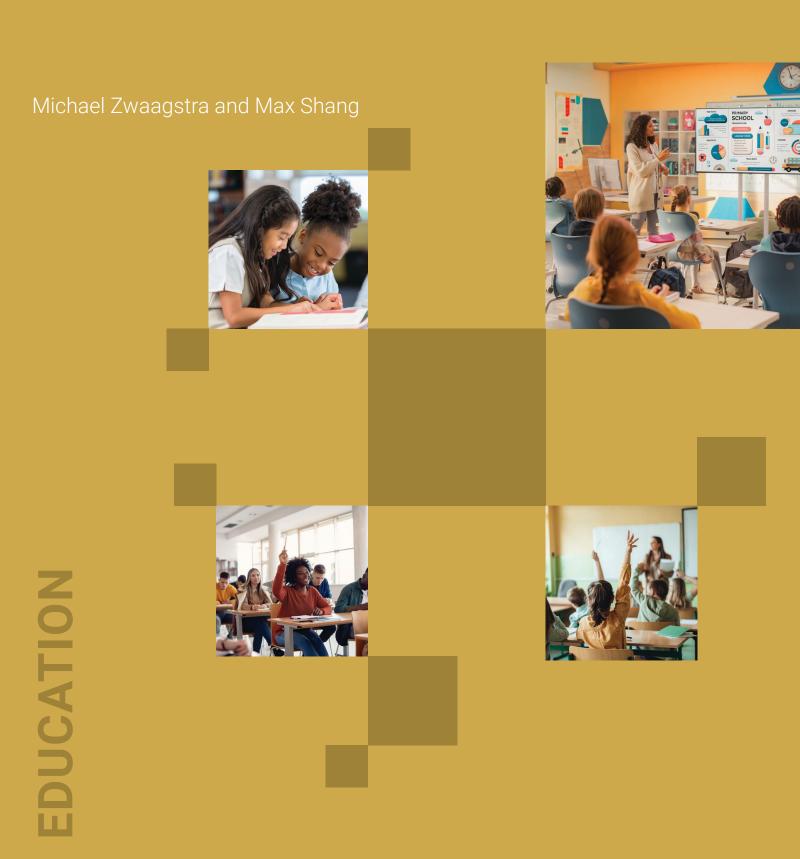
# K-12 Education Reform in British Columbia





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### **Executive Summary**

- In the 2024/25 fiscal year, British Columbia plans to spend \$9.6 billion on K-12 education.
- BC's per-student spending in government schools grew 6.7 percent between 2012/13 to 2021/22, after adjusting for the effects of inflation.
- On the Programme for International Student Assessment (PISA), BC has experienced a decline in its reading, math, and science scores over the last twenty years.
- BC needs to reverse changes made to the provincial curriculum. This new curriculum has been a disaster, and it should never have been imposed on schools.
- In addition, BC should restore the previous course-based standardized exams that had been in place in grades 10 and 12. It must also include performance from such testing as part of Grade 12 grades and require such testing as a condition of graduation.
- BC would also be wise to follow the example of Alberta and pass legislation that enables parents and other community members to establish charter schools—publicly funded non-religious schools that do not fall under the authority of the local school board.
- An innovation in Australia for varying the value of the government grant for independent schools is worth noting and perhaps even extending to ensure that independent school education is available to families at all income levels.
- Given the current mix of comparatively high spending with declining academic results, British Columbia should review a broad range of education reforms to achieve better value for money and improved results for both students and taxpayers.

### Introduction<sup>1</sup>

Primary and secondary education, hereafter referred to as K-12 education, is one of the most important services supported by government. It offers the next generation the opportunity to acquire the knowledge, experience, and skills necessary to be successful. It is also one of the largest areas of provincial spending. In the 2024/25 fiscal year, British Columbia plans to spend \$9.6 billion on K-12 education (British Columbia Ministry of Finance, 2024). This makes K-12 education the second largest area of program spending for the government of British Columbia, second only to health care.

Given the importance and cost of educational services, ensuring that families have access to world-class education in a fiscally responsible manner is one of the most important ongoing public policy challenges facing British Columbians.

This study is designed to first provide interested British Columbians with some background on the province's K-12 education system, including its delivery structure, costs, and some select performance data. The study then summarizes a host of potential reforms for both the government school system as well as for independent schools.<sup>2</sup> It concludes with a brief overview and summary of the reforms presented.

<sup>1</sup> This analysis of British Columbia's K-12 education system borrows heavily from Jason Clemens, Joel Emes, and Angela MacLeod (2018). This paper also borrows from Michael Zwaagstra (2024) and from Paige MacPherson and Joel Emes (2024).

<sup>2</sup> This paper does not include potential reforms to the province's homeschooling sector, which continues to grow and represents an important part of the overall education system in the province. For more information on homeschooling, please see Deani Neven Van Pelt (2015).

### **1 Background on British Columbia's K-12 Education System**

Prior to examining the overall spending and some performance measures of British Columbia's K-12 education system, this section reviews some of the basics of how K-12 education is delivered in the province. Like all Canadian provinces, British Columbia's K-12 education system is a mix of government and independent schools. The public or government system of schools dominates overall enrolment. As depicted in table 1, in 2023/24, the most recent year of comparable data, 86.4 percent of British Columbia students were enrolled in a government school (British Columbia Ministry of Education, 2024a, 2024b). Interestingly, British Columbia's government school enrolment as a proportion of total enrolment ranked lowest in the country (Zwaagstra, Emes, Ryan, and Palacios, 2023).

	Enrolment	Share of total
Total	700,755	
Public School	604,728	86.3%
Public Francophone	52,514	7.5%
Public Anglophone	552,214	78.8%
Independent School	91,694	13.1%
Homeschool	4,333	0.6%

#### Table 1: BC Elementary and Secondary School Enrolment, 2023/24

Source: British Columbia Ministry of Education, 2024a, 2024b.

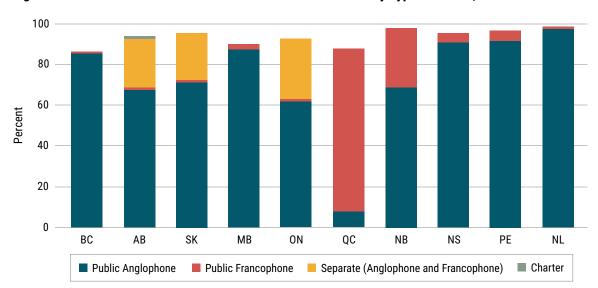


Figure 1: Public School Enrolment as a Share of Total Enrolment by Type of School, 2019/20

Source: Zwaagstra, Emes, Ryan, and Palacios, 2023.

The government school sector in British Columbia is composed of the following types of schools: 78.8 percent of students are enrolled in an Anglophone government school and 7.5 percent in a Francophone government school (British Columbia Ministry of Education, 2024a). Unlike the neighbouring province of Alberta, British Columbia does not have a separate Catholic education system within the government school system, nor does it provide charter schools.<sup>3</sup>

The remaining students are enrolled in independent schools or educated at home (home schooling). Independent schools exist wholly outside of the public system and are privately owned and operated. Often, they have a particular educational focus such as alternative pedagogies (Montessori and Waldorf), religious, or academic orientation—with a heavy focus, for instance, on science, technology, engineering and mathematics (STEM). In 2023/24, the latest available data comparable across provinces, British Columbia had 91,694 students enrolled in independent schools, representing 13.1 percent of all enrolment (British Columbia Ministry of Education 2024b).

British Columbia is one of five Canadian provinces that provide funding to independent schools. Independent schools in British Columbia are classified into one of four categories: Group 1, Group 2, Group 3, and Group 4. Group 1 independent schools are eligible for 50 percent of the per student funding allocated to government public schools while Group 2 independent schools can receive up to 35 percent of this funding. Group 3 and Group 4 independent schools are not eligible for operational funding. No independent schools receive capital funding from the provincial government (Van Pelt, Hasan, and Allison, 2017). Because independent schools cost the provincial government less money per student than government public schools, independent schools in British Columbia save taxpayers money (MacPherson and Shang, 2024).

