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Measuring Choice and Competition in Canadian Education

An Update on School Choice in Canada

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Contents

Summary

As the benefits or returns to education become more and more apparent, there is increasing interest in ensuring accessible, high quality education. The increasing body of research available on the effects of school choice and competition suggests that education is broadly improved when parents have choice and schools are forced to compete. It is, therefore, timely to update the state of school choice and competition in Canada. This study updates and consolidates previous work on school choice in Canada.

School choice and competition in Canada

1 Public education

There is a great deal of misunderstanding regarding school choice and competition within the public education systems that dominate Canadian education. Between 87.5 percent (British Columbia and Quebec) and 98.8 percent (Newfoundland & Labrador and Prince Edward Island) of Canadian K-12 students are enrolled in public schools. Too many people, however, equate this fact with a lack of school choice and competition. The reality of school choice and competition in the public education system is much more complicated. It is true that the principal language public schools—Anglophone in all provinces except Quebec, which is Francophone—dominate enrolment with between 63.3 percent (Ontario) and 98.5 percent (Newfoundland & Labrador) of total students enrolled.

One form of choice and competition afforded students across the country is education in a second language—French in all provinces except Quebec, where it is English. Enrolment in these public schools ranges from 0.4 percent in Newfoundland & Labrador to 28.2 percent in New Brunswick. Put simply, depending on your province and particular city (and school district), there is the possibility of selecting a public school based on a linguistic preference that provides parents with additional choice and competition between schools within the public system. The presence of Francophone schools outside of Quebec and Anglophone schools in Quebec are in addition to language immersion programs provided by the principal language schools in the provinces, which provide yet another layer of choice and competition within the public education system.

Separate religiously oriented schools within the public education system provide another source of parental choice and competition. Alberta, Saskatchewan, and Ontario provide full funding for religious schools, which are principally Roman Catholic schools (**Exec summary table 1**). Between 21.1 percent (Saskatchewan) and 30.3 percent (Ontario) of students in these provinces are enrolled at religiously oriented, fully funded public schools. The primary source of choice for these schools is the provision of religious instruction. However, the loosening of regulations regarding the degree of religious instruction

and the admittance of non-religious students (or students of different faiths) increases the degree of parental choice and competition since such schools are not exclusively available to religiously oriented families.

Finally, charter schools are another method by which to increase parental choice and competition in the public education system. Charter schools are autonomous, not-for-profit schools within the public system that provide alternative education programs to complement the public system and generally have greater discretion in selecting curriculum, teaching, and learning styles than public schools. Currently the only province to provide charter schools as an alternative is Alberta (**Exec summary table 1**). There are currently 13 charter schools in Alberta with a provision in the current legislation for an additional two. Waiting lists for such schools are substantial, with one estimate indicating that 8,000 students would like to attend one of the six charter schools in Calgary.

All told, enrolment in public schools, which includes principal language schools, alternative language schools, immersion programs, separate religious public schools, and charter schools, ranges from 87.5 percent in British Columbia and Quebec to 98.8 percent in Newfoundland & Labrador and Prince Edward Island. Critically, there is a range of parental choice and competition provided in the public education system depending on one's province (and city).

2 Independent schools

In addition to the public education system, every province in Canada also has an independent school system that is distinct from the public system. The nature of the independent school sectors, their funding, and regulation varies by province, as does the enrolment. Student enrolment in independent schools ranges from 0.9 percent in New Brunswick and Prince Edward Island to 12.5 percent in Quebec. British Columbia (12.1 percent), Manitoba (7.4 percent) and Ontario (5.1 percent) also have relatively high levels of independent school enrolment.

As already discussed, Alberta, Saskatchewan, and Ontario provide Roman Catholic education within their public education systems. The remaining provinces, however, provide all religious education including Roman Catholic schools outside of the public education system through independent schools. This in part explains some of the variance in both public school enrolment and independent school enrolment in provinces like British Columbia, Alberta, Ontario, and Quebec.

In addition to the differences in the treatment of religious schools, there is also fairly wide variation in how funding is provided and regulations imposed on independent schools. British Columbia, Alberta, Saskatchewan, Manitoba, and Quebec all provide public funding for independent schools ranging between 35 percent and 80 percent of the per-student operating costs, although definitions and formulas for determining the exact funding vary by province. Ontario and the Atlantic provinces, on the other hand, provide no funding for independent

schools. However, independent schools in these provinces enjoy more autonomy with respect to provincial regulations. Independent schools in provinces where funding is provided must comply with provincial guidelines on curriculum and other regulations applied to public schools.

3 Home schooling

The final type of schooling analyzed in this paper is home schooling, for parents who have decided to educate their children on their own. Home schooling is permitted in all ten provinces although the degree to which it is supported varies greatly by province (**Exec summary table 1**). Alberta is the most supportive in terms of providing resources, funding, and facilitating mechanisms for home schooling. However, the enrolment in home schooling remains marginal. Alberta, for example, which is the most generous and supportive of home schooling, only maintains 1.6 percent of student enrolment in home schooling. Most of the provinces have enrolment rates below 0.5 percent.

Again, however, the ability to choose to home school is an important mechanism allowing additional parental choice and some limited competition or at least the threat of competition in Canadian provinces.

General conclusions

As one might expect given the decentralized nature of K-12 education in Canada, the mix of public, independent, and home schooling varies by province as does the funding and regulations for schools. Some provinces rely more heavily on choice and competition within the public systems while others rely more heavily on independent schools to provide choice and competition.

In terms of general observations, Alberta currently offers the greatest degree of school choice in Canada. Apart from having five, fully funded public school choices, depending on residential area, it also provides substantial funding to students wishing to attend independent schools and for parents wishing to educate their children at home. The presence of charter schools in Alberta provides an additional source of choice, which provides parents with additional options outside of traditional linguistic and religious alternatives offered by public school boards.

At the other end of the spectrum, the Atlantic provinces tend to offer comparatively little parental choice and competition among schools. None of the Atlantic provinces provide funding for parents who choose independent schools. Simply put, the Atlantic provinces tend to offer less choice within the public system and provide no support to parents for independent schools.

The remaining provinces range between Alberta and the Atlantic provinces with respect to the level and depth of parental choice and competition for schools.

Exec summary table 1: School Choice by Province

	Public	Public Francophone	Separate Catholic	Separate Francophone	Separate Protestant	Charter
British Columbia	YES	YES				
Alberta	YES	YES	YES	YES	YES	YES
Saskatchewan	YES	YES	YES		YES	
Manitoba	YES	YES				
Ontario	YES	YES	YES	YES	YES	
Quebec	YES	YES				
New Brunswick	YES	YES				
Nova Scotia	YES	YES				
Prince Edward Island	YES	YES				
Newfoundland & Labrador	YES	YES				

Notes

1. Results were determined by reviewing each province's Ministry of Education website and Education/School Act and contacting the appropriate Ministries via email. Some provinces do allow school district or boards to determine open enrollment and catchment policies; these individual policies were not reviewed unless explicitly mentioned in the Act or on the Ministry website.

2. All open enrollment policies tend to be conditional on space and resources being available for students. If conditions are mentioned, it means that conditions other than adequate space and resources are imposed.

