

New Brunswick Education Summit



Succeeding at Home: ***A green paper on education in New Brunswick***

INSPIRE
Foster innovation

ENERGIZE
*Showcase local
leadership*

EMPOWER
*Optimize learning
environments*

**Succeeding at Home:
A green paper on education in New Brunswick**

Published October 2019 by:

Department of Education and Early Childhood Development
Government of New Brunswick
P. O. Box 6000
Fredericton, New Brunswick
E3B 5H1
Canada

12308

Introduction

What is a green paper?

A green paper is a document that offers the public and stakeholders a range of ideas and policies to consider. This green paper offers ideas on how to make our education system, from birth to high school graduation, the best in the world. It also includes specific actions government will undertake together, with New Brunswickers, in order to transform our education system.

The goal is to have teachers, parents, students, the business community, professionals in early childhood and other New Brunswickers come together for a conversation about education that results in tangible, positive change.

Some changes will be implemented quickly, some will take several years. If some areas of the education system are not included in this paper that does not mean they are not important.

Why a green paper?

Your government wants education to be at the centre of everything New Brunswick does. That means including citizens in the process of developing new ways to manage our education system. The ideas outlined in this paper build on the foundation of the [10-Year Education Plans](#), one for each of the two education systems (anglophone and francophone), published in 2016. When this document refers to the Education Plan it means these documents.

This green paper aims to stimulate discussion and debate in the weeks before a provincial summit on education, to be held in Fredericton from October 16 to 18, 2019. The summit will provide an opportunity to share ideas on improving classroom education while celebrating our many achievements. After the summit, ideas and comments collected during this process will be gathered and refined. These will inform the development of policy proposals and legislative changes that will be introduced starting in the 2020-21 school year and continuing through 2030.

Government intends to follow the priorities established in the [Education Plans](#) and the recommendations in the [2019 Auditor General's report](#) on the education system. Every effort will be made to minimize disruption and demonstrate the benefits of any changes for students.

Not surprisingly, for a field as important as education, there are competing theories about the best way to run a school system, train teachers, and measure our expectations of students. There's a lot of jargon, which can make conversations about new ideas difficult for parents, the general public, and politicians.

Appendix A provides a brief, and hopefully clear, summary of some of the key concepts in use or proposed for use in our education system.

We want your feedback!

This document aims to spark ideas about transforming our education system. Share your thoughts by writing to us at consultation.EECD-EDPE@gnb.ca

Minister's challenge

Education is the most important thing we do together, as a province. Over the first eighteen years of their lives, guided by their parents, school, family and community, children become New Brunswickers. A big part of what that means depends on the school system: The values we pass along and the example we set.

If we get education wrong, we condemn a generation to a learning deficit that limits opportunities, reduce incomes, and undercuts dreams. We damage young lives.

Too many students don't want to stay in New Brunswick, to build a life and career and to have a family. That will change. That change starts in our schools, and it starts with a recognition of the challenges we face. We will know we've succeeded when young students see opportunities here at home. We start down that road by being honest about the challenges we face, the hurdles that cause young New Brunswickers to see their future and New Brunswick as two different destinations.

Our education system is sliding towards crisis. Not for all students. Not every day. But for more and more students, and the teachers who guide them, school isn't working.

That has to change. Fast. We don't know how many more democratic institutions are going to be undermined and attacked by forces that deny evidence, fact, and reason. We do know those attacks will continue, and that training in critical thinking and civics is the only response.

We don't know how many low-skill jobs are going to disappear with the rise of automation and advances in artificial intelligence. We do know jobs will disappear, and that we need students skilled in trades and in building, managing, and maintaining the technology that will do more and more for all of us.

Meanwhile, some classrooms are unmanageable. As a province, we ask more and more from our teachers as we have restricted and questioned their authority. Teachers are subject to violence and threats. Parents feel disconnected and, increasingly, we see students raised without the challenges they need, and the resiliency to cope with a rapidly changing world.

This is not alarmism. It is also not a description of the majority of New Brunswick's classrooms. Many are happy, active places where motivated teachers engage with students in a friendly and challenging way. But the problems are getting worse. Teachers have tried to raise the alarm for years. They have not been listened to. That changes now.

We will increase our student resiliency. Make our classrooms safe. Offer classes that challenge and empower teachers. Make sure every student can learn both our official languages. These and other changes are what teachers and parents have asked for. Changes students need.

I have visited dozens of schools and talked to hundreds of teachers over the last eleven months. I have talked to hundreds of parents who shared their stories, and students their experience. This paper includes their ideas, and those of many others. Thank you to those who took the time to talk with me. I learned a lot.

I hope you will take the time to read the paper that follows, and share your ideas on how we can make New Brunswick's education system world class. It only happens if we decide to take the risk and then commit to doing the work.

Let me know what you think. Then let's get to work!



What do we mean when we talk about a world-class education system?

New Brunswick's provincial government has identified education as a key [priority](#).

Our province needs a literate, numerate, critical-thinking, problem-solving, and multilingual workforce if we are going to survive and succeed. Our province is not immune to the technological and social changes sweeping the world. Educating our children and youth is the most important challenge facing any society. Every day we are competing in a global education race. The reward is a growing economy and population, and a place at the table for the twenty-first century. The penalty for failure is a shrinking economy and population, growing poverty, and a dwindling ability to address those problems.

Despite public perception, New Brunswick's education system appears to perform well on the international stage. However, in a rapidly changing world, this is not enough - we need to do better. We cannot afford to lag behind or even just keep pace. Our children deserve better.

According to the Program for International Student Assessment (PISA)¹, out of 72 Organization for Economic Cooperation and Development jurisdictions:

- In Science, NB ranks 10th along with countries such as Korea, New Zealand, Australia, the United Kingdom, Germany, Switzerland, Norway and the United States.
- In Reading, NB ranks 7th, along with countries such as Japan, Norway, France and Sweden.
- In Mathematics, NB ranks 19th along with countries such as Germany, France and Australia.

In plain language, this means that New Brunswick is performing as well as some international educational powerhouses. We are also showing significant improvement rates that demonstrate our commitment to ensuring our students have quality educational opportunities. This means we cannot become complacent. Our education system faces significant challenges in terms of classroom composition, disengagement and general apathy. Education is not valued as it should be – as a key economic, social and democratic driver.

However, this performance does not translate to other national and provincial assessments. For example, in Reading on the Pan-Canadian Assessment Program, New Brunswick was 7th, tied with Saskatchewan, Manitoba and Newfoundland & Labrador, this is the lowest ranking. In Mathematics, New Brunswick fared better, with results showing 4th in Canada, along with British Columbia, Prince Edward Island and Nova Scotia. Finally, in Science, the province was also 4th, in the company of British Columbia, Quebec, Nova Scotia and Newfoundland & Labrador. While these results do demonstrate improvement year after year of the assessment, again, we must do more, particularly in literacy. This one element is the key to future success for all New Brunswickers.

Government aims for New Brunswick to be a top ten jurisdiction, worldwide, by 2030.