It is important to note that British Columbia has the highest proportion of students enrolled in independent schools in the country (figure 2). The high level of independent school enrolment in British Columbia is likely a combination of factors, including the lack of provision of Catholic education and other religious focused education with the government school system and the absence of charter schools as an option for parents (Zwaagstra, 2023).

<sup>3</sup> For more information on Alberta's charter schools and charter schools in general, please see Paige T. MacPherson (2018).

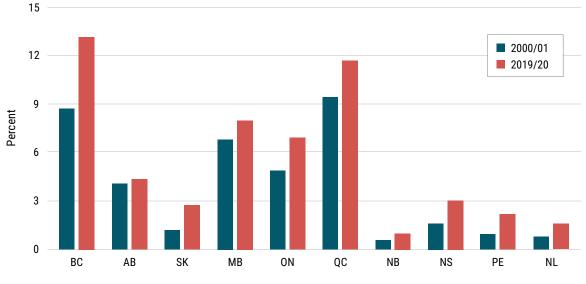


Figure 2: Independent School Enrolment as a Share of Total Enrolment, 2000/01 and 2019/20

Source: Zwaagstra, Emes, Ryan, and Palacios, 2023.

The percentage of students being homeschooled in British Columbia remains relatively low at only 0.6 percent over the last twenty years. In contrast, 1.9 percent of students neighbouring Alberta are being homeschooled (Zwaagstra, Emes, Ryan, and Palacios, 2023).

British Columbia is one of the seven provinces that has experienced growth in its overall K-12 enrolment over the last decade. Figure 3 illustrates the change in student enrolments in each of the provinces between 2012/13–2021/22, the latest year of available comparable data. British Columbia's 2.5 percent growth in student enrolment was far outpaced by the 14.2 percent growth in Alberta and the 8.4 percent growth in Saskatchewan. Quebec and Prince Edward Island also had higher growth at 5.9 and 3.2 percent, respectively. Nova Scotia and Manitoba grew at a slightly slower pace than British Columbia, while Newfoundland & Labrador, New Brunswick, and Ontario experienced a decline in overall K-12 enrolment ranging from -0.1 percent in Ontario to -5.8 percent in Newfoundland & Labrador.

The changes to student enrolment are critical to an accurate understanding of K-12 education spending over the last decade. Figure 4 shows the per-student spending adjusted for inflation, for each of the provinces as well as the Canadian average from 2012/13 to 2021/22, the latest year of comparable data. British Columbia's per-student spending in government schools grew 6.7 percent between 2012/13 to 2021/22, after adjusting for the effects of inflation. Per-student spending in British Columbia is below the national

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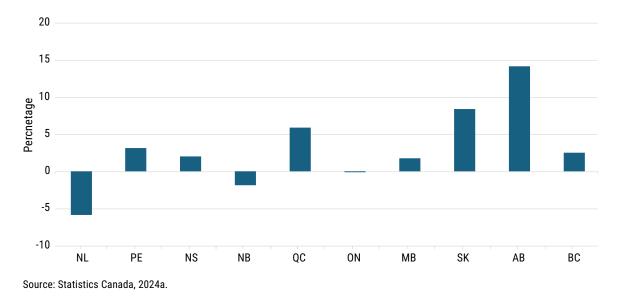


Figure 3: Change in Student Enrolment in Government Schools, 2012/13-2021/22

average: \$14,767 compared to \$15,771. However, British Columbia's per-student spending is markedly above (10.0 percent) Alberta's comparable spending: \$14,767 versus \$13,421. Alberta is an important comparator to British Columbia for a number of reasons, including its markedly different approach to K-12 curriculum delivery, its arguably stronger commitment to school choice, its lower costs, and generally better results.

Of course, higher per-student spending in British Columbia is not necessarily problematic if the higher spending is accompanied by better results and performance. The evidence, however, does not suggest that the higher spending in British Columbia is resulting in

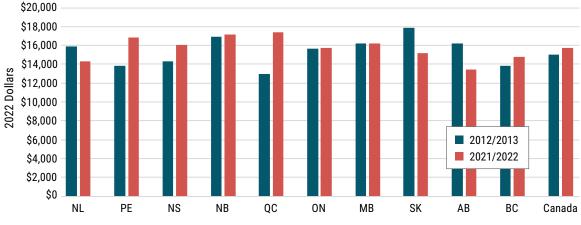


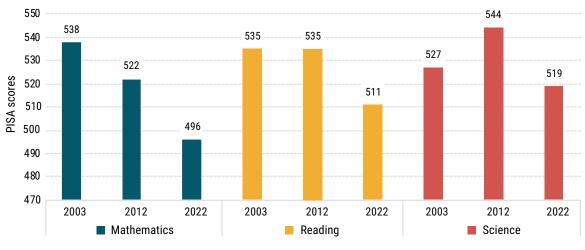
Figure 4: Spending per Student in Government Schools, Inflation Adjusted, 2012/3 and 2021/22

Source: Statistics Canada, 2024a, 2024b, 2024c.

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better performance. In fact, Alberta—despite per-student spending 10 percent lower than British Columbia's—performs approximately as well or better than British Columbia on many measures of student academic achievement (Elez et al, 2023).

The Programme for International Student Assessment, or PISA, is a recognized standard for internationally comparable testing. It is administered by the Organisation for Economic Co-operation and Development (OECD). Figure 5 illustrates the PISA test results for British Columbia from the first comparable year of data to the most current year available, 2022, across all three areas of testing: reading, science, and mathematics. British Columbia has experienced a decline in its provincial score in all three areas between the first year of comparable data—2000 for reading, 2006 for science, and 2003 for mathematics—and the most recent data, 2022. It is important to note, however, that while the province experienced a decline in all three areas, the declines in mathematics and reading were the largest.

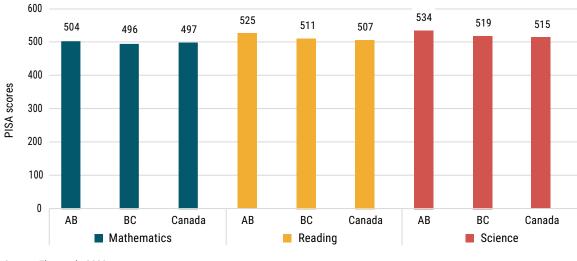


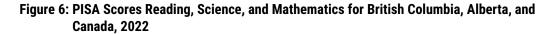
#### Figure 5: PISA Scores for BC, Selected Years

Source: Elez et al., 2023.

The concerns regarding declining PISA scores for British Columbia are heightened when the province is compared to both neighbouring Alberta and the Canadian average based on the 2022 results.<sup>4</sup> Figure 6 illustrates the PISA results for 2022 across all three test areas for British Columbia, Alberta, and the Canadian average. Alberta outperforms British Columbia in reading, mathematics, and science. In addition, while British Columbia is slightly above the national average in reading and science, it is slightly below the average in mathematics (although this difference was not statistically significant).

<sup>4</sup> For more information on Canada's PISA results in 2022, see Elez, et al. (2023).





Even more concerning is the fact that British Columbia declined by 42 points from 2003 to 2022. To put this in perspective, PISA considers 20 points to be the approximate equivalent of one grade level. In other words, BC students are, on average, two years behind in their math skills than they were in 2003.

The decline in mathematics scores is to some extent a pan-Canadian problem. Between 2003 and 2022, all 10 provinces experienced a statistically significant decline in math scores. The decline in British Columbia's scores is consistent with what happened in other provinces over the same twenty-year period.