3. As of October 2013, the Alberta Education Act is up for review, open enrolment could be a part of potential changes. See <http://www.education.alberta.ca/department/policy/education-act.aspx>.

4. In the Fall 2012 legislative session, an amendment to the Education Act concerning the attendance of students in neighbouring school divisions was proposed but not enacted.

Independent	Historical High Schools	Home schooling	Open Enrolment in Public System (1, 2)	Total Public Choice
YES— 35%–50% funded		YES	Province-wide open enrolment.	2
YES— 60%–70% funded		YES— $1,641 per student	Open enrolment allowed but exact rules are determined at the board level. Generally, transportation costs are not covered. (3)	6
YES— 50%–80% funded	YES— 70% funded	YES	No open enrolment policy. (4)	4
YES— 50% funded		YES	Provincial authorization for open enrolment; some conditions apply.	2
YES		YES	Province offers conditional open enrolment for distance and geographic considerations in Schools Act. Additional considerations are determined at the district/board level.	4
YES— up to 60% funded		YES	Provincially authorized open enrolment within the school districts.	2
YES		YES	No open enrolment; student placement determined by school district with appeal process.	2
YES		YES	No provincial open enrollment policy. Issue is determined at the board level.	2
YES		YES	No open enrolment student placement determined by school district.	2
YES		YES	No open enrolment.	2

Sources

BC See Section 2 (1-2) and Section 74, <http://www.bced.gov.bc.ca/legislation/schoollaw/revisedstatutescontents.pdf>.

AB See Sections 8, 13 and 44, <http://www.qp.alberta.ca/1266.cfm?page=s03.cfm&leg_type=Acts&isbnc ln=9780779733941>; <http://education.alberta.ca/parents/educationsys/ourstudents/iv.aspx> and Ministry correspondence.

SK See Section 141, 142, 143, <http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/E0-2.pdf> and Ministry correspondence.

MB <http://www.edu.gov.mb.ca/k12/schools/choice/schoolsofchoice.html#GeneralInfo>.

ON See Sections 32, 33, 34, 35, 36, <http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e02_e.htm#BK38> and Ministry correspondence.

QC See Section 4 of the Act: <http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/I_13_3/I13_3_A.html>.

NB See Sections 8, 9, and 11 of Act: <http://www.canadalegal.com/gosite.asp?s=3432>.

NS <http://nslegislature.ca/legc/statutes/education.pdf> and Ministry correspondence.

PE See section 51, <http://www.gov.pe.ca/law/statutes/pdf/s-02_1.pdf>.

NL See Section 4 (2), <http://www.assembly.nl.ca/legislation/sr/statutes/s12-2.htm#3_>.

Introduction

The ability of parents to choose among different schools for their children's education, or what has been called school choice, is one side of a two-sided coin. Their ability to choose among different schools represents the demand side, or as some refer to it, the consumer side of education. The other side of the education equation is the supplier side. If parents are able to choose among different schools, it means the schools (providers of education) are competing for those students. There are, therefore, important supply-and-demand considerations when examining school choice.

As the benefits or returns to education become more and more apparent, there is increasing interest in ensuring accessible, high-quality education. The increasing body of research available on the effects of school choice and competition suggests that education is broadly improved when parents have choice and schools are forced to compete.

It is, therefore, timely to update the state of school choice and competition in Canada. This study updates and consolidates previous work in two principal ways. First, an updated summary of the available key research on the effects of school choice and competition is presented. The focus of this review is on the benefits provided to students, parents, and others from school choice. Second, measures of school choice in Canada are updated, including choice among public schools (including charter schools), the availability of independent schools, and homeschooling. In each section, differences among the provinces are highlighted. In addition, an appendix presents the summary data for each province. Finally, a broad overview and conclusion are presented.

1. Understanding School Choice and Its Importance—an Updated Review of Existing Research

There is increasing understanding and broad acknowledgement of the importance of K-12 education in establishing the foundation for success, engagement, and prosperity. More specifically, K-12 education is recognized as a mechanism by which young people gain the skills and knowledge needed to succeed as adults and learn to interact with peers. The importance of education to young people in terms of their future lives should not be underestimated. It is the importance of education to the young that explains the increasing interest in school choice as a potential method of improving academic performance.

The discussion of school choice as a mechanism to improve education dates back to at least 1955 when Nobel laureate Milton Friedman began discussing parental choice and competition in education.[1] Friedman applied the basic economic principle that competition among suppliers results in better pricing, quality, and choice for consumers compared to monopolies where there is only one provider (i.e., there is no competition or choice) to the challenges observed in education. This analysis led to the insight that more parental choice for schools and competition among schools could improve educational outcomes.

Critically, however, there was and continues to be a large, vocal opposition to competition and choice in education that argues it does not result in the benefits outlined above because of the unique nature of education. Critics of school choice and competition range from academics to vested interests such as public-teacher unions. Many of these critics of school choice believe, for instance, that competition detracts from public education by taking resources away from the public system and creating social divisions rather than encouraging improvement, innovation, and responsiveness. Fortunately, the emergence of a host of school-choice experiments, particularly in the United States, has allowed for research into the effects of parental choice and competition in education.

Locational choice

Before delving into the specific research on the effects of school choice and competition, it is important to clarify the nature of choice explored and analyzed in this study. A traditional mechanism, which is still dominant within

1. Friedman, Milton (1955), The Role of Government in Education, Robert A. Solo, ed., *Economics and the Public Interest*, <http://www.schoolchoices.org/roo/fried1.htm>, as of September 3, 2013.

education research with respect to school choice, is the ability of parents to move residences in order to select different schools.[2] Simply put, this type of choice rests on the ability of parents to move their residences in order to gain access (and eligibility) to alternative schools for their children. It is rooted in what is referred to as the catchment system. Under such a system, only parents and their children residing within certain boundaries are eligible to attend schools within those boundaries. It is a mechanism by which to sort children into schools.

This parental choice mechanism is often referred to by scholars as Tiebout Choice. Tiebout Choice originally applied to broader municipal services with particular emphasis on public goods.[3] It has since, however, been regularly applied to education. According to an important study on the topic by Scott Davies and Janice Aurini,[4] roughly one-third of Canadian families rely on residential location decisions (Tiebout Choice) to achieve school choice.[5]

It is important to differentiate this mechanism, which allows parents to choose a single school by moving their residence, from other mechanisms of choice that provide parents with choice in their children's education without having to move residences. It is this latter type of choice upon which both the research cited below and the entire paper focus. The following section summarizes key research examining the effects of school choice and competition on student outcomes as well as the broader educational system in which the reforms took place.

Impact of school choice on students

The impact of school choice on student performance has been studied for several decades in the United States.[6] These studies generally assess the long-term

2. Hoxby, Caroline M. (2003), School Choice and School Productivity: Could School Choice Be a Tide that Lifts All Boats? in Caroline M. Hoxby, ed., *The Economics of School Choice* (University of Chicago Press): 287–341.

3. The original article in this line of research was: Charles M. Tiebout (1956), A Pure Theory of Local Expenditures, *Journal of Political Economy* 64, 5 (October): 416–424.