Every year, other countries shift their focus to education and are making gains on our modest progress. Just maintaining our current position will be a constant challenge especially considering the crisis currently facing New Brunswick's education system. To improve New Brunswick's position, and to reach our top-ten target, will require an unparalleled focus and dedication by the government and people that will have to persist beyond a complete electoral cycle.

The current social and economic reality of our province should be enough to trigger bold and immediate action. Together, we have a moral imperative to reimagine our education system.

The United Nations has identified a series of challenges facing our planet, and has called upon the world's countries to work together to achieve global success. New Brunswick's 10-year education plan is aligned

¹ 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
<https://www.cmec.ca/publications/lists/publications/attachments/365/pisa2015-cdnreport-en.pdf>



with these Sustainable Development Goals², which Canada has endorsed. These goals call on us to contribute solutions to such challenges as addressing climate change, eliminating poverty and hunger, promoting peace and justice, ending gender inequality, and, perhaps most significant to us, providing a high quality education to every child.

This green paper is not attempting to describe every element of our education system. Good reforms include a clear understanding of what should be left alone, as much as what should be changed. Readers who do not agree with the material presented here, or who want to highlight areas they feel are important that were not included, can submit their ideas to consultation.EECD-EDPE@gnb.ca by October 15th, 2019.

Where we are: New Brunswick in 2019

New Brunswick's public education system has a long history, starting with informal and often religious-based classes offered to some children, usually boys, which evolved into the one-room schoolhouses that prepared students for work in an agricultural society. School prepared students for adult life.

Today's classrooms are based on an industrial model, created when growing economies needed well-trained workers who were ready to tolerate strict discipline, with bells marking shift changes and routine, repetitive work making up most peoples' lives. Again, school was a preparation for life.

Education subsidies began in 1802, with some New Brunswick schools receiving public funds alongside unregulated, private, religious schools. The province's first teacher training school opened in 1848, beginning a move towards a more robust public education system.

The 1871 *Free Schools Act* created a universal, free, public education system but school was not made mandatory until 1940.

Over the years, New Brunswick has created many commissions and studies on the public school system and related subjects. Most notable was the 1963 Byrne Commission, resulting in the 1966 Program for Equal Opportunity. This massive reorganization of government and public funding introduced provincial oversight of social services, including education. This model remains in place today.

In 1974, the creation of the dual linguistic education sectors, at the department level and in the schools began. Today's *Education Act* was introduced in 1996 and organized around four areas: learning, teaching, governance and administration. In 2000, elected education governance was reintroduced, redistributing authority among the department, districts and schools. The intent was to empower communities but, over the years, that original intent was eroded by competing and sometimes conflicting priorities and powers.

Taking partisanship out of decision-making in education

Education suffers when partisan politics beats out evidence-based decision-making. Continued commitment to the Education Plan and to the Auditor General's report shows government's intent to move away from partisanship. Results do not have a party colour.

ACTION: Government will modify the *Education Act* to ensure a full review of the act every ten years. This will be conducted through an inclusive Select Legislative Committee on Education. The committee will have access to all available education data to inform recommended amendments and include stakeholder and community groups including teachers, students, businesses and others.

Stable, multi-year funding for education is critical. A ten-year plan based on a single year budget does not make sense.



² <https://sustainabledevelopment.un.org/sdg4>



ACTION: Within the confines of the democratic budgetary process, which must respond to changing economic and political circumstances and the will of the people, government will work with all parties to make multi-year budgeting part of the Select Committee's mandate.

Building a world-class education system

ACTION: Government is examining the *Education Act* to identify inconsistencies and conflicts within the act and between the act and supporting regulations and other laws, regulations, and policies. Laws should be clearly written and easily understood.

ACTION: Government will introduce the *Classroom Freedom Act*, a bill to amend the *Education Act*, which will make changes to laws and regulations. Consultations to inform the act will take place within and outside government and be based on responses to the contents of this green paper and the Education Summit.

This will include conversations with departments including, but not limited to, the departments of Post-Secondary Education, Training, and Labour; Social Development; Health; Environment and Local Government; and Service New Brunswick.

ACTION: Government will reduce outdated and unnecessary regulations in the education system. A *Red Tape Challenge in Public Education* will be launched, allowing everyone access to a simplified system that can amend or repeal regulations and procedures.

Students and teachers are the most important part of the education system

Your government approaches education based on the following three premises:

1. The machinery of the education system must be aimed solely at supporting teachers and classroom professionals;
2. Teachers and classroom professionals should be working solely to advance their students; and
3. The education system should be evaluated on how it supports teachers. Teachers should be evaluated on how their students advance.

Our students need to be prepared for a rapidly changing world. A better-prepared workforce will help our businesses grow and become more competitive. A better prepared society will foster innovation in government, push for more efficient delivery of services and products, and create an environment within which entrepreneurs and artists can thrive.

A world-class education system offers the opportunity to develop the discipline of critical thinking and the ability to take on all the responsibilities of being a full citizen in a democratic province where the values of hard work, creativity, responsibility, and civility are upheld.

A well-prepared citizenry will enjoy a higher level of employment, with an increased wage potential. As wages move upward, so does the amount of tax collected. A healthy, well employed workforce supports the social programs upon which all New Brunswickers rely on.

ACTION: Passing cultural and civic values from one generation to the next is an important part of the education system. Government will develop a world-class civics program that reflects New Brunswick today and prepares our students to be citizens tomorrow.

Education support structures: make them work for students and teachers

Government believes in decentralization and empowering local schools. The department should set and enforce provincial standards while other decisions should be delegated to the school level whenever possible.



Today, there is widespread confusion over the role of the department, of school districts, of District Education Councils (DEC), and of Parent School Support Committees.

ACTION: Government will define and clearly communicate areas of responsibility, making sure every dollar of education spending is targeted where it matters: on increasing the quality of the classroom environment.

ACTION: At the school level, principals need to be given the tools to lead. Government will work with teachers, unions, and the community to give principals more control over their schools.

IDEA: Government will look to enhance community engagement by empowering school governance, in tandem with initiatives to reform local government.

IDEA: Government will explore the best way to structure the offices and organizations that support principals, teachers, students, and parents. This will include a review of the mandate and structure of the department, school districts and the DECs.

Literacy

Literacy serves as the foundation for success in all areas of life. It is central to all of the actions and ideas in this Green Paper. Without a good foundation in literacy, all of our other efforts will be compromised. We all have to work together to ensure that students graduate high school with strong literacy skills. This is not uniquely the mandate of the Department of Education and Early Childhood Development. All partners, community members and stakeholders must work singularly with the goal in mind to improve literacy rates.

Too many of our graduates enter the world beyond school without the necessary literacy skills to allow them to compete in this 21st century knowledge economy. Literacy challenges can be devastating and have a lasting impact, both personally and provincially. Strong literacy skills equals a strong province.

Knowing that the ability to understand and use written information in everyday life to achieve personal goals, expand knowledge and abilities, makes the development of strong reading, writing and oral communication critical. It is the issue of greatest importance to New Brunswick society. This is more than simply investing more money or tinkering with existing programs - we must change the narrative around the importance of education and its ability to transform individual lives and our province.

