assurance to assist the Legislative Assembly in its scrutiny of the government's management of resources and programs, and to conclude on whether the Department's planning, monitoring and reporting on student success complies in all significant respects with the applicable criteria.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001 – Direct Engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook – Assurance.

AGNB applies Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the Rules of Professional Conduct of Chartered Professional Accountants of New Brunswick and the Code of Professional Conduct of the Office of the Auditor General of New Brunswick. Both the Rules of Professional Conduct and the Code are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with our regular audit process, we obtained the following from management:

- confirmation of management's responsibility for the subject under audit;
- acknowledgement of the suitability of the criteria used in the audit;
- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided; and
- confirmation that the findings in this report are factually based.

Period covered by the audit:

The audit covered the period between September 1, 2015 and June 30, 2017. This is the period to which the audit conclusion applies. However, to gain a more complete understanding of the subject matter of the audit, we also examined certain matters that preceded and followed the period of the audit.

Date of the report:

We obtained sufficient and appropriate audit evidence on which to base our conclusion on December 10, 2018 in Fredericton, New Brunswick.

Appendix VII – Criteria Used in Our Audit

Criteria Used in Our Audit

Criteria serve as the basis for our performance audits. They are benchmark statements we use to assess government programs. Criteria provide the framework for collecting audit evidence. Our criteria for this audit on student performance in reading, mathematics and science were:

- 1. The Department should set goals for student performance in reading, mathematics and science.
- 2. The Department should measure student performance in reading, mathematics and science against the goals to identify gaps.
- 3. The Department should take action through the school districts and schools to improve student performance in reading, mathematics and science.
- 4. The Department should publicly report on student performance in reading, mathematics and science and explain variances from goals.

Source: Criteria developed by AGNB using information from: New Brunswick legislation (*Education Act* & regulations), Department of Education and Early Childhood Development education plans, the Pan-Canadian Assessment Program (PCAP), the Programme for International Student Assessment (PISA), and other Offices of the Auditor General.

Appendix VIII – Information on the 2016 Pan-Canadian Assessment Program (PCAP)

Information on the 2016 Pan-Canadian Assessment Program (PCAP) (13-year old students)

With the establishment of PCAP in 2003, Canada's ministers of education set out the following goals with respect to pan-Canadian educational assessment:

- o to inform educational policies that seek to improve approaches to learning;
- to focus on reading, mathematics, and science, with the possibility of including other domains as the need arises;
- o to reduce the testing burden on schools through a more streamlined administrative process;
- to provide useful background information through the use of complementary context questionnaires for students, teachers, and school administrators; and
- to enable provinces and territories to use both national and international results to validate the results of their own assessment programs, and to improve these programs.
- School programs and curricula vary from province to province and from territory to territory across the country, so comparing results in these domains is a complex task. However, young Canadians in different provinces and territories learn many similar skills in reading, mathematics, and science. PCAP has been designed to determine whether students across Canada reach similar levels of performance in these core disciplines at about the same age, and to complement existing provincial/territorial assessments with comparative Canada-wide data on the achievement levels attained by Grade 8/Secondary II students.
- PCAP is designed as a system-level assessment to be used primarily by provincial ministries of education to monitor and assess their respective educational systems. PCAP data are reported by province (and, where data are available, by territory), by language of the school system, and by gender. The goal of national (and international) large-scale assessments is to provide reliable information about academic achievement and insight into the contextual factors influencing it. The data from studies such as PCAP provide policy-makers, administrators, teachers, and researchers with meaningful insights into the functioning of education systems and how they might be improved.
- **Participation** In the spring of 2016, approximately 27,000 students in Grade 8 (Secondary II in Quebec) from close to 1,500 schools across the country were tested. Reading was the major focus of the assessment. Mathematics and science were also assessed. Approximately 20,000 students responded in English and 7,000 in French.