4. Davies, Scott, and Janice Aurini (2011), Exploring School Choice in Canada: Who Chooses What and Why? *Canadian Public Policy* 37, 4 (December): 459–477.

5. They also found that a roughly equal number (one third of Canadian families) achieved choice in education outside of the public system. Altogether, as per their findings, two thirds of Canadian parents make use of some type of school choice: one third choosing alternatives to traditional public schools and one third using other methods of school choice such as residential location. See Davies and Aurini (2011), Exploring School Choice in Canada.

6. The United States education system is markedly different with regard to policies, regulations, and funding, making it difficult to compare it with Canada's education system. However, the substantial research on school choice in the United States provides sufficient evidence of its positive effects. Two classic examples of school-choice success in the United States are Milwaukee's Voucher Program and Florida's A+ program. For detailed summaries of Milwaukee, see: Greene, Jay P., and Ryan H. Marsh (2009), *The Effect of Milwaukee's Parental Choice Program on Student Achievement in Milwaukee Public Schools*, SCDP Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program Report #11, March (School Choice Demonstration Project), <http://www.uaedreform.org/the-effect-of-milwaukees-parental-choice-program-on-student-achievement-in-milwaukee-public-schools/>;

effects of school choice on student performance. One of the first studies that contributed to our understanding of the benefits possible from school choice was by Stanford's Caroline Hoxby. In 1994, then Harvard-professor Caroline Hoxby published an important study in the National Bureau of Economic Research (NBER) that examined whether private schools—note that similar schools are referred to as independent schools in Canada—in the United States provided competition to public schools and, if so, what the result was from the competition.[7]

Hoxby analyzed data between 1980 and 1983 from the National Longitudinal Survey for Youth, a Survey of Church Membership in the United States, and the National Centre for Educational Statistics, surveying thousands of public and private schools across the United States. She concluded that private schools provided competition for public schools and that such competition resulted in improvements in public schools as measured by education attainment. Specifically, she found that an additional "0.9 years in education attainment throughout a student's lifetime … and a 7 percent increase in AFQT test scores" were achieved by the introduction of private school competition with public schools. In other words, students at public schools benefited in a meaningful way from the introduction of competition from private schools even though they did not attend the private schools. The presence of competition, in this case from private schools, encouraged the public schools to improve, which benefited the students attending those public schools. Interestingly, Hoxby also found that competition resulted in six percent higher salaries for teachers who teach in schools that are in competition.[8]

School voucher lotteries, which are a popular form of allocating spots in charter and private schools in the United States, offer a unique form of research since they provide a test group against which the results of students that successfully enroll in charter and private schools can be compared. Since the lottery eliminates many aspects of selection biases, the students who receive the vouchers automatically become a treatment group while those left out become a natural control group.

A number of researchers have employed this research method along with data collected from the lottery process to enable the tracking of students through programs and longitudinal comparisons. Education scholar Greg

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Wolf, Patrick J. (2012), *The Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program: Summary of Final Reports*. SCDP Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program Report #36, February (School Choice Demonstration Project). For Florida, see: Greene, Jay P., and Marcus A. Winters (2004), Competition Passes the Test, *Education Next* (Summer): 66–71, <http://educationnext.org/competition-passes-the-test/>; Sass, Tim A. (2006), *Charter Schools and Student Achievement in Florida*, Education Finance and Policy (American Education Finance Association).

7. Hoxby, Caroline M. (1994), *Do Private Schools Provide Competition for Public Schools?* NBER Working Paper Series 4978, December (National Bureau of Economic Research).

8. Hoxby (1994), *Do Private Schools Provide Competition*: 29.

Forster reviewed ten major research projects that used this "Gold Standard" method.[9] Of the ten studies, Forster concluded that nine found statistically significant impacts of vouchers (school choice) on student achievement.

A recent study No Child Left Behind, by Hastings et al. (2012) measured the effects of school choice on student performance using data from 2005 to 2009. Hastings and her colleagues determined the student's performance and motivation by longitudinally measuring daily absences and suspension rates along with test scores both for students who were selected for the voucher lottery and those who were not. Their work showed that school choice programs that allowed students to move from low performing schools to higher performing ones raised student's motivation and in turn improved their academic achievement.[10] This increased motivation to succeed contributed to a 14 to 21 percent decrease in truancy among male students who won voucher lotteries and an overall improvement of 0.11 standard deviations in combined test scores (for reading, writing and math), which was found to be significant to one percent.[11]

Much of the research on school choice in the United States is focused on specific regions with high degrees of school choice. For instance, substantial work has been done on the Parental Choice Program in the city of Milwaukee, Wisconsin, which began in 1990 and is the oldest school choice program in the United States.[12] One of the earliest studies, completed by Cecelia Rouse (1998) found an 8 percentage-point improvement in math scores (but no change in reading scores) in Milwaukee schools where students used vouchers.[13]

Professors Jay P. Greene, Paul Peterson, and Jiangtao Du also examined school choice in Milwaukee. Although the Milwaukee school choice program has now grown to over 20,000 students, from 1990-91 through 1998-99 the program was restricted by law to only several hundred vouchers per year.[14] Greene and his colleagues found that, although there was initially little change in math scores in the first two years of the program, after three years

9. Forster, Greg (2013), *A Win-Win Solution: The Empirical Evidence on School Choice*, 3rd Edition (Friedman Foundation for Educational Choice): 8–9

10. Hastings, Justine S., Christopher S. Neilson, and Seth D. Zimmerman (2012), *The Effect of School Choice on Intrinsic Motivation and Academic Outcomes*, NBER Working Paper 18324, August (National Bureau of Economic Research).

11. Hastings, Neilson, and Zimmerman (2012), *The Effect of School Choice*: 9–12.

12. Other studies on Milwaukee's Parental Choice Program include: Chakrabarti, Rajashri (2008), Can Increasing Private School Participation and Monetary Loss in a Voucher Program Affect Public School Performance? Evidence from Milwaukee, *Journal of Public Economics* 92: 1371–1393; Wolf, Patrick J. (2012), *The Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program: Summary of Final Reports*, SCDP Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program Report #36, February (School Choice Demonstration Project).

13. Rouse, Cecilia (1998), Private School Vouchers and Student Achievement, *Quarterly Journal of Economics* 113, 2: 553–602.