ACTION: Government will ensure that all teachers have access to the necessary skills and knowledge to support learners as they increase their literacy skills. Innovative practices will be validated and shared. Teachers and students together will determine the best road forward individually to increase literacy. In addition, EECD will be asked to regularly report on key literacy measures, informed by partners, to Government.

A bilingual and multicultural province

As Canada's only bilingual province, New Brunswick has a dual education system, with an anglophone deputy minister and a francophone deputy minister each reporting to a single minister. Government supports this structure.

After 50 years as an officially bilingual province, one would expect we would have figured out how to ensure all New Brunswickers are able to communicate in both official languages. Sadly, that is not the case. Our anglophone education system has relied on a French Immersion program that has resulted in less than half of our high school graduates being able to speak French at a conversational level. This is simply not good enough.

Furthermore, the French Immersion model has created a negative situation where the majority of students with learning and behavioural challenges are streamed into non-immersion classes. This has



led to serious classroom composition challenges which undermines quality teaching and learning. We have heard from many teachers and parents that such a model is inherently unfair. We cannot deem it acceptable that such a situation should continue to occur.

All children and youth deserve every opportunity to thrive in every classroom in this province, and the ability to achieve one's full potential should not be influenced by second language program models. Our government will ensure that all New Brunswick graduates achieve a conversational level of French while learning in an environment that eliminates streaming. This will increase student's chances for success in all academic subjects and in their personal development.

New Brunswick's francophone education system has been successful in strengthening the culture, history and language of Acadians and francophones. Recent initiatives, including the development of the [Linguistic and Cultural Development Policy](#), offer a model that government supports and intends to encourage for the anglophone community.

The francophone sector has developed a collaborative relationship to create the conditions for success that supports the fulfillment of its dual mission: ensuring the academic success of learners and contributing to identity building. Collaborations such as the *Groupe d'action-collaboration sur l'éducation en français* (GACEF) allow for dialogue with various community partners. The cultural community is a particularly important partner.

IDEA: Government believes New Brunswick's anglophone education system should strengthen the sense of community and identities of the province's anglophone students, building on the successes in this area of the francophone sector. What could this look like?

As the Education Plan state, and government supports, education plays a pivotal role as New Brunswick continues to build respectful relationships between First Nation and non-First Nation People. The historical and cultural contributions of First Nation communities and individuals are being included in the province's schools, reflecting learning opportunities for all students. We are ensuring that First Nation realities, experiences and contributions to Canadian society are embedded throughout the K-12 educational system. This foundational understanding for all New Brunswick learners is critical. This will allow all students and teachers in the system to understand the historical and current context of First Nation peoples in New Brunswick. This also allows government to acknowledge and act upon our commitment to the Truth and Reconciliation Commission of Canada: Calls to Action.

ACTION: In recognition of the historical and contemporary significance and importance of Mi'kmaq, Passamaquoddy and Wolastoqey languages within New Brunswick, government is committed to fostering meaningful partnerships with First Nations communities to expand the availability and quality of these courses within provincial schools.

Newcomers to New Brunswick must be welcomed, and their contributions to our province reflected in an ever-evolving education system where teachers are free to adapt and improvise to meet the needs of their students. Schools are where integration into Canada's multicultural society can happen, for our children. As government launches the [New Beginnings population growth strategy](#) this task becomes ever more important.

A united New Brunswick means a province where all students have the opportunity to learn our official languages. As Canada's only bilingual province, today's low level of bilingualism is not acceptable. New Brunswickers should be able to speak to each other and share their stories. Successive governments have invested heavily in second language learning, only to return modest gains, if any. Your government is committed to applying the best practice of personalization and experiential learning and other high yield practices to address the needs to second language learners.

ACTION: Government will, over the next two years, work with early childhood educators, teachers and experts to develop and begin implementation of a second language training program that will build on



best practices and other second language programs, and include play-based approaches to language learning that can be put in place through Early Childhood Education Centres.

IDEA: How can we create structures for students to work together as they learn our two official languages? How can technology reinforce face to face learning, making it easier to create lasting ties of friendship and community across our province?

ACTION: Government will ensure that all students will achieve, at a minimum, conversational proficiency in both official languages by the time they graduate from high school.

Parents and students: partners in learning

Changes in society since the Second World War have resulted in changed family dynamics. Our school system, our whole society, was based on the assumption that one parent stayed home to look after the house and family. That is no longer the case. Today, in most households, both parents work, and they work longer hours to support their families. Daycares and then early childhood education centres grew out of the need to provide care and support in learning for the very young, while school and increasingly structured play fill the gap for older students.

Today, the internet and social media are creating another transformation, offering incredible tools that allow every child the ability to access the world while presenting serious challenges from misinformation, distraction, and bullying.

Students feel overwhelmed. Mental health challenges are cited by students and teachers as a crisis that is disrupting the classroom, hurting the students affected and those around them. Mental health professionals are in short supply and the need is increasing exponentially. This is not sustainable.

Students need to have the opportunity to learn in an enriched environment from the earliest age. All young people need the opportunity to start the school day well-nourished, to experience challenge and risk, and to develop resiliency through mental and physical challenges.

IDEA: How can schools address the increased demand to manage the physical and mental health of students and adults in the school system?

ACTION: Work across government, building on the Integrated Service Delivery model that today brings four departments together to help students in crisis, to address the challenges facing youth inside and outside the school system, and to bring government recommendations for action within six months.

Creating a positive, healthy and inclusive learning environment is critical to engagement and students wanting to be in school. Learning time spent with or under the guidance of teachers is critical for student achievement. Students are expected to be in school during school hours. A better understanding of the causes of low attendance is crucial. A special focus must be placed on student and parental engagement, which means working with parents and across government departments.

ACTION: Government will update and enforce rules on truancy while developing tools to increase student engagement.

Teachers need support from their community, particularly families. Interactions with parents were less frequent and more structured in the past. Today, technology allows families to communicate with teachers many times a day by text, social media posts, phone calls and emails. Parental engagement is critical but for teachers to respond to these requests takes time away from teaching. Teachers must be accountable for what happens in their classrooms but they need time to prepare and to teach.

ACTION: Government will work with stakeholders to create policies that protect teachers from excessive demands on their time while ensuring appropriate communication to parents.



Early Childhood Education

Early childhood education is recognized as being as, if not more, important than other periods in a child's development. In addition to the impact on the child, high quality and affordable early childhood education allows parents to return to work: a benefit to the child and to the economy.

ACTION: Government will expand and improve the current early childhood education system, recognizing the importance of the field and the need for ongoing work with universities and colleges to constantly improve the quality of training and ongoing professional development for early childhood educators.

From grades to flexible learning environments³

In most human activities people are not grouped based upon age. Those that are, give an advantage to children who are older or who develop early. Differences in development can be profound between younger children. Two children, born on the same day, may be at markedly different levels of development, depending on the subject or competency, and they move ahead at radically different speeds. Grades do not make sense.