Currently in British Columbia high schools the province conducts student assessments in literacy and numeracy in Grade 10 and literacy in Grade 12. Previously, British Columbia used course knowledge-based exams that were marked with a clear percentage grade by which to fairly and objectively measure students in Grades 10 and 12. These exams were mandatory for course completion—and the completion of those courses was required for graduation; students' exam grades contributed to their final course marks. Starting in 2017/18, the shift to student assessments, which no longer employ broadly understandable percentage grades but rather are evaluated using terms like "emerging" or "proficient," began to make British Columbia's province-wide assessment program less clear and less meaningful for students and schools (MacPherson and Emes, 2024).

In the context of increasing per-student spending coupled with the observed decline in PISA test results presented earlier, there are some concerning trends that emerge from

Source: Elez et al., 2023.

the latest province-wide assessment results. Comparing the 2015/16 English Grade 10 exam results with the 2021/22 Grade 10 literacy assessment results shows that proficiency is 4.1 percentage points lower (figure 7). This is not a comparison of exactly the same tests because of the provincial government shift from Grade 10 math and English exams to Grade 10 numeracy and literacy assessments. However, both are intended to demonstrate how academically proficient Grade 10 students are in these core subject areas. In 2021/22, 80% of Grade 12 students in British Columbia were considered to be proficient in literacy, which is higher than the 2015/16 proficiency. Yet on the Grade 10 numeracy assessment, proficiency was 14.2 percentage points lower in 2021/22 than on the 2015/16 Grade 10 math exam. In 2021/22, Grade 10 proficiency in numeracy in BC was 48.2 percent. In other words, in 2015/16, six in 10 Grade 10 students in British Columbia were proficient in math, but by 2021/22, less than half of Grade 10 students in the province were considered proficient at working with numbers.

What seems fairly clear from the data presented thus far is that British Columbia's student performance on tests has not concurrently improved as per-student spending has increased. Indeed, in several areas, particularly with respect to mathematics and reading,

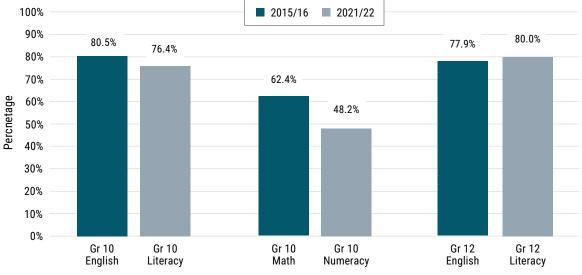


Figure 7: BC High School Student Proficiency on 2015/16 Exams vs. 2021/22 Assessments, All Students

Notes:

- 1) Proficiency measures are not directly comparable between the years because the 2015/16 exams and 2021/22 assessments use different evaluation criteria. We have made them as comparable as possible.
- 2015/16 participation rates are 100% because if a student didn't write the exam they didn't receive credit for the course and the marks were not recorded in the ministry's tracking system.
- 3) In calculating assessment participation we used all students for number of writers and enrolments in "Standard" schools.

Source: MacPherson and Emes, 2024.

student performance has declined, which should raise serious concerns for parents, students, and policymakers.

In conclusion, the gap in per-student spending between British Columbia and Alberta does not seem connected with improved results either in absolute terms or when compared to results on international and provincially administered tests. In plain language, the increased spending without commensurate performance improvement should encourage British Columbians to demand reform options that can improve student outcomes, reduce spending (without compromising achievement), or perhaps both.

### 2 Improving British Columbia's Public School System

As discussed in section one, the overwhelming majority of British Columbia students attend some type of government school, whether it is a standard Anglophone government school or a Francophone government school. Given that a large majority of British Columbian students (as in all other provinces) attend government schools, it is critically important that these schools deliver high-quality education for students and their families. This section of the paper examines policy reforms within the government school system. Specifically, this section considers four reforms—improvements to curriculum, restoration of standardized testing, charter school legislation, and protecting open enrolment.

### Improvements to curriculum

The K-12 curriculum in British Columbia underwent a complete overhaul beginning in 2016. In short, the new curriculum places less emphasis on content knowledge and focuses instead on the so-called process of learning. A promotional brochure from the BC government even goes as far as stating that its redesigned curriculum places "more emphasis on the deeper understanding of concepts and the application of processes than on the memorization of isolated facts and information" (British Columbia Ministry of Education, n.d.). At root, this is a false dichotomy since there is no reason to assume that memorizing specific facts precludes developing a deeper understanding of any topic.

One example of the problematic aspect of the new curriculum is in how it covers Canadian history. The British Columbia curriculum focuses on "big ideas" that are, in fact, so vague as to be meaningless. For example, a big idea from Grade 2 is that "Canada is made up of many diverse regions and communities" while a big idea from Grade 9 is that "Collective identity is constructed and can change over time" (British Columbia Ministry of Education, 2016b: 9, 43). These vacuous statements are so open to interpretation that they provide no guidance to teachers who genuinely want to ensure that their students are learning what they need to know. The lack of specific content in the curriculum guides is a clear sign that teachers are on their own when planning their lessons. Thus, students with different teachers will get quite different material.

At the K-8 levels, the only grades where students will have an opportunity to actually learn some Canadian history are Grades 4 and 5. The Grade 4 curriculum states that

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students will learn about early contact between Europeans and Canada's First Peoples, the fur trade, and the factors behind British Columbia's entry into Confederation. In Grade 5, students are to learn about the development and evolution of Canadian identity, the changing nature of Canadian immigration policy, and past discriminatory government policies and actions. Interestingly, the only outcome with specific examples provided is where students are required to learn about past discrimination. The examples given are residential schools for Indigenous students, the Chinese Head Tax, the Komagata Maru Incident, and the internment of various people. While these are important topics, it is quite limited in scope if these are the only Canadian history details required for students to graduate.

Unfortunately, the high school curriculum guides are not any better. Interestingly, Grade 9 students are expected to learn about "discriminatory policies and injustices in Canada and in the world." Surprisingly, the same examples are provided as in the Grade 5 curriculum (British Columbia Ministry of Education, 2016b: 47). Apparently, the British Columbia government wants to make sure students learn about Canada's discriminatory past but does not have a similar zeal for ensuring that students learn about more positive aspects in Canada's evolution as a country (e.g., the Battle of Vimy Ridge, the Statute of Westminster, the 1960 Bill of Rights, etc.).

As for the Grade 10 social studies curriculum (British Columbia Ministry of Education, 2018), the learning outcomes are equally vague, with one exception. The Grade 10 curriculum requires students to learn about "discriminatory policies and injustice in Canada" with the exact same examples as appeared in the Grade 9 curriculum (British Columbia Ministry of Education, 2018: 5). One can only wonder why anyone would think this content must be repeated at least three times throughout a student's time in school while omitting most other details about our country's history.

Grades 11 and 12 students only need to complete one social studies course, and it is up to them to decide which course they will take. Unfortunately, none of the high school courses focus exclusively on Canadian history. Instead, students can choose from a smorgasbord such as 20th Century World History, Comparative World Religions, Contemporary Indigenous Studies, Genocide Studies, and Social Justice. Of course, none of these courses are likely to give high school students much of a grounding in Canadian history, which is necessary for preparing them for citizenship in our country.

In short, the new social studies curriculum in British Columbia makes it unlikely that students will learn much about the history of Canada. Focusing on big picture ideas

without filling in the necessary details (except for examples of discrimination) is a recipe for an inadequate education for students. An alternative would be to look at the example of organizations such as the Core Knowledge Foundation. The Core Knowledge Foundation, set up in 1986 by E.D. Hirsch, Jr., a well-known education writer, publishes excellent curriculum guides in a variety of subjects, including history (Core Knowledge Foundation, n.d.). Unlike what we see in British Columbia, the Core Knowledge curriculum guides are detailed and specific, replete with historically significant names, places, and events. While the Core Knowledge curriculum guides that take a similar content-rich approach.