14. For Milwaukee enrolment caps, please see: <http://www.schoolchoicewi.org/index.php/research/issues/mpcp-enrollment-cap/>.

of enrolment, voucher students showed a five-percentage point improvement over the control group (students who applied but were not selected). By the fourth year, the improvement increased to 10.7 percent. Reading scores were also shown to improve between two and three percentage points in the first two years and up to 5.8 percent by year four.[15]

Greene followed up on his earlier study in 2009 with Professor Ryan H. Marsh to measure the effects of expanded school choice options following the expansion of the school choice program.[16] Their paper indicated that expanding voucher programs to include all types of private schools, for example religious-based schools, created an environment more suited to a student's individual needs by allowing parents to select schools that enabled their children to achieve the best educational outcomes. Their results also suggest that an increase of one standard deviation in private school options (equivalent to 37 schools receiving vouchers) coincided with a two-point (or one-tenth standard deviation) increase in student achievement across the remaining Milwaukee public schools as measured by the scores achieved on the standardized tests.[17]

Florida is also a popular region for research on school choice due to its educational reforms in the early 2000s.[18] Rajashri Chakrabarti (2007) of the Federal Reserve Bank of New York examined Florida's voucher and school grading programs. One of the many reforms implemented in Florida was the introduction of a school grading system. A school receives an "F" if it fails to meet minimum pass criteria on reading, writing, and math on Florida's Comprehensive Assessment Tests (FCATs).[19] Chakrabarti found that schools responded to the threat of failing (receiving an F) by focusing on students closest to the cut-off minimum criteria, yet "there seemed to be a rightward shift of the entire score distribution in reading, math, and writing", meaning higher performing students also improved.[20] Put differently, Chakrabarti found evidence

15. Greene, Jay, Paul Peterson, and Jiangtao Du (1998), School Choice in Milwaukee: A Randomized Experiment, in Paul Peterson and Bryan Hassel (eds.), *Learning from School Choice* (Brookings Institution): 335–336, <http://ocw.library.nenu.edu.cn/pluginfile.php/26356/mod_resource/content/1/Milwaukee%20School%20Choice.pdf>.
16. Greene and Marsh (2009), *The Effect of Milwaukee's Parental Choice Program*.
17. Greene and Marsh (2009), *The Effect of Milwaukee's Parental Choice Program*: 8.
18. Florida's school choice programs, introduced in 2002, provided students attending schools graded D to F with vouchers to attend higher performing schools. The voucher portion of the choice program was removed in 2006 but the letter grading portion for each school was kept in place. Other studies include: Figlio, David N., and Cecilia Elena Rouse (2006), Do Accountability and Voucher Threats Improve Low-Performing Schools? *Journal of Public Economics* 90: 239–255; Rouse et al. (2007), *Feeling the Florida Heat? How Low-performing Schools Response to Voucher and Accountability Pressure*, NBER Working Paper 13681, December (National Bureau of Economic Research); West, Martin R., and Paul E. Peterson (2005), The Efficacy of Choice Threats within School Accountability Systems: Results from Legislatively Induced Experiments (Annual Conference of the Royal Economic Society, University of Nottingham, March 23, 2005); Sass (2006). *Charter Schools and Student Achievement in Florida*.
19. Chakrabarti, Rajashri (2007), *Vouchers, Public School Response, and the Role of Incentives*, Federal Reserve Bank of New York Staff Report no. 306: 6.
20. Chakrabati (2007), *Vouchers, Public School Response, and the Role of Incentives*: 22–23.

that schools responded positively to the assessments imposed on them through standardized testing due to the risk of vouchers being offered to the students to go to other institutions.

More recently Patrick Wolf led a three-year study (subsequently updated with a fourth year) of the Washington, D.C. lottery scholarship program. Although a change in sample size between the third and fourth year reports resulted in statistical significance being missed ($p < 0.6$ was achieved on a $p < 0.5$ threshold) on improvements in math and reading skilling, the fourth year report found that, for the first time, the scholarship program significantly increased the probability that a student would graduate high school compared to the control groups. Overall, it was shown that students in Washington, D.C. who received vouchers, graduated high school at a rate of 82 percent compared to the control group who graduated at a rate of 70 percent.[21]

Professor Greene also examined Charlotte, North Carolina in a study for the Manhattan Institute in 2001. Greene's analysis concluded that low income students who received vouchers, had an approximate six-percent increase in math and reading scores in standardized tests.[22] This data was then re-analyzed in 2008 by Joshua Cowen who, despite using slightly different methods, also found a five to seven point increase in math scores and a six to eight percent point increase in reading.[23]

Deming et al. measured the impact of the Charlotte-Mecklenburg school choice lottery in 2002. He found that students from low-quality neighbourhood schools who participated in the lottery were more likely to earn a bachelor's degree and more than twice as likely as their counterparts to graduate from an elite university.[24] Specifically, lottery winners in low-quality samples were 7.5 percentage points more likely to complete a four-year bachelor's degree.[25] This study provides evidence that school choice programs are also important for providing students with long-term post-secondary success.

School choice programs have also been effective outside of the United States. Sweden, a prominent example, introduced in 1991 a voucher system

21. Wolfe, Patrick, Babette Gutmann, Michael Puma, Brian Kisida, Lou Rizzo, Nada Eissa, and Marsha Silverberg (2009), *Evaluation of the DC Opportunity Scholarship Program Impacts after Three Years* (Institute of Education Sciences and US Department of Education, March), <http://ies.ed.gov/ncee/pubs/20094050/>; Wolfe, Patrick, Babette Gutmann, Michael Puma, Brian Kisida, Lou Rizzo, Nada Eissa, Matthew Carr, and Marsha Silverberg (2010), *Evaluation of the DC Opportunity Scholarship Program Final Report* (Institute of Education Science and US Department of Education, June), <http://ies.ed.gov/ncee/pubs/20104018/pdf/20104018.pdf>: 50–51.

22. Greene, Jay. (2001). Vouchers in Charlotte: Vouchers and the Test Score Gap. *EducationNext* 1, 2 (Summer), <http://educationnext.org/vouchersincharlotte/>: 55–60.

23. Cowen, Joshua M. (2008), School Choice as a Latent Variable: Estimating the "Complier Average Causal Effect"' of Vouchers in Charlotte, *Policy Studies Journal* 36. 2: 301–315.

24. Deming et al. (2011). *School Choice, School Quality and Postsecondary Attainment*. NBER Working Paper 17438, September (National Bureau of Economic Research): 2–39.

25. Deming et al. (2011). *School Choice, School Quality and Postsecondary Attainment*: 21.

in its education system that provided independent schools with 85 percent of the costs of educating a student, which was raised to 100 percent in 1997.[26] A study by Mickael F. Sandstrom and Fredrik Bergstrom demonstrated that these reforms caused significant improvements in both test scores and final grades for students within public schools.[27] Moreover, contrary to the criticism of school choice that funding provided to independent schools will cause a mass exodus from the public system, independent schooling rose only to 11 percent of the total "market" in Sweden as of 2008.[28] The Swedish example therefore provides evidence that school choice programs can improve academic outcomes in public schools without a significant number of students leaving the public schooling system.[29]

The effect of school choice on the education system

Beyond the impact on students, school choice and competition can also have an effect on the broader educational system. The aforementioned article by Greg Forster, in addition to looking at student effects, also examined the impact of vouchers on the education system. He identified and examined 22 empirical studies looking at the impact of vouchers on education systems. Twenty-one of the 22 studies examined showed a positive impact on the general education system through school choice and competition. Such improvements were demonstrated by higher test scores across the affected region. None of the studies showed a negative effect and only one showed no discernible relationship between school choice and broader positive systemic impacts on education.[30]

Again, Professor Jay Greene was one of the first to study Florida's school choice program impacts on education systems. Although his first test in 2001 was inconclusive due to a limited sample size and the newness of the program, Greene followed up with the assistance of Marcus Winter in 2004. In this study,

26. Hepburn, Claudia, and John Merrifield (2006), *School Choice in Sweden: Lessons for Canada*, Studies in Education Policy (Fraser Institute): 5–6.