Flexible grouping of children and youth is a way to eliminate long-standing barriers to learning that have existed for more than a century. Traditional schools organize students in grade levels that reflect their ages rather than their needs as individual learners. What might it look like if schools were given more flexibility in grouping and regrouping students according to their individual talents, interests and learning requirements? We are committed to implementing a phased-in approach to a non-graded system, beginning with first three years of schooling, whereby teachers would work with groups of children with similar learning profiles. This will allow us to accelerate the progress of our gifted and talented students, so they aren't held back by artificial organizational structures, while also meeting the needs of children and youth who simply need more time to master particular concepts or skills.

While this might seem like a revolutionary concept, there are already schools around the province who have taken the lead in flexible grouping practices. In some schools, for example, a teacher works with students of various ages who are all reading at the same level, thereby ensuring their lessons are of the right level of difficulty for each of the students involved. With this approach, no child is bored because the work is too easy, and no child is frustrated because it is too hard. We envision a system where five, six, seven and eight-year old children are grouped together for particular lessons that are engaging, dynamic and focused on each learner's particular needs, talents and interests.

ACTION: Based on international best practices and the results of successful experiences in New Brunswick classrooms, the department will, in stages, eliminate grades. These will be replaced with flexible learning environments beginning in the 2020-21 school year. This will start with elementary schools, through proposals submitted by interested school staff. Proposals to replace kindergarten, Grades 1 and 2, with a flexible primary learning environment will be reviewed and selected for implementation. These will see students working with others flexibly, based on their readiness, interests and learning profiles while sustaining an inclusive classroom environment. The intent is that all elementary schools adopt this model within five years while also expanding this model to middle and high schools.

Teachers will have the authority to use their expertise, experience and professional learning to plan for their students. Plans will not be bureaucratic exercises based on overly-rigid curriculum documents but dynamic exercises allowing students to move ahead when they are ready and have demonstrated competency in the focus of learning. Government will evaluate artificial intelligence tools to assist in student assessments, which will focus on recognition of what new skills have been acquired following periods of instruction.

Assessments will support teachers in improving their skills and demonstrate the progress of each student. This will allow consistent appraisal of students across the province, based on demonstrated capacity.

3 <https://theconversation.com/are-mixed-grade-classes-any-better-or-worse-for-learning-38856>



This personalized approach, combined with flexible learning environments, will end the policy of social promotion. Students will move on to new material once they mastered what is in front of them. There is no shame in difference: students in elementary school who are ready for high school or even post-secondary material in some subjects should be encouraged to excel.

Further, artificial intelligence tools will be evaluated by government to help develop ongoing assessment tools, moving us towards a fully personalized education for each student that will reduce the workload for teachers. Personalization does not mean one-on-one instruction, a real concern for teachers already struggling with often excessive demands on their time.

Teacher development, teacher freedom

ACTION: Government will work with universities to ensure teaching programs reflect best practices, and prepare student teachers for the fast-changing classroom environment. The legally required letters of agreement between the department and universities will be completed and an agreed profile of a prepared teacher drafted, as the basis for those relationships.

New Brunswick has many highly trained and motivated teachers but they need to be given the freedom to use and share their expertise with a minimum of political and bureaucratic interference.

IDEA: What are the obstacles that hold teachers back? What promising practices are already in place in schools that encourage innovation and support teachers taking risks to respond to student needs?

In consultation with the New Brunswick Teacher's Federation and unions, government will remove restrictions on teachers speaking publicly about their work, and the challenges they face. Open discussion is the best way to identify and resolve challenges.

Inside the classroom, educators and administrators need the freedom to develop, share, and use their own tools to engage students and the freedom to engage community and business leaders to support learning.

ACTION: Government will look at incentives for community and business leaders to support the public-school system, while ensuring education remains fully publicly funded. These could include apprenticeships or other support.

Teachers need to regain control over their classrooms. That starts with a policy of zero tolerance for the physical abuse of any adult in the classroom. We have heard from teachers that classroom composition is having a huge and negative impact on their ability to do their jobs. Learning cannot take place in classrooms where violence or other disruptions persist.

Consistent with the Education Plan, all students must be offered the opportunity to explore various careers in a variety of fields, including those related to the trades. This has to include industry and post-secondary partners. Schools alone cannot meet the needs of industry nor match the pace of growth and change. Simply adding and installing infrastructure in schools will not respond to this need.

ACTION: Our government will work with our partners in New Brunswick's private sector and the New Brunswick Community Colleges to develop learning partnerships and expand the availability of physical and virtual learning environments. For example, partnerships with industry that find students working in the field to gain skills and knowledge. Students will benefit from the expertise and relevant experiences of professionals in these sectors, applying knowledge and skills learned in school and through targeted learning experiences in college or private business. This will both engage students by nurturing their passion and fulfill the needs of our province. Students will learn real life, on the job skills and problem-solve real world situations. When students are engaged in their studies, they are invested in their future here in New Brunswick.

ACTION: Government will work with teachers to strengthen and communicate policies that respect inclusion while protecting teachers and others in the classroom all while passing on a fundamental lesson: the importance of working together.



Further, challenges evident in today's classroom that may be a result of current second language programming options need to also be addressed. The impact of streaming in non-French Immersion classes is diminishing students' ability to learn and teacher's ability to respond.

ACTION: Government is committed to putting additional resources in classrooms where composition issues are hurting the educational outcomes of students and the teacher's ability to teach while a longer term response is developed.

Smart phones and other devices can both improve and undermine education. The same tool that allows a student to access all the information in the world, no matter where they are, also allows students to access misinformation and opens an additional channel for bullying.

ACTION: Government will develop provincial guidelines for the use of technology in schools, focusing on appropriate use. Government will support 'bring your own device' policies; establishing provincial rules for the acquisition and use of technology, the use of out-of-date technology, and issues around equity between schools in low versus higher income areas.

Learning life and job skills cannot be left to the school system alone. From innovations in public policy research to new welding technology, changes in the world outside the classroom cannot wait for slow and bureaucratic curriculum and program reforms.

IDEA: How does the school system rapidly respond to emerging trends that are proven to support students? How can the business community, non-profit groups, and people with contributions to offer, such as retirees, be engaged in our school system?

Consistent with the Education Plan, all students must be offered the opportunity to explore various careers in a variety of fields, including those related to the trades. This has to include industry and post-secondary partners. Schools alone cannot meet the needs of industry nor match the pace of growth and change. Simply adding and installing infrastructure in schools will not respond to this need.

ACTION: Our government will work with our partners in New Brunswick's private sector and the New Brunswick Community Colleges to develop learning partnerships and expand the availability of physical and virtual learning environments. For example, partnerships with industry that find students working in the field to gain skills and knowledge. Students will benefit from the expertise and relevant experiences of professionals in these sectors, applying knowledge and skills learned in school and through targeted learning experiences in college or private business. This will both engage students by nurturing their passion and fulfill the needs of our province. Students will learn real life, on the job skills and problem-solve real world situations. When students are engaged in their studies, they are invested in their future here in New Brunswick.