Source: *PCAP 2016 - Report on the Pan-Canadian Assessment of Reading, Mathematics, and Science*, Council of Ministers of Education, Canada (CMEC)

PCAP 2016 - Reading, Mathematics, and Science - Highlights, Council of Ministers of Education, Canada (CMEC)

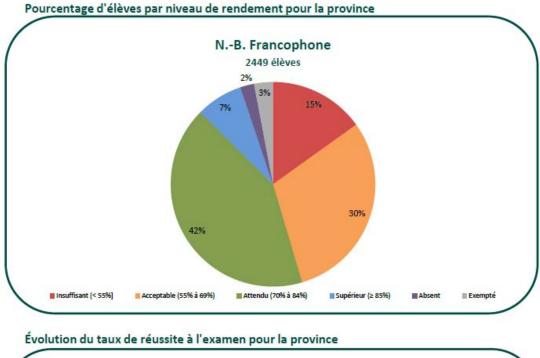
Appendix IX – Information on the 2015 Programme for International Student Assessment (PISA)

Information on the 2015 Programme for International Student Assessment (PISA)

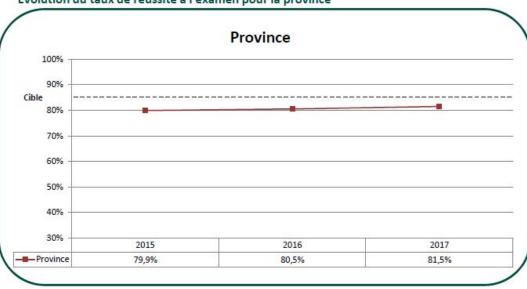
- The Programme for International Student Assessment (PISA) measures the extent to which youth, at age 15, have acquired some of the knowledge and skills that are essential for full participation in modern societies.
- It reports on scientific, mathematic, and reading literacy every three years and provides a more detailed look at one of those domains in the years when it is the major focus.
- In 2015 the sixth cycle of PISA was completed and it focuses on scientific literacy.
- Seventy-two countries participated in PISA 2015, including all 35 OECD countries. Between 5,000 and 10,000 students aged 15 from at least 150 schools were typically tested in each country. In Canada, approximately 20,000 15-year-olds from about 900 schools participated across the ten provinces.
- The large Canadian sample was required to produce reliable estimates representative of each province and for both French- and English-language school systems in Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Alberta, and British Columbia. PISA was administered in English and in French according to the respective school system.
- The 2015 PISA assessment was administered in schools during regular school hours in April and May 2015.
- The assessment was a two-hour computer-based test. Students also completed a 35-minute student background questionnaire providing information about themselves and their home, while school principals completed a 20-minute questionnaire about their schools.
- PISA is a collaborative effort among member countries of the OECD. PISA is designed to provide policy oriented international indicators of the skills and knowledge of 15-year-old students and to shed light on a range of factors that contribute to successful students, schools, education systems, and learning environments. It measures skills that are generally recognized as key outcomes of the educational process. The assessment focuses on young people's ability to use their knowledge and skills to meet real-life challenges. These skills are believed to be prerequisites for efficient learning in adulthood and for full participation in society.

Source: Excerpt from *Measuring up: Canadian Results of the OECD PISA Study - The Performance of Canada's Youth in Science, Reading, and Mathematics - 2015 First Results for Canadians Aged 15, 2016 (Council of Ministers of Education, Canada)*

Appendix X – Examples of Public Reports on Assessment Results



Mathématiques 3e année



Source: Excerpt from *Le bulletin provincial 2016-2017*, Department of Education and Early Childhood Development, available only in French.