27. Sandstrom, Mikael F., and Fredrik Bergstrom (2005), School Vouchers in Practice: Competition Will Not Hurt You, *Journal of Public Economics* 89, 2: 351-380.

28. Ozimek, Adam (2012), Lessons on School Choice from Sweden, *Forbes* (March 12), <http://www.forbes.com/sites/modeledbehavior/2012/12/03/lessons-on-school-choice-from-sweden/>, as of September 3, 2013.

29. India provides another interesting example of school choice practices. Muralidharan and Sundararaman (2013) unsurprisingly found that government institutions tend to be run less efficiently than private institutions in education. This efficiency/productivity difference in Indian schools has resulted greater human capital growth in those students who attend private schools. Muralidharan, Karthik, and Venkatesh Sundararaman (2013), *The Aggregate Effect of School Choice: Evidence from a Two-stage Experiment in India* (National Bureau of Economic Research, September): 24, <http://www.nber.org/papers/w19441?utm_campaign=ntw&utm_medium=email&utm_source=ntw>. These results confirm the productivity research in: Bloom, Nicholas, and John Van Reenen (2010), Why Do Management Practices Differ across Firms and Countries? *Journal of Economic Perspectives* 24, 1: 205, <http://www.stanford.edu/~nbloom/JEP.pdf>.

30. Forster, Greg (2013). *A Win-Win Solution: The Empirical Evidence on School Choice*:14

he found that the threat of vouchers improved standardized test scores for not only for schools that have received an F ranking but also small gains for borderline schools.[31]

David Figlio and Cecilia Rouse (2005) found that the A+ school grading program in Florida was a cost effective method of improving school standards. As mentioned earlier in this paper, in Florida schools that averaged a failing grade (F) on standardized tests faced the threat of their students being offered vouchers to go to higher preforming schools.[32]

Hanley Chiang (2009) conducted similar work on Florida's voucher system and found that schools were clearly responsive to competition as a result of the threat of vouchers. Specifically, he found that schools not only increased test scores from the threat of sanctions but also increased spending for curriculum and pedagogical reform to improve their education quality.[33] As a result, at-risk schools began to target "on the bubble" students through school reforms in an effort to raise these students (and the school averages) over the passing threshold. Meanwhile, underperforming teachers were removed from the schools, while additional funds were spent in technology, classroom teaching assistants, and after-school programs.[34]

In a 2005 study, David Salisbury examined the fiscal benefits of school choice. He evaluated current and proposed school choice programs in the United States and also addressed several issues regarding state education budgets. He argued that, if Milwaukee voucher students would return to public schools, it would cost the school board $70 million in additional expenses.[35] Moreover, in Pennsylvania, savings from school choice programs were estimated to be between $147 million and $205 million annually.[36] Many opponents of school choice argue that the reduction in costs from school choice programs also means the loss of federal dollars for each student. However, Salisbury argued that a transfer of students to the private schools would not affect per-student funding in public schools and would allow states to slow the growing costs of education.[37]

Jay Greene and Greg Forster examined the Milwaukee school choice program and found, like Carnoy et al., that geographic proximity between

31. Greene and Winters (2004), Competition Passes the Test; Greene, Jay (2001), *An Evaluation of the Florida A-Plus Accountability and School Choice Program* (Manhattan Institute, February), <http://www.manhattan-institute.org/html/cr_aplus.htm>.
32. Figlio, David and Cecilia Rouse (2005), *Do Accountability and Voucher Threats Improve Low-Performing Schools* (National Bureau of Economics Research, August): 30–31, <http://www.nber.org/papers/w11597.pdf?new_window=1>.
33. Chiang, Hanley (2009), How Accountability Pressure on Failing Schools Affects Student Achievement, *Journal of Public Economics* 93: 1056.
34. Chiang (2009), How Accountability Pressure on Failing Schools: 1054.
35. Salisbury, David (2005), *Saving Money and Improving Education: How School Choice Can Help Reduce Education Costs*, Policy Analysis 551 (Cato Institute): 18.
36. Salisbury (2005). *Saving Money and Improving Education*: 18.
37. Salisbury (2005). *Saving Money and Improving Education*: 7.

public and private schools has no discernible impact on competitive responses from the public education system.[38] The impact of these findings is that when school choice options are offered the competitive impacts are felt across the jurisdiction and not just between public and private schools of close proximity, which ensures that the impacts of these policies are wide spread.

More recently, Benjamin Scafidi examined one of the major criticisms put forward by school choice opponents in a comprehensive study on the fiscal impact school choice.[39] Using evidence from a number of states and the District of Columbia, he analyzed how the loss of students affected the finances of public schools. Although schools lost funded students as a result of increased competition and choice, they were able to reduce instructional and support expenses at a greater rate, so the loss did not have a fiscal impact on the public school. Specifically, Scafidi found that as long as less than $7,967 per student is redirected from schools in the short term, the fiscal situation of the public school is either unaffected or improved.[40]

Parental perception of schools is another area of research on the school choice programs. Wolfe et al. in examining voucher programs in Washington, D.C. found that parents who had children receive and use vouchers held higher opinions of school quality and safety than parents who did not.[41] Although this finding may seem logical, satisfied parents are not only more likely to re-enroll in school choice programs but also become increasingly involved in their child's school and education.[42]

Another possible benefit emanating from school choice that is often overlooked is the potential to remove barriers resulting from a family's socio-economic status. By allowing choice, such a program can allow students from low-income families to attend schools outside of their school district, enabling parents to choose a different school in another neighbourhood, while vouchers can subsidize the cost to attend these institutions. This, in turn, can improve the children's education and improve their long-term earning potential.

Looking beyond a child's earning potential, Thomas J. Nechyba used voucher programs and private school attendance to study how school choice

38. Forster, Greg, and Jay Greene (2010), *The Effect of Milwaukee's Parental Choice Program on Student Achievement in Milwaukee Public Schools* (The School Choice Demonstration Project, University of Arkansas, April), <http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_11.pdf: 9; Carnoy, Martin, et al. (2007), *Vouchers and Public School Performance: A Case Study of the Milwaukee Parental Choice Program* (Economic Policy Institute).

39. Scafidi, Benjamin (2012), *The Fiscal Effects of School Choice Programs on Public School Districts* (Friedman Foundation for Educational Choice), <http://www.edchoice.org/CMSModules/EdChoice/FileLibrary/796/The-Fiscal-Effects-of-School-Choice-Programs.pdf>.

40. Scafidi (2012), *The Fiscal Effects of School Choice Programs*:15. Note that the $7,967 is based on US national averages. Each state has a different per-student funding level and a fixed-cost estimate that are required to be covered for the school to see no impact or fiscal improvement.