Another important reason for providing more content in the British Columbia curriculum is to help students improve their reading comprehension skills. There is strong research evidence of a causal relationship between background knowledge and reading comprehension (Hirsch, 2016; Wexler, 2019; Smith, Snow, Serry, and Hammond, 2021). Simply put, the more that students know about a topic in a book or an article, the more likely they are to be able to understand what they are reading. It is important for students to gain a solid grasp of Canadian history so that they can understand modern-day articles and books that assume this background knowledge. British Columbia students deserve better than to have substandard curriculum guides imposed upon them.

British Columbia's questionable new curriculum is a prime example of what can happen when provinces mandate one curriculum on all schools that receive government funding. There is no justification for putting schools in this predicament. Provinces should mandate specific academic standards and learning outcomes (e.g., basic math skills, reading, writing, scientific methods, key historical events) but let schools decide for themselves how to get there. If, for example, a school, whether public or independent, wishes to use an adapted version of the highly successful Core Knowledge curriculum rather than the current provincial curriculum, it should be free to do so as long as it can demonstrate that students are learning the necessary academic skills.

#### Restoration of standardized testing

As noted earlier, research is clear that there is a strong correlation between background knowledge and reading comprehension. Give students an article to read on a topic they know nothing about and they will struggle to understand it. But they will have little difficulty reading an article or book when they possess background knowledge about the topic.

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The more they already know, the more effectively they can read and understand. Reading comprehension significantly, but not entirely, depends on background knowledge. Thus, it is important to immerse students in a content-rich learning environment. Not only does the curriculum need to have a strong knowledge focus, but there must also be an accountability mechanism in place to ensure that teachers cover the full curriculum.

Unfortunately, standardized testing in Canada is moving in the wrong direction on this issue. Instead of measuring specific knowledge outcomes, most of these tests now focus on generic literacy and numeracy skills. This is consistent with a general shift among many provinces away from knowledge in their curriculum guides (Zwaagstra, 2022). Nowhere is this shift more apparent than in the province of British Columbia.

This explains why, as noted earlier, British Columbia has abolished its provincial content-based exams and replaced them with literacy and numeracy assessments that focus on general concepts rather than on specific content (Macpherson and Emes, 2024). The problem with this approach is it assumes that literacy and numeracy are easily transferable skills when the reality is that these skills are heavily dependant on content. As Hattie and Yates (2014) explain, memorization of basic facts still plays an important role in the learning process. That is because committing basic facts to memory and wide acquaintance with stories and figures (whether actual, literary, or mythological) helps reduce cognitive load and makes it possible for students to tackle higher order concepts. This is why students who have not memorized the times table typically struggle when trying to solve algebraic equations. It is also why students who do not know basic facts about the Confederation of 1867 (such as the names of the key people and colonies involved) are unlikely to do any critical thinking about the factors that led to this important event. Unfortunately, because British Columbia's provincial assessments no longer measure content knowledge, there is little incentive for teachers to help students acquire the background knowledge they need to be successful.

The British Columbia government should restore the course-based exams that had been in place in grades 10 and 12. Immediately after the new student assessments were implemented, participation rates declined compared to those recorded for the previously required course-based exams—despite the fact that the student assessments are "mandatory" for graduation (MacPherson and Emes, 2024). Despite their flaws, the student assessments revealed declining student performance. The decline in participation in student assessments marks a downturn in the quality of British Columbia's student performance data, and therefore in the public understanding of how British Columbia students are doing academically. The drop in student performance reveals a concerning trend. The declining academic success of British Columbia high school students suggests that fair, objective, and accurate student testing may be more necessary than ever if schools are to help British Columbia students improve. Thus, not only should British Columbia restore objective, fact-based testing as was the norm prior to the current reforms, but it should also include performance from such testing as part of Grade 12 grades and require such testing as a condition of graduation. This would go a long way to ensure that schools are being held accountable for meeting essential academic standards.

#### **Charter school legislation**

Unlike their counterparts in Alberta, British Columbia parents, educators and other educational reformers do not have the option of setting up charter schools. Alberta is the only province that allows charter schools. Charter schools inject greater choice for parents within the government system.<sup>5</sup> Charter schools in Alberta are "autonomous non-profit public schools that provide basic education in a different or enhanced way [and] follow Alberta Education's Program of Studies" (Alberta Education, n.d.). More specifically, while charter schools are independently operated and exempt from many of the inhibiting regulations that impede innovation in traditional government schools, they are nonetheless part of the government school system. They are not allowed to be affiliated with a particular religion and are not permitted to charge tuition.

Legislation to allow charter schools was enacted in Alberta in 1994, and initially capped the number of charters at 15, although the cap was lifted in 2019. There are currently 22 charter schools in the province that operate on a total of 36 campuses. The majority of these schools are located in Calgary and Edmonton with a few schools in smaller centres. Even though there are a relatively small number of charter schools in the province compared to other types of schools, they have experienced a significant growth in enrolment. Between 2000/01 and 2019/20, enrolment at charter schools increased from 2,558 students to 9,918, an increase of 287.7 percent. When measured as a share of total enrolment, charter schools have increased from 0.4 to 1.4 percent over the same period

<sup>5</sup> For a succinct discussion of the broad benefits of school choice and competition within the public system, please see Cassandra M.D. Hart and David Figlio (2011). For a discussion of both the benefits and how to achieve more choice and competition within a government school system, see Derek J. Allison (2015).

(Zwaagstra, Emes, Ryan, and Palacios, 2023). Several charter schools have reported extensive wait lists, demonstrating that they are highly sought after by parents (Kavanagh, 2023).

Beyond the independence offered by charter schools, many parents seem to be motivated by their ability to improve student performance. For instance, a comprehensive analysis of charter schools in Alberta (MacPherson, 2018) found that they tended to outperform all other types of schools in Alberta as measured by performance on Grades 6 and 9 Provincial Achievement Tests (PATs). This is particularly impressive given that there are several charter schools that cater to students who have exceptional needs, such as English language learners or at-risk youth.

Indeed, a review of charter schools in the United States and Canada concluded that charter schools were particularly effective at improving student performance for students in "underserved" groups at traditional government schools, including students from poorer communities, ethnic minorities, and those entering school with lower educational levels (Bosetti, Brown, Hasan, and Van Pelt, 2015).

Finally, charter schools benefit teachers. By working in a charter school, teachers can expand their craft and have the freedom to explore new and innovative pedagogical techniques. And because charter school teachers in Alberta are not required to be members of the Alberta Teachers Association, they do not have to pay union dues or worry about strikes or lockouts. No doubt many British Columbia teachers would find a similar circumstance preferable.

The ability of charter schools to expand parental educational choice, increase school competition, increase teacher professionalism, foster innovation, and improve student performance, particularly for many at-risk student groups means that British Columbia should consider passing legislation to enable the creation of charter schools.

#### Protecting open enrolment

One study (Friesen, Harris, and Woodcock, 2015) analyzed the effect of open enrolment policies in British Columbia. In 2002, British Columbia implemented open enrolment throughout the province, which gave parents more freedom to opt out of their neighbourhood school in two ways. Prior to the reform, parents had to first seek permission from the principal of the school where their child was supposed to attend based on geography before they could request that their child be enrolled in an out-of-catchment school. Second, principals of the preferred school had the discretion to reject out-of-catchment requests even if they had space to accommodate the new student. The reforms enacted eliminated both the need to ask permission from the local principal and the discretion of the principal at the potential receiving school so long as space was deemed available.