Excellence

Excellence in the public-school system will be encouraged as part of a fully inclusive education system that allows every student to reach their full potential.

ACTION: Government will work to expand the [International Baccalaureate](#) program, already in place within the francophone and anglophone sectors, allowing students to pursue an internationally recognized program as part of its public education system.

ACTION: Government will work to create partnerships between post-secondary institutions and the private sector, allowing students interested in acquiring a trade to get a head start through mentorships, internships, and apprentice programs that will combine in-school and field placements.

ACTION: The department will continue to work with the newly established Business Roundtable on Education, in the anglophone sector, to ensure opportunities for collaboration are encouraged and structured. A similar structure will be explored for the francophone sector.



New Brunswick and the world

New Brunswick is an educational leader on the Canadian and world stage. We often find this hard to believe, and our system does face many challenges, but these are the same challenges faced by other jurisdictions and we are, often, addressing them successfully.

Our province is highly regarded for our leadership in inclusive education, safe and positive learning environments, global competencies and international education. Many New Brunswick teachers have won international awards and acclaim for their innovative classroom approaches. Because of our strong international reputation, New Brunswick is a destination of choice for hundreds of students from around the world who come to study in our middle and high schools every year.

New Brunswick has taken on leading roles at the Council of Ministers of Education of Canada (CMEC), the Organization for Economic Cooperation & Development (OECD), and the United Nations Education, Scientific and Cultural Organization (UNESCO). New Brunswick is known as an international Francophonie and education leader. Our province currently holds the presidency of the *Conférence des ministres de l'Éducation des états et gouvernements de la Francophonie* (CONFEMEN), which includes the 44 members of the Francophonie.

New Brunswick recently led the Canadian delegation to the G7 Education and Innovation Conference in Paris and the High-Level Political Forum on Sustainable Development Goals at the United Nations in New York, and the International Forum in Inclusion and Equity in Education in Colombia.

Private education at home and abroad

New Brunswick's education system is already creating world class education programs in high demand around the world.

In the anglophone sector, Atlantic Education International (AEI) has, for 22 years, sold all or elements of the New Brunswick curriculum to schools in six countries, and has welcomed thousands of international students from around the globe to New Brunswick schools. AEI's sole purpose is to grow our international education initiatives, enhancing cultural diversity and understanding, while generating revenues for our province and local schools.

Since 2011, AEI's over \$31 million dollars in profits have been reinvested in our education system through grants to schools and school districts, payments to homestay families and coordinators, and contributions to provincial revenues. AEI is a self-sustaining entity which does not rely on any government funding to cover its operations.

In the francophone sector, new business opportunities are generated without a formal, independent structure like AEI. For example, in 2019 a new school using the New Brunswick curriculum opened in Tunisia.

ACTION: Government will examine the best way to expand New Brunswick's international educational institutions in both sectors, to offer the best return on investment and ensure high educational standards that will bring credit to our province and our overseas partners.

Today, private schools within New Brunswick cannot award the New Brunswick High School Diploma to their graduates. When the province is selling its curriculum abroad and allowing students in international schools to earn a New Brunswick diploma, this does not make sense.

ACTION: Government will create standards to allow private schools in New Brunswick to use the New Brunswick curriculum and to award New Brunswick diplomas while maintaining the integrity of the public school system. This program will generate revenue for the province and the school system and ensure high standards are met for all students.



Conclusion

The ideas and actions advanced in this Green Paper have one common purpose: to transform the education system in order to better respond to the future needs of New Brunswick.

New Brunswick needs critical thinkers, confident problem solvers – citizens who take ownership of the world around them and improve upon it.

I urge you to keep an open mind and constructively question what we need to move forward. I look forward to hearing from you!

We want your feedback!

This document aims to spark ideas about transforming our education system. Share your thoughts by writing to us at consultation.EECD-EDPE@gnb.ca



Appendix A

Promising practices

There are a variety of innovative practices well-placed to support transformation of our school system and many, such as those you'll read about below, are already in place in New Brunswick schools. Applied across the province they will help ensure learners' success in every school. Check this link to see some of these practices in action <https://www.ihublearningnb.ca/featured-stories>.

- **Personalization:** Personalized learning empowers teachers and principals to ensure every child achieves their full potential while reflecting best practices. When personalized learning is happening, learners have voice and choice in how they work and learn. They are challenged at a level that best meets their needs; and feel a sense of belonging while being positively connected to their peers and teachers. With this approach, children and youth learn skills and knowledge that is relevant to their lives, purpose, and future. For example, students in New Brunswick can participate in a Personalized Virtual Learning Centre from anywhere across the province. This center focuses on the creation of a business and product and encourages the growth of an entrepreneurial mindset. Over the last two years, 15 schools in the anglophone sector have specifically focused on personalizing learning and input from their experiences has informed future direction.
- **Essential skills programs:** Through these programs, high school students can acquire non-academic skills necessary to continue their studies in a community college or to directly access the job market. Trades and other career paths are equal to and as important as an academic path.
- **Experiential learning:** School must focus on learning and experiences that can be applied to real life. Coop opportunities continue to be offered to students and recently, virtual coops have become more popular. Virtual coops connect students with industry and professional mentors to explore an area of interest for a post-secondary pathway. Future Ready NB will be implemented this school year and provides support and funding for students to have even more opportunities to be exposed to a variety of career options.
- **Project based learning (PBL):** Thomas (2000) describes PBL as, "...complex tasks, based on challenging questions or problems, that involve students in design, problem-solving, decision making, or investigative activities; give students the opportunity to work relatively autonomously over extended periods of time; and culminate in realistic products or presentations." Many schools use project based learning as an effective teaching practice; for example, Brilliant labs, a key partner in education, uses this approach in the creation of technology products.
- **Student engagement practices:** There are experiences that contribute to engagement and increase relatedness, autonomy, and need for all humans to feel competent. For example, some schools have student-teacher conferences rather than traditional exams. At these conferences, students present what they think they should get for a grade and show examples of their work that provide evidence they have met course objectives. Another example is when schools place students in leadership positions in which they run school assemblies and events, and communicate to the broader community.
- **Collaborative inquiry:** This effective strategy is based on the belief that by working together in teams to address problems in teaching practice, we can identify key areas of focus, experiment with intervention to address the problem, and adjust our teaching based on the impact of these interventions. For example, schools in New Brunswick have professional learning communities (PLCs), which include the identification of what students need to learn, how teachers will address it, and what teachers will do if students are not learning.
- **Formative assessment:** This refers to the process of continuously assessing student learning and adjusting teaching strategies prior to administering final tests and grades. Formative assessment has been a province-wide instructional practice for several years, with a more recent attention at the high school level. PDCA projects (Plan, Do, Check, Act) include teams of teachers which examine a challenge in their classrooms, apply new approaches to address the need, measure the impact of these approaches, and adjust their teaching.
- **Prototype schools:** The Acadian and francophone community asked that schools change to better prepare our youth for the world of today and of tomorrow. Thus, the department has identified, in the



exit profile of a student in Acadian and Francophone schools, the necessary skills to be developed. In collaboration with three schools and school districts, work has begun to explore pedagogical practices that promote skills development in the classroom.