41. Wolfe et al. (2010), *Evaluation of the DC Opportunity Scholarship Program Final Report.*

42. Goldring, Ellen B., and Rina Shapira (1993), Choice, Empowerment and Involvement: What Satisfies Parents? *Educational Evaluation and Policy Analysis* 15: 406.

can break down socioeconomic barriers within cities. Using data from four New Jersey counties representative of different income brackets, Nechyba demonstrated that voucher policies can affect the evolution of residential districts.[43] Voucher programs can induce large population migrations when housing prices change due to changes in school quality. Since competition between private and public schools leads to improving school quality, school choice can in fact be a tool of socioeconomic change, with improving schools resulting in higher housing values within school districts and, in turn, greater wealth for families.[44]

While not definitive, the growing body of scholarly research on school choice and competition generally shows that competition does not have a negative impact on public school quality and can often have positive effects on academic outcomes generally. The evidence from several studies, across several states, provides significant evidence that school choice has positive outcomes for students. While these studies are based mostly on programs in the United States, their results demonstrate that school choice is important for improving the quality of education and can have meaningful effects on all school types.

Section two of this study delineates the availability of these different types of schools and the degree to which they provide parental choice and competition in education across Canada.

43. Nechyba, Thomas J. (2003), Introducing School Choice into Multidistrict Public School Systems, in Caroline M. Hoxby (ed.), *The Economics of School Choice* (University of Chicago Press): 145–194.
44. Nechyba (2003). Introducing School Choice: 191.

2. School Choice in Canada

The analysis contained in this section builds on the work of Claudia Hepburn and Bill Robson in their 2002 paper,[45] as well as on the foundational work of Professor Mark Holmes, a noted Canadian education scholar.[46] Each of these aspects of school choice and competition are measured in the following section.

Structure of K-12 education in Canada

Before delving into the measurement of school choice in Canada, it is worth reminding ourselves of the structure of K-12 education in Canada. K-12 education is almost entirely a provincial matter in Canada with no federal department, ministry, or minister dedicated to K-12 education. The federal government is only involved with the K-12 education of Aboriginal peoples and families in the military or the foreign services.[47] The absence of federal involvement provides the provinces with the authority and autonomy to implement their own unique systems. The decentralized nature of K-12 education has, not surprisingly, resulted in wide variations among the provinces regarding the funding and organization of K-12 education.

Each province has its own department or ministry of education that shares responsibility with local school boards. Generally speaking, the provincial ministries determine the curriculum standards, funding levels, and related issues while the school boards are responsible to implement the provincial standards, administer local regulations, and manage day-to-day school operations.

There are three types of schools[48] in the Canadian K-12 system upon which we will focus: (1) public schools, (2) independent schools, and (3) home-based

45. Robson, William and Claudia R. Hepburn (2002), *Learning from Success: What Americans Can Learn from School Choice in Canada*, School Choice Issues in Depth 1, 2 (Milton & Rose D. Friedman Foundation and Fraser Institute), <http://oldfraser.lexi.net/publications/critical_issues/2002/educationprimer.pdf>.

46. Holmes, Mark (2008), An Update on School Choice in Canada, *Journal of School Choice* 2, 2: 199–202. Of note, Holmes argued that each of these school choice options is limited in their own respect. Linguistic schools, largely Francophone, for example are not readily available in all locations and student enrolment can be restricted based on family background. Similarly, alternative schools such as those offering French immersion and International Baccalaureate (IB) programs are not available in all cities. Publicly funded Roman Catholic schools are only available in Alberta, Saskatchewan, and Ontario. Alberta remains the only Canadian province with charter schools. Finally, the availability of independent schools is often limited outside of major cities.

47. Information on Canadian Forces Dependent Education retrieved from: <http://www.afnorth-is.com/canadian-section/dem.htm>. Information on aboriginal education retrieved from: <http://www.aadnc-aandc.gc.ca/eng/1100100033601/1100100033605>, as of September 13, 2013.

48. A complementary form of K-12 education that is becoming increasingly popular are "proprietary schools". These organizations (such as Kumon or the Sylvan Learning Center) with the exception of their institutional structure, function in a manner similar to traditional after-school tutors and in general do not offer courses that are recognized by the Ministries of Education to fulfill grade requirements. As a result, they will not be examined in this paper.

schooling.[49] The following section assesses the extent of each of these three types of schooling by province. The data presented has been compiled using documents and data found either on the webiste of the respective provincial Ministry or Department of Education or through direct contact with representatives of the provincial governments.[50] The most recent, complete set of data for school choice available across Canada is for the 2009-10 school year.[51] For this reason, all the statistics presented in the following sections are for the 2009-10 school year, unless stated otherwise.

1. Public schools

This section measures and assesses the public systems of education in each of the provinces. For clarity and comparability, each type of public school is assessed separately before public education is treated in aggregate.

i. Anglophone public schools

Every province in Canada, with the exception of Quebec, has multiple Anglophone public school boards acting as its *primary* board of education. Public Anglophone school boards in Canada are secular and do not provide students with religious instruction.

Access and eligibility for entry to schools are usually determined for students based on the area within which they reside, with each region operating its own local school board. Most provinces use what are referred to as enrolment or catchment areas to segregate local populations, assigning them to a specific local school. Catchment areas are designated by the school board and the opportunities for choice vary among boards and provinces. As discussed

49. These categories generally include students who are registered in regular public school programs, independent schools, or educated at home. It excludes students in alternative types of education such as distance learning and tutoring programs as well as Aboriginal and adult students. With respect to Aboriginal students, each province has different options available for its Aboriginal students. Apart from the public system, most provinces also have federally funded schools for First Nations students with varying levels of autonomy over curriculum. Many Aboriginal schools are operated by bands directly and located on reserves. Because these schools are funded by the federal government and are specific to Aboriginal students, they are not discussed in this paper.

50. The figures presented in this paper are relative to total enrolment. For this paper, total enrolment includes students enrolled in fully funded religious and non-religious public schools and independent schools as well as home-schooled students attending K-12 education, unless otherwise mentioned. Adults attending continuing education programs or alternative programs, as well as Aboriginal students are not included. Therefore, the total enrolment figures might be different in some cases from those reported by provincial departments of education. For example, British Columbia reported a total enrolment of 649,950 in 2009-10. Using information provided by the BC Ministry of Education, we excluded aboriginal students attending aboriginal programs, adults attending alternate, continuing, and distance education (in public and independent schools), which result in an adjusted figure for total enrolment of 575,103. Similar adjustments have been done in other provinces. For details, see footnotes to the tables.

51. Please note that data for nine provinces is available for 2010-11. Unfortunately we were not able to secure independent school enrolment data from Ontario for 2010-11, so have used 2009-10 as the year of analysis. We assume the 2009-10 results are as reflective of the current situation as the 2010-11 data would have been, given that no significant reforms occurred in 2010-11 and the limited variationin school choice and competition from year to year.

previously, under such a system, the residential location determines the school. It is important to note, however, that some provinces, such as British Columbia, maintain an open enrolment policy.[52] Such a policy allows parents to choose schools outside of their catchment area if they are capable of covering transportation costs and assuming the preferred school has room.[53]

Every province also has public, Anglophone schools that offer French immersion programs, the students of which are included in their total enrolment numbers. These programs provide students with the opportunity to learn a portion of their subjects in French and the remainder in English. French immersion programs generally have larger catchment areas than standard schools within a district, which allows students to attend public schools outside their residential area because these programs are not offered at all schools. The presence of French immersion programs within the basic public education system provides parents with a limited degree of school choice depending on their linguistic preferences and the availability of space in such programs.[54]

Table 1 and Figure 1 contain data about Anglophone public school enrolment. The province of Newfoundland & Labrador maintains the highest rate of public Anglophone enrolment as a share of total school enrolment at 98.5 percent. Interestingly, three of the highest rates of public Anglophone enrolment among the provinces occur in Atlantic Canada with New Brunswick being the exception. Quebec has the lowest rate of public Anglophone enrolment in the country at 9.4 percent. The next lowest is Ontario at 63.3 percent.

ii. Francophone public schools

Every province in Canada also has at least one public Francophone school board, which provides additional choice to parents based on linguistic preferences.[55]

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52. Open enrolment policies allow students to attend any public school in their district despite their area of residence within that district, causing traditional public schools to be competitive amongst themselves and providing parents the right to send their child to whichever school they please. Guillemette, Yvan (2007), *Breaking Down Monopolies: Expanding Choice and Competition in Education*, C.D. Howe Institute Backgrounder 105, October (C.D. Howe Institute), <http://www.cdhowe.org/pdf/backgrounder_105.pdf>: 4.