Empirical evidence analyzed by Friesen and her colleagues indicates that academic performance has improved since open enrolment was introduced. The study analyzes the Foundation Skills Assessment (FSA) scores of Grade 4 students in the province's Lower Mainland and found that, for a student scoring at the 50th percentile in an average neighbourhood, open enrolment led to a 1.2 point increase and a 1.0 point increase in percentile ranking for reading and numeracy scores, respectively. Amongst those residing in high-density neighbourhoods, open enrolment contributed to a 3.0 percentile point increase in reading and a 2.4 percentile point increase in numeracy scores (Friesen, Harris, and Woodcock, 2015). More importantly, the increase in test scores was predominantly a product of increased school competition rather than a portion of students having access to better schools. The higher positive impact for students in densely populated areas is suggestive that in order for the policy to be effective, realistic alternatives must exist in a reasonable geographic boundary.

Thus, it is imperative that British Columbia maintain its current policy of open enrolment. For parents who choose to keep their children in the government public school system, open enrolment provides them with at least some ability to find a school that works best for their children. While rigid school catchment areas might benefit school board administrators, they do not work in the best interests of parents and students.

### **3 Unleashing Innovation in Independent Schools**

The previous section explored reforms that could improve education within the government or public system. The remaining students are enrolled in independent schools or educated at home. This section focuses on possible reforms to improve education in the independent school sector, which in 2023/24 had 91,694 students, representing 13.1% of all enrolment (British Columbia Ministry of Education, 2024b). Independent schools exist wholly outside of the government public system. They are privately owned by non-profit organizations or charities. Often, they have a particular educational focus such as alternative pedagogies (Montessori and Waldorf), religion, or academic orientation (STEM, for instance) that are not readily provided by the public system.

Critically, British Columbia is one of five Canadian provinces that provide financial support to parents choosing independent schools rather than a government public school or home schooling. Group 1 and Group 2 independent schools receive grants amounting to 50 or 35 percent, respectively, of the per-pupil operating funding allocated to public schools in the comparable region, which reduces the costs directly borne by the parents (Van Pelt, Hasan, and Allison, 2017). Despite having lower grant levels than Alberta, British Columbia ranked first in the level of independent school enrolment in the latest data.

Before exploring policy reforms that could enhance education and the accessibility of the independent school sector, it is first important to dispel a commonly held misperception about independent schools in British Columbia, and indeed most of Canada. There is an often-held view that independent schools cater to the ultra-wealthy. One study (Clemens, Parvani, and Emes, 2017) provides two insights that effectively refute this assumption about the nature of families choosing independent schools. First, the analysis, which focused on British Columbia, examined the share of independent schools that could reasonably be defined as "elite" and concluded that only 7.7 percent of independent schools in British Columbia qualify as university preparatory schools that are stereotypically perceived as elite.

The second insight from this analysis refuting the claim that only wealthy families choose independent schools is based on a comparison of average after-tax family income. The average after-tax income for families with children enrolled in non-elite<sup>6</sup> independent

<sup>6</sup> Families with children in elite independent schools earned an average after-tax income of \$119,241, which is 54.1 percent higher than the average income for families with children in public schools. See Clemens, Parvani, and Emes (2017).

schools was \$78,894, which is only 1.9 percent more than the average income for families with children attending government schools in the province. In other words, the after-tax family income for families in British Columbia choosing government schools is essentially the same as those families who choose to have their children attend a nonelite independent school (that is, at over 90 percent of independent schools).

This section now turns to several potential reforms that should be considered for improving the independent school system in British Columbia, and thus the educational system overall.

#### Variable vouchers—an innovation from Australia

The closest any province in Canada that provides funding to independent schools comes to varying the value of the government grant provided to the independent school based on income occurs in British Columbia, which is a crude approximation at best. British Columbia reduces an independent school's per-student funding from 50 to 35 percent if that school's spending exceeds the average of comparable government schools in the district (Van Pelt, Hasan, Allison, 2017). The underlying assumption is that these schools cater to a higher-income, wealthier group of families. This makeshift approach totally ignores the specific incomes of families attending the independent schools. In other words, it treats upper-income families the same as lower-income families who scrimp and save to put their children in independent schools.

An innovation in Australia for varying the value of the government grant for independent schools is worth noting and perhaps even extending to ensure that independent school education is available to families at all income levels. Before delving into the specific reform in Australia, it is important to understand several characteristics of Australia's education system. First, in 2014, the share of students enrolled in independent schools in Australia was more than five times that of Canada: 34.9% compared to 6.8% (Donnelly, 2017). Recall that 13.1% of students in British Columbia are enrolled in an independent school. Put simply, Australia has a much larger independent school sector than Canada and British Columbia. Part of the explanation for the size of Australia's independent school sector is that, like all Canadian provinces except for Ontario, Saskatchewan, and Alberta, religious education and in particular Catholic education is delivered exclusively by independent schools. Indeed, of the 34.9% of students attending independent schools in Australia, 20.6% attend independent Catholic schools and the remaining 14.4% attend other independent schools (Donnelly, 2017). In 2013, the year before the reform

in question was implemented, the average operating grant provided to an independent school in Australia was \$8,781, which represents 56.1% of the average operating grant provided to government schools in Australia (in Canadian dollars using Bank of Canada conversions of Australian dollars). Recall that the government grants in British Columbia range between 35% and 50%.

The innovation in grants provided to independent schools in Australia by governments is that they are adjusted based on average household income. Specifically, the value of the government grant to the independent school is adjusted based on the socioeconomic profile of the area in which each student in a school resides. As Donnelly (2017) explains, "[G]overnment funding for students from the highest socioeconomic status (SES) areas is limited to 20%, while grants for students from the lowest SES areas can reach 90%. The remaining portion of the tuition costs must be covered by the parents or through fundraising by the school" (Donnelly, 2017: iii).

Put simply, the Australian innovation is to vary the value of the government funding to independent schools to reflect the assumed economic ability of the family to afford tuition costs based on their residential location. One of the obvious drawbacks to this approach is that it could penalize comparatively lower-income families who might reside in marginally higher socioeconomic neighbourhoods while at the same time benefiting higher-middle or even higher-income families who may not live in a neighbourhood that accurately reflects their income.

The intent of the variation in the value of the government grant is, however, worth noting, given that it is an attempt to make independent school education more affordable and thus accessible for lower-income families. Specifically, building on the Australian innovation of varying government grants based on the socioeconomic profile of the communities students reside in, British Columbia could introduce higher levels of government grants for lower-income families in order to improve their ability to send their children to independent schools. The government grants could range from the current 70 percent to the 90 percent level used in Australia for families whose annual after-tax income falls below a prescribed threshold.<sup>7</sup> The potential for such a policy is to make accessible schools that are currently out of reach for lower-income British Columbia families.

<sup>7</sup> If this reform were implemented, the government would be advised to consider a gradual reduction in per-student grants from 90 to 70 percent as income rises rather than using a single cut-off point in order to prevent unwanted labour incentives from a sharp decline in benefits at a specific income level.

#### Include for-profit schools-a lesson from Sweden

Sweden embarked on a series of fundamental reforms of its educational system in the early 1990s.<sup>8</sup> These offer some insights for potential reforms in British Columbia and indeed Canada's larger independent school sector. The reforms in Sweden have seen large-scale increases in enrolment in independent schools. Specifically, the share of students in Sweden enrolled in independent schools has risen from less than 2 percent in 1992 when reforms began to 14.1 percent for primary and lower secondary grades and to 25.1 percent for upper secondary grades as of 2014 (Sahlgren, 2016).

There are two reforms from the Swedish experience to consider, described like this by Swedish education expert Gabriel Heller Sahlgren:

[D]uring this period education in Sweden was fundamentally transformed from one of the most centralized education systems in the OECD to one of the most decentralized. Funding was decentralized from the national to the municipal level, public school choice opportunities increased, and a national voucher system allowed for-profit and non-profit independent elementary and secondary schools to receive funding equivalent to 100 percent of the per-student allocation for average operating costs<sup>9</sup> at local municipal schools. (Sahlgren, 2016: iii)

As discussed previously with respect to the Australian innovation, there is some merit in considering increasing the value of government grants to mitigate the financial burden of attending independent schools for lower-income families. The merit linked with making independent schools more accessible for families with limited resources loses a great deal of its value when the same higher government grants are provided to families of means.