- **“Flip the system” approach:** This refers to the idea of changing education from the ground up, with teachers at the steering wheel of educational innovation (Evers and Kneyber, 2016).
- **Networking:** Expanding students’ organization has been working with private and public sector partners to promote, develop, and manage innovative and creative projects and programs for youth in New Brunswick. We manage a fund to develop the entrepreneurial culture in education in the province’s three francophone school districts and offer training and job placement to help at risk youth develop essential skills for employment and the acquisition of qualities that support learning.

We also administer and promote the New Brunswick French International Student Program. Since 2010, we have invited young people from around the world to attend a francophone school in our province, to live with a French-speaking family and to experience the unique culture of the Acadians and francophones in New Brunswick. This includes classroom experiences through strategic partnerships and virtual learning, for example:

- Co-op and Virtual Co-op - Provides province-wide access for students to participate in high-interest, high-demand areas for coop with industry mentors and local teacher facilitators;
- Partnerships with postsecondary institutions to allow students to take university courses, as well as collaboration with researchers;
- The IDEA Centre for Enterprise Education, a program for students to launch an authentic business venture.
- Partnerships to develop an entrepreneurial mindset, such as Powerplay and *Place aux compétences*. Powerplay is a program that promotes entrepreneurship by providing teachers and students a step-by-step approach in developing a product with a plan to market, test and sell their creation. *Place aux compétences (PAC)* is an organization working with private and public sector partners to promote, develop, and manage innovative and creative projects and programs for youth in New Brunswick. PAC manages a fund to develop the entrepreneurial culture in education in the province’s three francophone school districts and offer training and job placement to help at-risk youth develop essential skills for employment and the acquisition of qualities that support learning. PAC also administers and promotes the New Brunswick French International Student Program, which allows young people from around the world to attend a francophone school in our province, to live with a French-speaking family and to experience the unique culture of the Acadians.
- The Cyber Defence Hub, in partnership with New Brunswick Community College, offers students access to the highest quality cybersecurity software programs to enhance their skills. New Brunswick has also created curriculum for high school students across the province, and promotes student participation in national cybersecurity competitions.
- Partnership with iHub Learning Inc., which serves as an incubator of innovation, in collaboration with the four anglophone school districts. Academic and practical research initiatives are used to actively develop and continuously improve programs and professional learning opportunities offered and supported by iHub. The organization studies a variety of outcomes, including the development of core competencies.
- The John Hopkins Advanced Learners Program targets marginalized learners with high potential from excluded backgrounds including the urban poor, rural students, indigenous students, and newcomers.
- International partnerships provide opportunities for New Brunswick to sell educational products around the world, sharing our expertise and generating revenue.



Appendix B

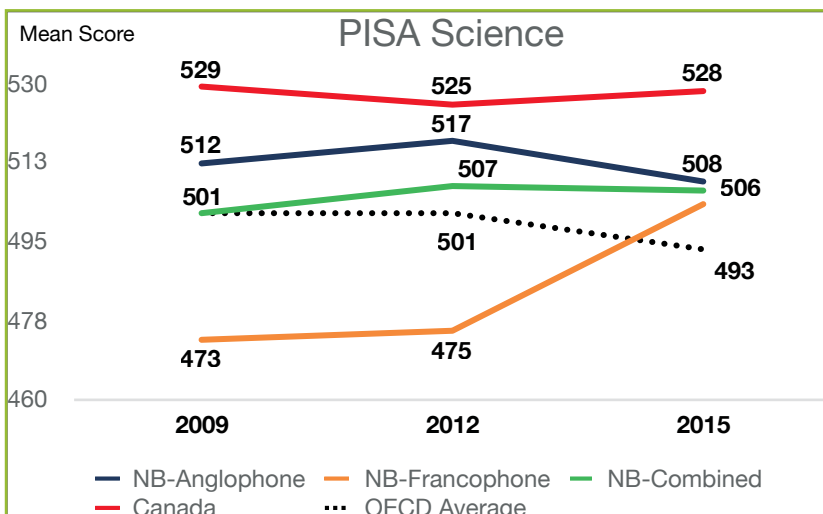
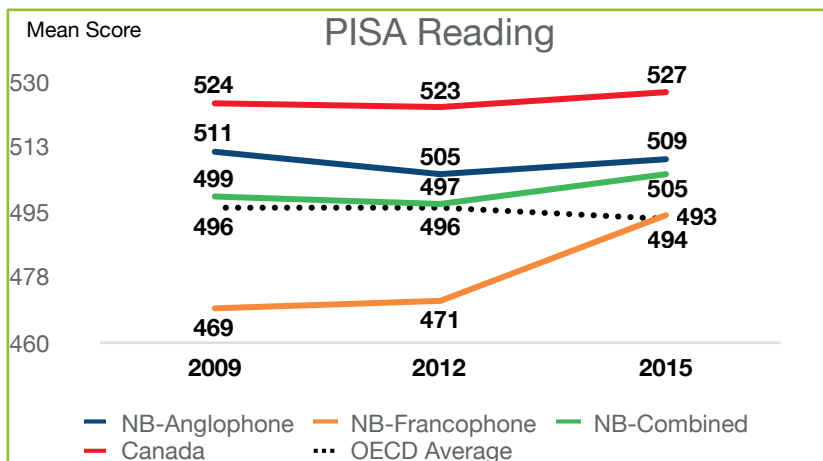
How New Brunswick fares on standardized assessments

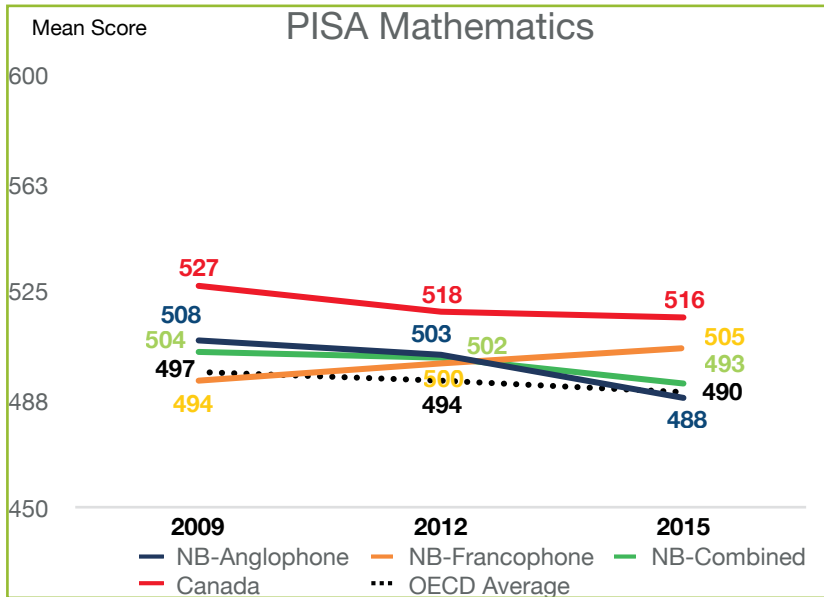
New Brunswick's International Standing (assessment of a sample of 15-year-olds) - Programme for International Student Assessment (PISA)

Results of the PISA 2015 *Reading* component indicate that Canada ranks second of the 72 participating jurisdictions, on par with Hong Kong-China, Finland, and Ireland. If New Brunswick were treated as a separate jurisdiction, it would rank in seventh place, along with 21 other jurisdictions whose results were not statistically different from New Brunswick's. Canadian results have not changed substantially over the past three assessments. New Brunswick made slight gains since the previous assessment.