53. Open catchment policies in Canada are largely unclear at a provincial level. Many provinces see this policy as a board-level issue and as a result leave the implementation (or lack of implementation) up to the individual school boards. This means that some provinces may be checkered with open and closed catchment policies depending on the board. British Columbia offers the best example of open catchment policies at the provincial level, as a student may attend a school outside his or her catchment area if he or she is of school age, a resident or British Columbia, and there is sufficient space in the receiving board. British Columbia, Department of Education (2002), *School Act* (Government of British Columbia), <http://www.bced.gov.bc.ca/legislation/schoollaw/revisedstatutescontents.pdf>: Part 2, Division 1, 2(2).

54. French immersion schools are in high demand in Canada, but face many accessibility issues. See <http://www.cbc.ca/news/canada/story/2012/10/24/census-french-immersion.html>. For example, in Vancouver, more than one hundred students were put into a lottery for only 36 spots for September 2013. See <http://www.cbc.ca/news/canada/british-columbia/story/2013/01/14/bc-vancouver-french-immersion.html>.

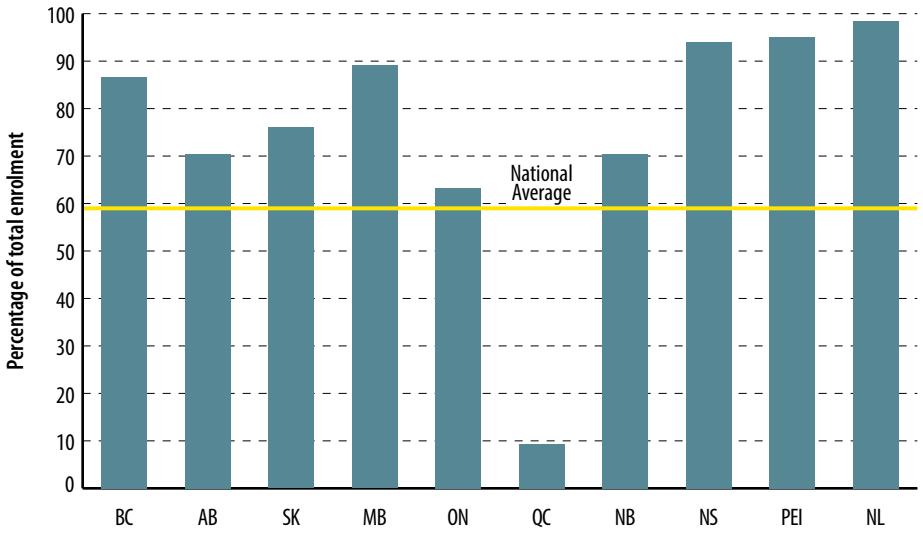
55. Under the Canadian Charter of Human Rights and Freedoms, Section 15, New Brunswick parents have equal rights to educate their children in both national languages. Alberta, Ontario, Quebec, and New Brunswick are the only provinces with multiple public Francophone school boards within their provinces. See <http://www.efc.ca/pages/law/charter/charter.text.html>.

Table 1: Anglophone enrolment, fully-funded, non-religious public schools, 2009-10

	Number	As percent of total enrolment		Number	As percent of total enrolment
BC	498,816	86.7	QC	94,992	9.4
AB	419,147	70.4	NB	75,974	70.4
SK	126,737	76.0	NS	126,008	94.1
MB	169,909	89.1	PEI	20,718	95.1
ON	1,378,218	63.3	NL	69,409	98.5

Notes and sources: see Appendix.

Figure 1: Anglophone enrolment, fully funded, non-religious public schools, 2009-10



Notes and sources: see Appendix.

These public schools offer a more intense, dedicated program of education based on French instruction than comparable French immersion programs in the Anglophone public system.

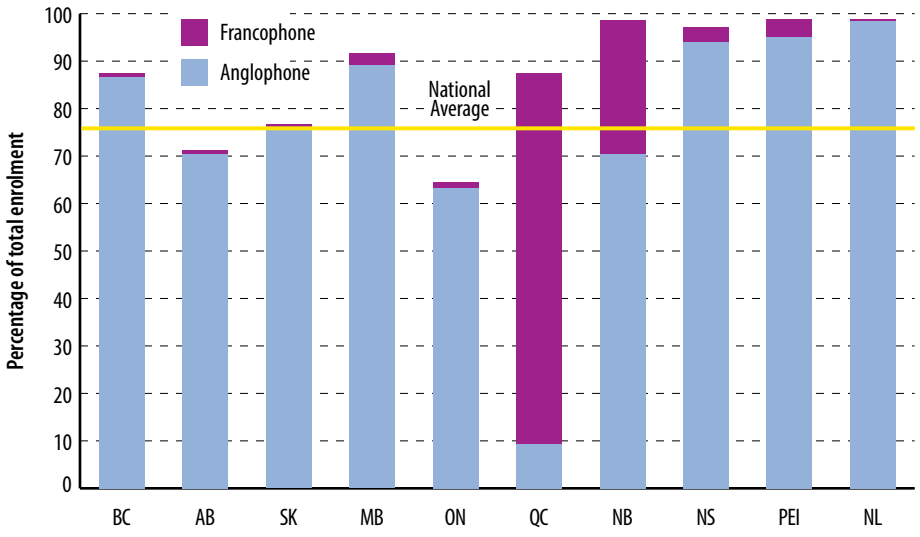
Quebec is the only province that has a public Francophone board as its *primary* school board. For a child to receive an Anglophone education in Quebec requires a substantial burden of proof on the part of the family.[56] For example, there are only nine Commissions Scolaires Anglophones (Anglophone school boards) in the province of Quebec, compared to 60 Commissions Scolaires Francophones (Francophone school boards).[57]

56. See articles 72 and 73 in *La Charte de la Langue Française* for an in-depth explanation of the burden of proof required before a child can attend an Anglophone school in Quebec. See <http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/C_11/C11.html>.
57. Quebec, Ministere de l'Education, du Loisir et du Sport (2011), *Statistiques de l'Education, Édition 2011* (Gouvernment de Quebec), <http://www.mels.gouv.qc.ca/fileadmin/site_web/documents/publications/SICA/DRSI/se2011-EditionS.pdf>: 27.