The more meaningful lesson for British Columbia and perhaps the more interesting innovation in Sweden is that for-profit schools are also eligible for government grants. While for-profit schools are permitted in Canada, none of the five provinces that provide government grants to independent schools allow for-profit schools to be eligible for such grants (Van Pelt, Hasan, and Allison, 2017). On this policy, the Swedish experience is quite informative:

<sup>8</sup> For an overview of the Swedish reforms and some of the early results, please see Claudia Rebanks Hepburn (1999).

<sup>9</sup> It is important to note that independent schools in Sweden still do not receive capital or maintenance-related grants. The parity of funding is, therefore, limited to operating expenses.

[T]he most significant independent school enrolment growth occurred in the forprofit sector. In all, 64 percent of elementary and lower-secondary independent school students and 85 percent of upper-secondary independent school students attend for-profit schools. Thus, not only do independent schools in Sweden attract one in seven lower-grade students and one in four upper-secondary students in the country, but the vast majority of those students attend for-profit institutions. (Sahlgren, 2016: iii)

A reform in British Columbia permitting for-profit independent schools to be eligible for government grants would likely expand the supply of independent schools and the diversity of options available to parents. In addition, for-profit schools have access to capital and financing that non-profit and charitable independent schools simply lack. Indeed, one of the insights from the Swedish experience is the role that schools, which are part of larger chains, can play in the independent school sector. In 2015, the ten largest chains of for-profit independent schools in Sweden enrolled 36 percent of all independent school students (Sahlgren, 2016). Extending eligibility for government grants to for-profits in British Columbia is another reform worthy of consideration based on the experience of Sweden.

### Competitive and alternative curricula

While the term "curriculum" technically means the courses taught at any particular educational institution, it has in common usage evolved to mean something much broader. Indeed, in the Canadian context the term "curriculum" often refers to the lessons and academic content taught in a school or other educational institution. In other words, curriculum refers to what and how materials are taught to students. Currently, independent schools in British Columbia that accept government grants must follow the provincial programs of study (Van Pelt, Hasan, and Allison, 2017).

A hallmark insight from economics is that monopolies impose costs on consumers; in the case of education, we would expect monopoly costs to be imposed on both parents and students.<sup>10</sup> More specifically, monopolies result in higher prices, lower quality goods and services, and/or less diversity in choice with respect to the good or service provided by a monopoly. There is no conceptual or theoretical reason to believe that these standard monopoly costs would not apply to education, as well as curricula more specifically.

<sup>10</sup> For a succinct discussion of the concept of monopoly, please see George J. Stigler (2002).

When any province including British Columbia imposes a curriculum on all government schools as well as independent schools receiving funding, it eliminates diversity of learning and the experimentation with different approaches that can lead to better methods. Perhaps worse—as is the case with changes in mathematics instruction—it requires that all covered educational institutions make the changes deemed beneficial by a centralized bureaucracy. Put differently, a mandated monopoly curriculum means that almost all students and their parents will incur costs if curriculum changes by the government are not successful and worse, as appears to be the case with mathematics, they result in worse outcomes.

It is important to note that alternative curricula—but with similar or even common learning outcomes—already exist in Canada. For instance, there are independent schools in many provinces including British Columbia that choose to opt-out of eligibility for government funding in order to avoid having to follow a provincially imposed curriculum. For example, there are curricula rooted in traditional approaches, educational essentialism, progressive or inquiry-based, liberal arts, international baccalaureate programs, Montessori, Waldorf, and Reggio Emilia (Our Kids, n.d.).<sup>11</sup> In other words, there are a multitude of different types of content and approaches generally aimed at achieving a common end with respect to learning outcomes. Allowing one approach to essentially monopolize much of the province makes little sense. The province should consider a transition to focusing on specifying learning outcomes and providing both the government system and certainly the independent schools more flexibility in how best to achieve the stated learning outcomes.

In addition, and quite critically given the province's declining performance in mathematics, it is worth noting changes introduced in the province to the math curriculum. Both the language used in the curriculum requirements as well as the general approach parallel the content of the widely criticized "discovery math" approach (Flanagan, 2019). For example, the themes of "mental math," "multiple strategies," and "understanding context" as well as the broader issue of first presenting problems and then exploring possible solutions are all dominant themes of "discovery math" (British Columbia Ministry of Education, 2016a).<sup>12</sup> In addition, a number of commentators in the province who have investigated the decline in math performance of the province's students have criticized the provincial government for introducing "discovery math" (Houle, 2016; Houle, 2023; Urback, 2017).

<sup>11</sup> For an excellent overview of these different curricula, please see Our Kids (n.d.).

<sup>12</sup> For information on the content and aims of kindergarten to Grade 9 mathematics in British Columbia, please see British Columbia Ministry of Education (2016).

A number of scholars have suggested a link between the proliferation of curricula based on discovery math and the decline in math performance that has occurred across Canada in recent years as described in a preceding section (Richards, 2017; Stokke, 2015; Zwaagstra, 2011). University of Winnipeg professor of mathematics and statistics, Anna Stokke, for instance, has been particularly critical of the current fad in teaching mathematics, which is referred to as "discovery-based instruction." Her concerns regarding the new "discovery" approach is that it sets aside proven past techniques such as "times table memorization, explicit teacher instruction, pencil-and-paper practice, and mastery of standard mathematical procedures." Professor Stokke also points to the absence of international evidence indicating this new approach is more effective than the traditional system it replaced (Stokke, 2015: 1).

The point for consideration is broader than just the efficacy of adopting a new method of mathematics instruction, though clearly the provincial government should be undertaking an immediate and thorough review of curriculum changes in British Columbia. More broadly though, this example illustrates how the imposition of monopoly curriculum regulations on all government schools and independent schools receiving government grants may contribute to sudden province-wide undesirable outcomes such as the recent observed decline in math scores.

British Columbia's students and parents would be much better served if the province removed these restrictions and allowed for more experimentation with respect to curriculum while still focusing on common learning outcomes. Freeing up both government and independent schools to experiment with different approaches to common learning outcomes offers the dual benefit of better matching parental preferences with educational options as well as the learning from experimentation.

This section has offered three broad reforms for the independent school sector of British Columbia, including varying the value of government grants to increase accessibility for lower-income families, including for-profit independent schools as eligible for government grants, and eliminating or at least easing the monopolization of curriculum based on common learning outcomes. In addition, given the declining performance in mathematics, an immediate and thorough review of curriculum changes should be undertaken within the context of a more flexible and innovative approach to curriculum regulation. These reforms would benefit not only the independent school sector and the families that currently or in the future would choose such schools but also the broader K-12 education system in the province.

### Conclusion

This study has outlined a number of reforms that could improve the performance of British Columbia's K-12 educational system. The reforms have covered both the government school sector as well as the independent school sector. The basic fact that British Columbia is a relatively high spender on K-12 education with declining academic results, particularly when compared with the lower-spending province of Alberta, should give all of British Columbia cause to consider reform.

The key reforms discussed for the government school sector include ending the province's imposition of an ineffective curriculum, restoring the previous system of standardized testing to enhance accountability, protecting the current practice of open enrolment, and allowing for the creation of charter schools, similar to what currently happens in Alberta. These reforms would strengthen the government school system, which educates a little more than 86 percent of all British Columbia students.