Appendix X – Examples of Public Reports on Assessment Results (continued)

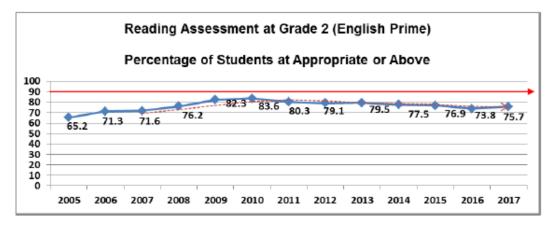
Provincial Literacy Assessment at Grade 2 Assessment Results 2016-2017

Provincial Literacy Assessment at Grade 2 – English Prime

The 2017 Provincial Literacy Assessment was administered to students in the second grade near the end of the 2016-2017 school year to assess their reading proficiency. The goal of the government of New Brunswick is for 90% of students at the elementary level to achieve the expected level of literacy.

Provincial Literacy Assessment at Grade 2 – Reading

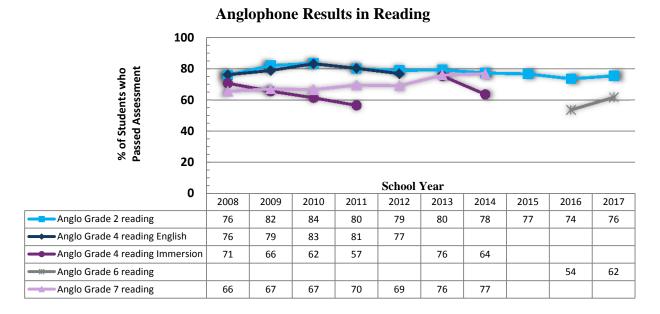
Of the 5027 second graders registered in the English Prime program, 75.7% met or exceeded the appropriate achievement level in reading, an increase of 1.9 percentage points. Of these students, 52.7% attained the appropriate achievement level and 23.1% attained the strong achievement level. Please note that 2.9% of students were exempt and 0.3% did not write.



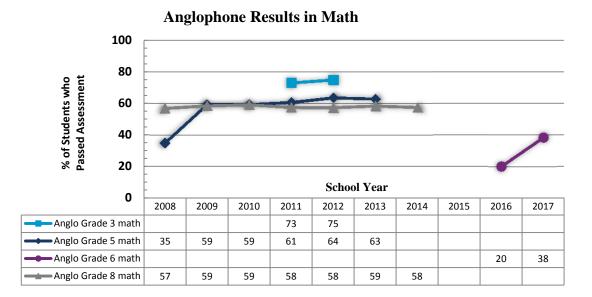
This graph shows the trend line for grade 2 reading across time. The blue line represents the yearly score and the dotted red line is the linear trend line. The trendline indicates that reading performance on the Provincial Assessment at Grade 2 is decreasing.

Source: Excerpt from *Provincial Literacy Assessment at Grade 2 – Assessment Results 2016-2017*, Department of Education and Early Childhood Development

Appendix XI – Anglophone Assessment Results over 10 Years – Grade 2 to 8

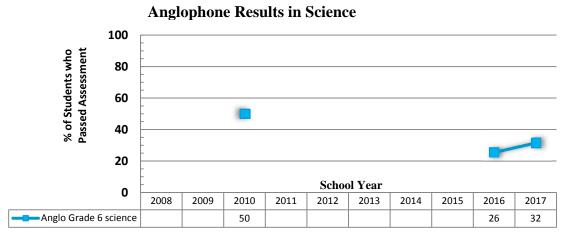


AGNB Interpretation: Reading has been assessed consistently at grade 2 for the last 10 years. Reading assessments at other grade levels was not as stable, with grade 4 and 7 reading assessments discontinued in 2014, and a new grade 6 assessment introduced in 2016.



AGNB Interpretation: Math was assessed at four grade levels over the years; however, none of the grade levels were assessed consistently in the last 10 years. Grade 3 math was assessed for only two years (2011 and 2012). Assessments at grade 5 and 8 were discontinued in 2013 and 2014 respectively. Math is now assessed at grade 6, beginning in 2016.