PISA 2015 *Mathematics* results indicate that Canada ranks seventh, along with Korea, Switzerland, Estonia, the Netherlands, Denmark, and Finland. If New Brunswick were treated as a separate jurisdiction, it would be in 19th place along with 16 other jurisdictions. Results for Canada have decreased over the past three assessments. New Brunswick results decreased slightly since the previous assessment.

PISA 2015 *Science* results indicate that Canada ranks fourth along with Chinese Taipei, Finland, Macao-China, Vietnam, Hong Kong-China, and BSJG-China. If New Brunswick were treated as a separate jurisdiction, it would rank 10th along with 16 other jurisdictions. Results for Canada and New Brunswick have been stable.





New Brunswick's National Standing- Pan-Canadian Assessment Program (PCAP) 2016 (assessment of a sample of Grade 8 students)

As referred to earlier in this document, New Brunswick's PCAP results demonstrate improvement, however, we still lag behind a number of Canadian provinces. We are committed to accelerating this improvement on future assessments.

NEW BRUNSWICK PCAP OVERALL RESULTS	
READING ACHIEVEMENT - GRADE 8	
Percent of NB students successful	82% successful
Percent of Canadian students successful	88% successful
NB's ranking against other provinces	Tied with Saskatchewan, Manitoba and Newfoundland & Labrador for 7th in Canada ahead of no other provinces
Change in NB's reading score over time	2010 score = 479 2013 score = 471 2016 score = 489



MATHEMATICS ACHIEVEMENT - GRADE 8	
Percent of NB students successful	Data not available
Percent of Canadian students successful	Data not available
NB's ranking against other provinces	Tied with British Columbia, Prince Edward Island and Nova Scotia for 4th in Canada ahead of: Saskatchewan Manitoba Newfoundland & Labrador
Change in NB's mathematics score over time	2010 score = 478 2013 score = 480 2016 score = 498

SCIENCE ACHIEVEMENT - GRADE 8	
Percent of NB students successful	Data not available
Percent of Canadian students successful	Data not available
NB's ranking against other provinces	Tied with British Columbia, Quebec, Nova Scotia and Newfoundland & Labrador for 4th in Canada ahead of: Saskatchewan Manitoba
Change in NB's science score over time	2013 score = 469 2016 score = 500

NB Anglophone 2016 PCAP results

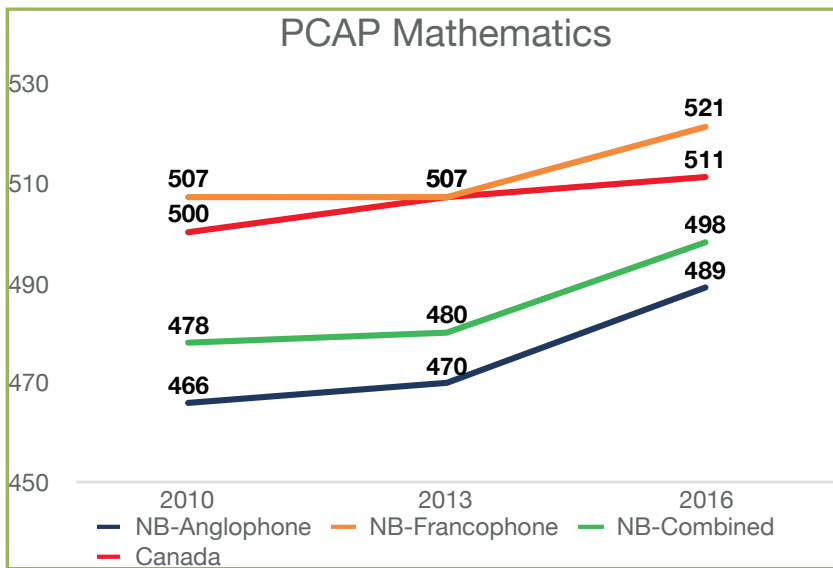
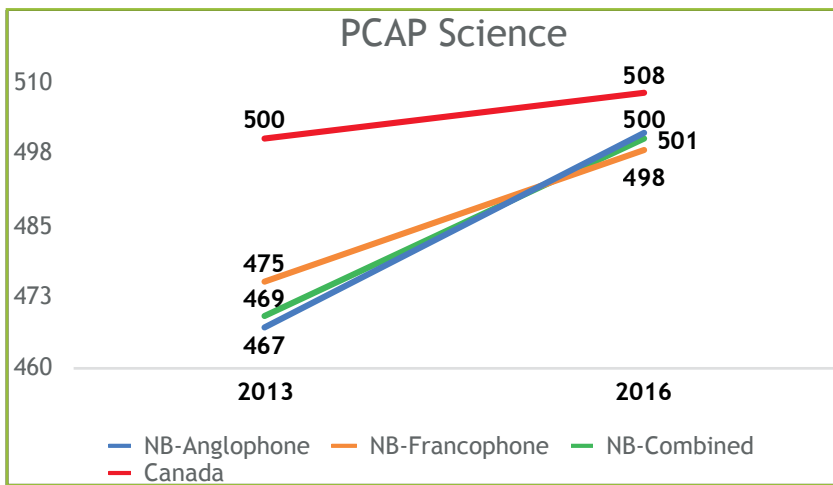
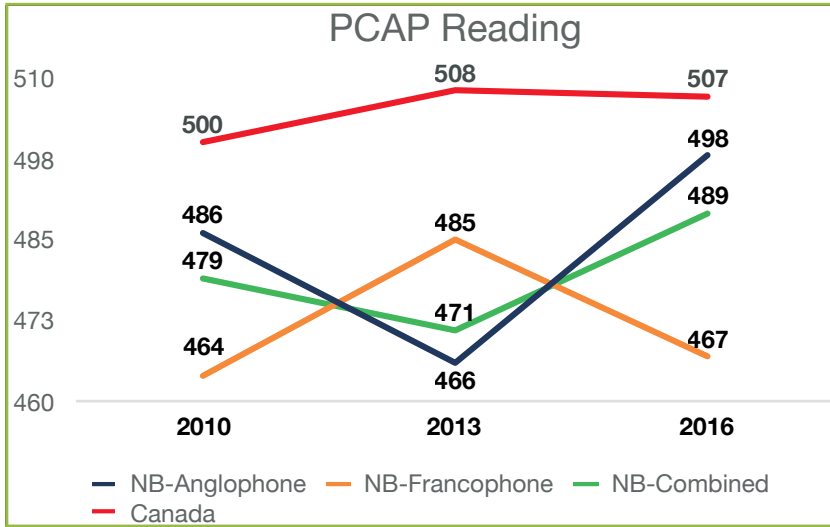
The most recent PCAP results show that in Reading, the New Brunswick anglophone sector score fluctuates. In 2016 it was below the Canadian average but higher than in any year since measurements began. In Mathematics, the score has steadily increased. In 2016 it remained below the Canadian average but higher than in all previous years. Finally, in Science, the score increased significantly since 2013, and in 2016 reached the Canadian average.