The next set of reforms focused on improving the independent school sector. They included allowing for-profit independent schools to be eligible for government grants based on the Swedish approach to K-12 education, varying the government grant amount to better reflect the household income of individual students to make independent schooling more accessible for lower-income families based on similar Australian reforms, and allowing competitive curricula by independent schools (without sacrificing their funding eligibility) so long as they focus on common learning outcomes.

Throughout, special attention was paid to the province's declining performance on mathematics and changes to the curriculum. The province should immediately review and assess the changes in the mathematics curriculum and their relationship to the province's declining math performance.

There is obviously some overlap between the reforms for the two sectors since curriculum competition and teacher incentive compensation could improve education in both sectors.

Given the current mix of comparatively high spending with declining academic results, British Columbia should be reviewing a broad range of education reforms to achieve better value for money and improved results for both students and taxpayers.

### References

- Alberta Education (n.d.). Public Charter Schools. <a href="https://www.alberta.ca/public-charter-schools">https://www.alberta.ca/public-charter-schools</a>, as of August 1, 2024.
- Allison, Derek J. (2015). *Expanding Choice in Ontario's Public Schools*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/expanding-choice-in-ontarios-public-schools.pdf">https://www.fraserinstitute.org/sites/default/files/expanding-choice-in-ontarios-public-schools.pdf</a>, as of August 1, 2024.
- Bosetti, Lynn, Brianna Brown, Sazid Hasan, and Deani Neven Van Pelt (2015). *A Primer on Charter Schools*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/primer-on-charter-schools.pdf">https://www.fraserinstitute.org/sites/default/files/primer-on-charter-schools.pdf</a>>, as of August 1, 2024.
- British Columbia Ministry of Education (2016a). *Area of Learning: Mathematics.* <a href="https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/mathematics/en\_mathematics\_k-9\_elab.pdf">https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/mathematics/en\_mathematics\_k-9\_elab.pdf</a>, as of August 1, 2024.
- British Columbia Ministry of Education (2016b). *Social Studies Curriculum: Kindergarten Grade 9.* <a href="https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/social-studies/en\_social-studies\_k-9\_elab.pdf">https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/social-studies/en\_social-studies\_k-9\_elab.pdf</a>>, as of August 1, 2024.
- British Columbia Ministry of Education (2018). *Social Studies Curriculum: Grade 10.* <a href="https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/social-studies/en\_social-studies\_10\_core\_elab.pdf">https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/social-studies/en\_social-studies\_10\_core\_elab.pdf</a>>, as of August 1, 2024.
- British Columbia Ministry of Education (2024a). Reporting and Analysis Unit. BC Schools - Student Headcount by Grade. <a href="https://catalogue.data.gov.bc.ca/dataset/bc-schools-student-headcount-by-grade">https://catalogue.data.gov.bc.ca/dataset/bc-schools-student-headcount-by-grade</a>, as of June 28, 2024.
- British Columbia Ministry of Education (2024b). Reporting and Analysis Unit. Headcount of Homeschooled Children. <a href="https://catalogue.data.gov.bc.ca/dataset/headcount-of-homeschooled-children">https://catalogue.data.gov.bc.ca/dataset/headcount-of-homeschooled-children</a>>, as of June 28, 2024.
- British Columbia Ministry of Education (n.d.). *BC's Redesigned Curriculum*. <https:// curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/supports/curriculum\_brochure. pdf>, as of August 1, 2024.
- British Columbia Ministry of Finance (2024). *Budget and Fiscal Plan 2024/25–2026/27.* <a href="https://www.bcbudget.gov.bc.ca/2024/pdf/2024\_Budget\_and\_Fiscal\_Plan.pdf">https://www.bcbudget.gov.bc.ca/2024/pdf/2024\_Budget\_and\_Fiscal\_Plan.pdf</a>>, as of August 1, 2024.
- Clemens, Jason, Joel Emes, and Angela MacLeod (2018). *K-12 Education Reform in Alberta*. Fraser Institute. <<u>https://www.fraserinstitute.org/studies/k-12-education-reform-in-alberta</u>>, as of August 1, 2024.
- Clemens, Jason, Sasha Parvani, and Joel Emes (2017). *Comparing the Family Income of Students in British Columbia's Independent and Public Schools*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/comparing-family-income-of-students-in-BCs-independent-and-public-schools.pdf">https://www.fraserinstitute.org/sites/default/files/comparing-family-income-of-students-in-BCs-independent-and-public-schools.pdf</a>>, as of August 1, 2024.

- Core Knowledge Foundation (n.d.). Core Knowledge. <a href="https://www.coreknowledge.org/">https://www.coreknowledge.org/</a>, as of August 1, 2024.
- Donnelly, Kevin (2017). *Regulation and Funding of Independent Schools: Lessons from Australia.* Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/regulation-and-funding-of-independent-schools-lessons-from-australia.pdf">https://www.fraserinstitute.org/sites/default/files/regulation-and-funding-of-independent-schools-lessons-from-australia.pdf">https://www.fraserinstitute.org/sites/default/files/regulation-and-funding-of-independent-schools-lessons-from-australia.pdf</a>>, as of August 1, 2024.
- Elez, Vanja, Edouard Imbeau, Yitian Tao, Vincent Paquet, Asia Kotasinska, Ashley Rostamian, Laure Subtil-Smith, Manuel Cardoso, Tanya Scerbina, and Gulam Khan (2023). *Measuring Up: Canadian Results of the OECD PISA 2022 Study: The Performance of Canadian 15-Year-Olds in Mathematics, Reading, and Science.* Council of Ministers of Education, Canada. <a href="https://www.cmec.ca/Publications/Lists/Publications/Attachments/438/PISA-2022\_Canadian\_Report\_EN.pdf">https://www.cmec.ca/Publications/Lists/Publications/Attachments/438/PISA-2022\_Canadian\_Report\_EN.pdf</a>, as of August 1, 2024.
- Flanagan, Colleen (2019, January 18). The Debate Over How to Teach Math in B.C. *Surrey Now-Leader*. <a href="https://www.surreynowleader.com/news/the-debate-over-teaching-mathin-b-c-2945423">https://www.surreynowleader.com/news/the-debate-over-teaching-mathin-b-c-2945423</a>, as of August 1, 2024.
- Friesen, Jane, Benjamin Cerf Harris, and Simon Woodcock (2015). *Expanding School Choice* through Open Enrolment: Lessons from British Columbia. Commentary No. 418. C.D.
  Howe Institute. <a href="https://www.cdhowe.org/public-policy-research/expanding-school-choice-through-open-enrolment-lessons-british-columbia">https://www.cdhowe.org/public-policy-research/expanding-school-choice-through-open-enrolment-lessons-british-columbia</a>, as of August 1, 2024.
- Hart, Cassandra M.D., and David Figlio (2011). Does Competition Improve Public Schools? New Evidence from the Florida Tax-Credit Scholarship Program. *Education Next* 11 (Winter). <<u>https://www.educationnext.org/does-competition-improve-public-schools/></u>, as of August 1, 2024.
- Hattie, John, and Gregory Yates (2014). *Visible Learning and the Science of How We Learn*. Corwin.
- Hepburn, Claudia Rebanks (1999). The Case for School Choice: Models from the United States, New Zealand, Denmark, and Sweden. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/CaseforSchoolChoice.pdf">https://www.fraserinstitute.org/sites/default/files/CaseforSchoolChoice.pdf</a>>, as of August 1, 2024.
- Hirsch, E.D. (2016). Why Knowledge Matters: Rescuing Our Children from Failed Educational Theories. Harvard Education Press.
- Houle, Tara (2023, December 19). B.C. is Failing to Teach Math Properly, and the Numbers Prove It. *Times-Colonist.* <a href="https://www.timescolonist.com/opinion/comment-bc-is-failing-to-teach-math-properly-and-the-numbers-prove-it-8001317">https://www.timescolonist.com/opinion/comment-bc-is-failing-to-teach-math-properly-and-the-numbers-prove-it-8001317</a>>, as of August 1, 2024.
- Houle, Tara (2016, September 8). Math Instruction Gets Failing Grade Under New B.C. School Curriculum. *Vancouver Sun.* <a href="https://vancouversun.com/opinion/opinion-new-curriculum-gets-failing-grade-in-math">https://vancouversun.com/opinion/opinion-new-curriculum-gets-failing-grade-in-math</a>, as of August 1, 2024.
- Kavanagh, Catharine (2023). Charter School Waitlists are a Kilometre Long. It's time Alberta's Regulators Caught Up to the Demand. *The Hub.* <a href="https://thehub.ca/2023/04/07/catherine-kavanagh-charter-school-waitlists-are-a-kilometre-long-its-time-albertas-regulators-caught-up-to-the-demand/">https://thehub.ca/2023/04/07/catherine-kavanagh-charter-school-waitlists-are-a-kilometre-long-its-time-albertas-regulators-caught-up-to-the-demand/</a>, as of August 1, 2024.