Appendix XI – Anglophone Assessment Results over 10 Years – Grade 2 to 8 (continued)



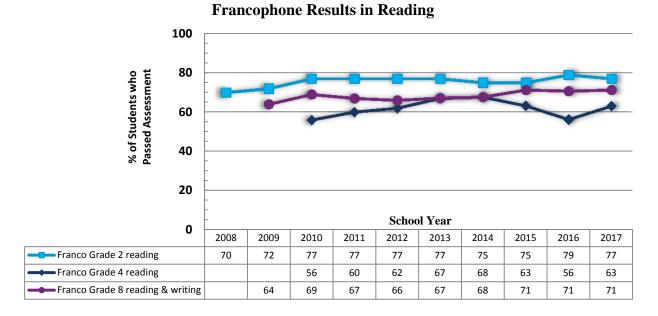
AGNB Interpretation: Science was only assessed at grade 6 in a sporadic manner. There was a single assessment in 2010 followed by recent assessments in 2016 and 2017. Students performed poorly in both recent years. Only 32% of students performed at the appropriate level or higher in 2016-2017, well below the target of 90%.

Notes:

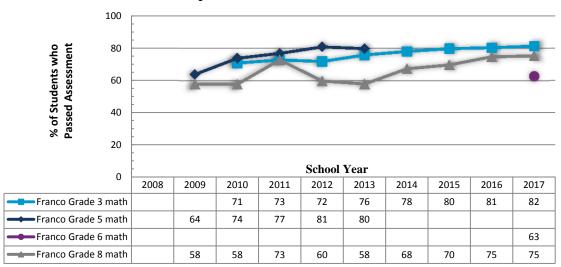
- 1. The passing rate is considered appropriate achievement (appropriate level for grade 2 reading, and a mark of 64% for all other assessments).
- 2. The 2007 target that 85% of students reach or exceed appropriate achievement in grades 6-12 on provincial assessments in literacy, math and science remained consistent until the most recent 2016 education plan, which increased the target to 90% for 2025-2026. The target of 90% for grade 2 reading was set in 2002 and has remained consistent.

Source: Graphs created by AGNB with information provided by the Department of Education and Early Childhood Development

Appendix XII – Francophone Assessment Results over 10 Years – Grade 2 to 8



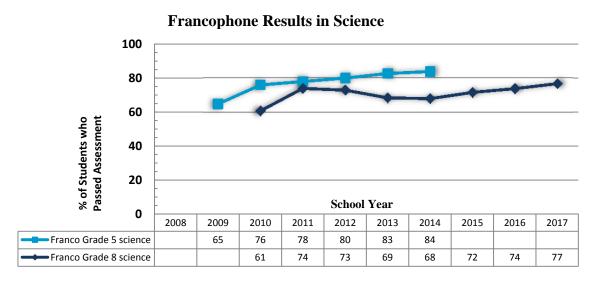
AGNB Interpretation: Reading has been assessed consistently at grade 2 for the last 10 years. Grade 4 and 8 assessments were introduced in 2009 and 2010 respectively. Results remained on a relatively even trend throughout the period, with generally between 60 and 79% of students achieving the acceptable level or higher on assessments, however never achieving the Department's targets (see Note 2).



Francophone Results in Math

AGNB Interpretation: Math was assessed at four grade levels in elementary school in the last 10 years. While grade 3 and 8 assessments were somewhat continuous, the grade 5 assessment was discontinued in 2013, and grade 6 was only introduced in 2017. Performance remained on a stable trend but never met the targets (see Note 2).

Appendix XII – Francophone Assessment Results over 10 Years – Grade 2 to 8 (continued)



AGNB Interpretation: Science was assessed at grade 5 from 2009 to 2014, and at grade 8 starting in 2010. Student performance in both assessments showed a slight upward trend in later years, but remained below the Department's targets (see Note 2).

Notes:

- 1. The passing rate is considered achieving the expected level (level 3) for elementary level reading, and the acceptable level (mark of 55%) for all other assessments.
- 2. The target for the percentage of students reaching or exceeding acceptable achievement on these evaluations has varied between 85% and 90% over the years depending on the assessment.

Source: Graphs created by AGNB with information provided by the Department of Education and Early Childhood Development