NB Francophone 2016 PCAP results

According to the most recent PCAP 2016, New Brunswick's Francophone Grade 8 students' achievements have improved significantly in both mathematics and science. In mathematics, out of 18 jurisdictions, only one jurisdiction (Francophone Québec) scored significantly higher than the Francophone NB students. As for science, only, four out of the 18 jurisdictions performed significantly better. The results in reading for 2016 are the same as six years prior and remain significantly below the Canadian average but comparable to most other minorities throughout Canada.

For more detailed information, please consult the [2016 PCAP Report](#).





New Brunswick Provincial Evaluation Results

Anglophone sector

Success Rate (%) - Evolution Over Time									
Assessment	Grade	12-13	13-14	14-15	15-16	16-17	17-18	Target	
LITERACY	Reading	2	80	78	77	74	76	71	90
	Reading	4	UNDER DEVELOPMENT						
	Reading	6	-	-	-	54	62	61	90
	Reading	9	78	80	78	80	81	81	90
	French Reading (Early Immersion Program)	10	-	-	-	-	-	70	90
	French Reading (Late Immersion Program)	10	-	-	-	-	-	60	90
NUMERACY - MATHEMATICS	Mathematics	4	UNDER DEVELOPMENT						
	Mathematics	6	-	-	-	20	38	37	90
	Mathematics	10	-	-	-	-	-	65	90
SCIENCE		4	UNDER DEVELOPMENT						
		6	-	-	-	26	32	35	90
		10	-	-	-	-	-	65	90

Reviewing the assessment process is a normal and expected part of any education system. The anglophone provincial assessment program was redesigned between 2013 and 2018. Since most of the assessments are new, there is little comparative data. Prior to the 2018-19 administration, the Grade 6 assessment underwent a thorough analysis to ensure appropriateness for students, alignment with the overall assessment program and national and international assessments. Results will be available shortly.

The Grade 2 standardized reading assessment was discontinued in 2018-19. Consultation has begun regarding the development of a more authentic, age-appropriate assessment process for Grade 2 literacy, aligning with best practices and practices in other provinces. Standardized assessments in Canada begin in Grade 3 in four provinces, Grade 4 in four others, and Grade 6 in Alberta.

The Grade 2 assessment process will be based on ongoing evaluation at the classroom level. The goal is to develop a reporting process that improves classroom-level assessment practices while providing data about system performance. This model employs the professional expertise of educators who know the most about their students. At the same time, it will increase confidence that assessment practices are used effectively as tools for improvement, and that students in all classrooms are assured the same advantages.



The shift in early years assessment is aligned with the department's focus on personalized learning, ensuring a solid foundation of basic skills, and working towards global competencies. Accomplishing this will require a combination of new pedagogies, teaching and assessment practices, student learning pathways, and engagement with parents and community stakeholders. The work on the Grade 2 assessment process will support this overarching goal in the following ways:

- Support best practices for assessment
- Provide teachers with access to formative and summative data, as well as training to enhance their professional practice
- Support parents in understanding assessment in their child's classroom
- Motivate students to self-assess and set learning goals
- Identify and address achievement gaps across the system
- Increase stakeholder confidence in the public education system

The 2019-20 school year will be a research and pilot year. As with all our assessment pilots, it will be an evaluation of the assessment itself. System achievement results are anticipated in the fall of 2021. The Grade 4 standardized reading assessment will continue as before.

Standardized assessment results for the anglophone sector for 2017-2018 can be found on the [Assessment and Evaluation](#) page of the Department's website.

New Brunswick's Francophone Provincial Assessment Program

Provincial assessments rely on a partnership between school personnel, principals, school districts and the department. These evaluations provide parents and schools personnel with reliable data on the performance of students at critical points in their education. Provincial assessment results allow us to measure the effectiveness of initiatives put in place in schools, at the district level and in the department. This information guides interventions and contributes to the improvement of all students.



Provincial Assessment results - Francophone sector 2013-2018

Taux de réussite (%) - Évolution dans le temps									
Évaluations		Année	12-13	13-14	14-15	15-16	16-17	17-18	Cible
LITTÉRATIE / FRANÇAIS	Lecture silencieuse	2e	77	76	75	77	-	-	-
	Lecture à haute voix	2e	77	75	75	79	77	75	90
	Lecture	3e	-	-	-	-	-	63	90
	Lecture	4e	67	68	63	56	63	63	90
	Lecture et écriture	8e	67	68	71	71	71	-	-
	Lecture et écriture (régulier)	11e	62	60	61	60	56	55	80
NUMÉRATIE / MATHÉMATIQUES	Mathématiques	3e	76	78	80	81	82	82	85
	Mathématiques	6e	-	-	-	-	63	61	85
	Mathématiques	8e	58	67	70	75	75	74	85
	Math (Parcours 10A)	10e	-	53	46	49	54	52	80
	Math (Parcours 10BC)	10e	-	61	58	64	71	76	80
Sciences et technologies	8e	69	68	72	74	77	75	85	

Over the past five years, there has been significant improvements in student achievement, both in mathematics and science and technology. For reading, the results have remained fairly consistent. These results confirm the importance of identifying improving literacy skills as a priority.

For more information, please refer to the [Bulletins des écoles et des districts](#).



A note to teachers

First, thank you.

It's written in this paper but I want to repeat it: Teachers are the most important people in New Brunswick.

We need you. We need you to feel supported in your work. Challenged but not overwhelmed.

You need support from your government in doing a job that is getting more and more difficult as society changes around us.

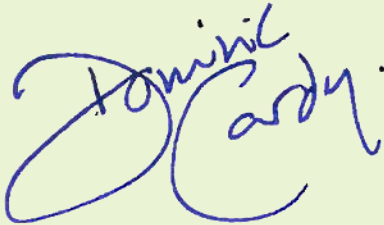
These reforms are about you.

Let me know what you think. Write to me at dominic.cardy@gnb.ca or call me at 506-238-5550.

Have we missed something important? Is there a consequence we haven't thought of? Do you want to help with in developing new ideas to improve our schools? Let me know!

Government will be launching an initiative entitled Teach NB to talk about the importance of education and the central role you play as teachers within our system. The intent is to share best practices and celebrate the many achievements of professionals in the classroom. I will be reaching out to ask for your ideas, to draw on your experiences, and to ask for your guidance as we work together, as a province, to build the world's best education system.

Let's get to work!



Dominic Cardy,
Minister of Education and Early Childhood Development