- MacPherson, Paige T. (2018). *An Untapped Potential for Educational Diversity: Policy Lessons from Alberta Charter Schools*. Atlantic Institute for Market Studies. <a href="https://www.aims.ca/wp-content/uploads/2018/09/AIMS-18004\_AlbertaCharter\_SP2418\_F2.pdf">https://www.aims.ca/wp-content/uploads/2018/09/AIMS-18004\_AlbertaCharter\_SP2418\_F2.pdf</a>>, as of August 1, 2024.
- MacPherson, Paige, and Joel Emes (2024). *The Collapse of Student Testing in BC High Schools: Participation Rates Plummet as Student Achievement Wanes.* Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/collapse-of-student-testing-in-bc-high-schools.pdf">https://www.fraserinstitute.org/sites/default/files/collapse-of-student-testing-in-bc-high-schools.pdf</a>, as of August 1, 2024.
- Macpherson, Paige and Max Shang (2024). *Funding for BC Independent Schools Saves Government Money.* Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/funding-for-bc-independent-schools-saves-government-money.pdf">https://www.fraserinstitute.org/sites/default/files/ funding-for-bc-independent-schools-saves-government-money.pdf</a>, as of August 1, 2024.
- Our Kids (n.d.). *Factors in Finding the Right School: Curriculum.* <a href="https://www.ourkids.net/school/private-school-curriculum">https://www.ourkids.net/school/private-school-curriculum</a>, as of August 1, 2024.
- Richards, John (2017). *Red Flags for Educators: Lessons for Canada in the PISA Results.* Commentary No. 488. C. D. Howe Institute. <a href="https://www.cdhowe.org/sites/default/files/attachments/research\_papers/mixed/Commentary\_488.pdf">https://www.cdhowe.org/sites/default/files/attachments/research\_papers/mixed/Commentary\_488.pdf</a>>, as of August 1, 2024.
- Sahlgren, Gabriel Heller (2016). *Regulation and Funding of Independent Schools: Lessons from Sweden.* Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/regulation-and-funding-of-independent-schools-lessons-from-sweden.pdf">https://www.fraserinstitute.org/sites/default/files/regulation-and-funding-of-independent-schools-lessons-from-sweden.pdf</a>>, as of August 1, 2024.
- Smith, Reid, Pamela Snow, Tanya Serry, and Lorraine Hammond (2021). The Role of Background Knowledge in Reading Comprehension: A Critical Review. *Reading Psychology* 42, 3 (February): 214-240. <<u>https://doi.org/10.1080/02702711.2021.1888348</u>>, as of August 1, 2024.
- Statistics Canada (2024a). Table 37-10-0109-01 Number of students in elementary and secondary schools, by school type and program type. <a href="https://doi.org/10.25318/3710010901-eng">https://doi.org/10.25318/3710010901-eng</a>>, as of June 27, 2024.
- Statistics Canada (2024b). Table 37-10-0066-01 Public and private elementary and secondary education expenditures (x 1,000). <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710006601">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710006601</a>>, as of May 23 2024.
- Statistics Canada (2024c). Table 18-10-0005-01 Consumer Price Index, annual average, not seasonally adjusted. <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000501">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000501</a>>, as of May 23, 2024.
- Stigler, George J. (2002). Monopoly. In David R. Henderson (ed.), *Concise Encyclopedia of Economics* (Liberty Fund).
- Stokke, Anna (2015). *What to Do about Canada's Declining Math Scores.* Commentary No. 427. C.D. Howe Institute. <a href="https://www.cdhowe.org/sites/default/files/attachments/research\_papers/mixed/commentary\_427.pdf">https://www.cdhowe.org/sites/default/files/attachments/research\_papers/mixed/commentary\_427.pdf</a>>, as of August 1, 2024.
- Urback, Robyn (2017). Just Fix the Bloody Math Curriculum. *CBC Online* (September 1). <a href="https://www.cbc.ca/news/opinion/math-eqao-scores-1.4270882">https://www.cbc.ca/news/opinion/math-eqao-scores-1.4270882</a>>, as of August 1, 2024.

- Van Pelt, Deani Neven (2015). *Home Schooling in Canada: The Current Picture—2015 Edition*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/home-schooling-in-canada-2015-rev2.pdf">https://www.fraserinstitute.org/sites/default/files/home-schooling-in-canada-2015-rev2.pdf</a>>, as of August 1, 2024.
- Van Pelt, Deani, Sazid Hasan, and Derek J. Allison (2017). *The Funding and Regulation of Independent Schools in Canada*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/funding-and-regulation-of-independent-schools-in-canada.pdf">https://www.fraserinstitute.org/sites/default/files/funding-and-regulation-of-independent-schools-in-canada.pdf</a>>, as of August 1, 2024.
- Wexler, Natalie (2019). *The Knowledge Gap: The Hidden Cause of America's Broken Education System—and How to Fix It.* Penguin Random House.
- Zwaagstra, Michael (2011). Math Instruction That Makes Sense. Policy Series No. 120. Frontier Centre for Public Policy. <a href="https://fcpp.org/files/1/PS120\_MathInstruct\_SP15F1.pdf">https://fcpp.org/files/1/PS120\_MathInstruct\_SP15F1.pdf</a>>, as of August 1, 2024.
- Zwaagstra, Michael (2022). *The Decline of Standardized Testing in Canada*. Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/decline-of-standardized-testing-in-canada.pdf">https://www.fraserinstitute.org/sites/default/files/decline-of-standardized-testing-in-canada.pdf</a>), as of August 1, 2024.
- Zwaagstra, Michael (2023). *B.C.'s New Curriculum Will Shortchange Students*. Fraser Institute. <a href="https://www.fraserinstitute.org/article/bcs-new-curriculum-will-shortchange-students">https://www.fraserinstitute.org/article/bcs-new-curriculum-will-shortchange-students</a>, as of August 1, 2024.
- Zwaagstra, Michael (2024). Canadian History Untold: Assessing the K-12 Curriculum Guides in British Columbia and Ontario. Fraser Institute. <a href="https://www.fraserinstitute.org/studies/canadian-history-untold-assessing-the-k-12-curriculum-guides-in-british-columbia-and-ontario">https://www.fraserinstitute.org/ studies/canadian-history-untold-assessing-the-k-12-curriculum-guides-in-britishcolumbia-and-ontario</a>, as of August 1, 2024.
- Zwaagstra, Michael, Joel Emes, Evin Ryan, and Milagros Palacios (2023). *Where Our Students are Educated: Measuring Student Enrolment in Canada, 2022.* Fraser Institute. <a href="https://www.fraserinstitute.org/sites/default/files/where-our-students-are-educated-2022.pdf">https://www.fraserinstitute.org/sites/default/files/where-our-students-are-educated-2022.pdf</a>: table 4., as of August 1, 2024.

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