Table 2 extends the information from table 1 by adding data for public Francophone enrolment for each province. Figure 2 illustrates the share of total enrolment represented by both Anglophone and Francophone public enrolment by province. Francophone enrolment represents a fairly small share of the public school system as a whole except in Quebec, where Francophone enrolment represents 78.1 percent of total student enrolment, and New Brunswick, where it is 28.2 percent. These two provinces have large Francophone populations that explain the demand for Francophone public education: Quebec is primarily a Francophone province and New Brunswick is the only official bilingual province in Canada. The percentage of students enrolled in Francophone public schools in the remaining provinces ranges from 0.4 percent in Newfoundland & Labrador to 3.7 percent in Prince Edward Island.

The combination of public Anglophone school boards and one or more public Francophone school boards represent the total public education in most provinces. Choice for parents within the public system is, therefore, limited to the degree to which there is provision for parallel Francophone education—or, in the case of Quebec, for Anglophone education—and the extent of open enrolment in each of the provinces. In every province except Alberta, Saskatchewan, and Ontario, the combination of Anglophone and Francophone schools represent total public schooling. In the Atlantic provinces, for instance, public Anglophone and Francophone enrolment represents almost all of the students in the provinces, accounting for more than 97 percent of students in each of the four provinces (table 2). British Columbia, Alberta, Saskatchewan, Ontario, and Quebec all have less than 90 percent of their students enrolled in Anglophone or Francophone public schools.

Figure 2: Anglophone and Francophone enrolment, fully funded, non-religious public schools, 2009-10



Notes and sources: see Appendix.

Table 2: Anglophone and Francophone Enrolment, fully-funded, non-religious public schools, 2009-10

	Anglophone		Francophone		Anglophone and Francophone	
	Number	% of Total Enrolment	Number	% of Total Enrolment	Number	% of Total Enrolment
BC	498,816	86.7	4,369	0.8	503,185	87.5
AB	419,147	70.4	4,694	0.8	423,841	71.2
SK	126,737	76.0	1,231	0.7	127,968	76.8
MB	169,909	89.1	4,872	2.6	174,781	91.7
ON	1,378,218	63.3	23,555	1.1	1,401,773	64.4
QC	94,992	9.4	786,643	78.1	881,635	87.5
NB	75,974	70.4	30,420	28.2	106,394	98.6
NS	126,008	94.1	4,214	3.1	130,222	97.3
PEI	20,718	95.1	798	3.7	21,516	98.8
NL	69,409	98.5	256	0.4	69,665	98.8

Notes and Sources: see Appendix.

iii. Separate public schools

Alberta, Saskatchewan, and Ontario[58] also provide separate, fully funded public schools based on religious preferences that augment the non-religious public schools discussed previously.[59] Most separate schools in the three provinces are Catholic. Catholic schools in other provinces are considered independent or private schools and do not receive public funding.[60]

It is important to note, however, that the strict religious nature of some of these separate public schools has been eroded over time. For instance, some publically funded separate schools, especially among secondary schools, no

58. Quebec and Newfoundland & Labrador historically had separate public school boards but both were prohibited for constitutional reasons in 1988 and 1998, respectively. See: Holmes (2008). An Update on School Choice in Canada: 201.

59. The funding of separate school boards has been controversial in Canada. Canada has a large, multicultural immigrant population with many different religious and ethnic backgrounds. Some non-Catholic religious minorities interpret the funding of separate, Catholic schools to be discriminatory, as other religious or linguistic schools are not fully funded by the provincial Ministry of Education. The funding of separate schools in Ontario has recently become a greater issue, with legal cases taken to the Supreme Court and the United Nations Human Rights Committee. In *Waldman v. Canada*, Mr. Waldman, a Jewish parent, filed a complaint that Ontario was discriminatory for only subsiding Catholic education and failing to provide funding to other religious schools. While the United Nations did rule in favour of Mr. Waldman, the case is not legally binding and no subsequent action has been taken to address the ruling. For full case information, see: *Arieh Hollis Waldman* (Initially represented by Mr. Raj Anand from Scott & Aylen, a law firm in Toronto, Ontario) *v. Canada*, Communication No. 694/1996, U.N. Doc. CCPR/C/67/D/694/1996 (5 November 1999), <http://www1.umn.edu/humanrts/undocs/session67/view694.htm>.

60. Catholic schools represent 33.6 percent of all independent schools in British Columbia. Clemens, Jason (2012), *Wait Lists for Independent Schools in British Columbia's Lower Mainland*, Studies in Education Policy (Fraser Institute): 21. Interestingly, data collected for this study indicated that 51 percent of Catholic schools in British Columbia had a waiting list for new students.

longer have strict regulations about accepting only Catholic students. Many school boards, for instance, now allow non-Catholic students to attend these schools if there is enough room, similar to the open enrolment policy offered by some public school boards.[61]

Table 3 and **Figure 3** contain information about student enrolment as a share of total enrolment for separate schools in Alberta, Saskatchewan, and Ontario. Note that Alberta and Ontario offer not only Anglophone separate schools but also Francophone separate schools. In other words, these two provinces offer a combination of linguistic and religious diversity within the publicly funded system simultaneously. Total separate school enrolment in the three provinces, including both Anglophone and Francophone enrolment, accounts for a meaningful portion of the total student enrolment, ranging between 21.1 percent in Saskatchewan (no Francophone option) to 30.3 percent in Ontario (table 3 and figure 3).

Separate schools provide additional choice both by accommodating religious preferences as well as by accepting non-religious students. Such choice contributes to competition within the public education system by providing mostly Catholic students willing to switch between school types with alternative choices within the public school system.[62]

Separate Francophone as well as separate Protestant boards also exist in Canada. As noted, Alberta and Ontario both offer fully funded separate, Francophone school boards as part of their public education system. Alberta offers one separate Francophone school board in the Calgary area, which educates 951 students.[63] Ontario, on the other hand, has eight local separate Francophone school boards across the province covering 70,278 students.[64]

Because of historical considerations and agreements, certain provinces offer a separate, Protestant school board, which is fully funded by the Ministry of Education. Alberta, Saskatchewan, and Ontario each have one Protestant Separate School Board as part of its public education system: the St. Albert Protestant Separate School District no. 6 in Edmonton, Alberta,[65] the Englefeld Protestant Separate School District 132 in Englefeld, Saskatchewan, and the Penetanguishene Protestant Separate School Board in Penetanguishene, Ontario.

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61. Davies, Scott (2013), Are There Catholic School Effects in Ontario, Canada? *European Sociological Review* 29, 4 (August): 871–883.
62. Card, David, Martin Dooley, and A. Abigail Payne (2008), *School Choice and the Benefits of Competition: Evidence from Ontario*, C. D. Howe Institute Backgrounder 115 (C.D. Howe Institute): 2.
63. Based on 2012/2013 enrolment data, available at <http://education.alberta.ca/department/stats/students.aspx>.
64. Based on 2010/2011 enrolment data. Calculated by the authors based on information sent directly by the Ontario Ministry of Education through a Request of Information (ROI).
65. In 2011, the St. Alberta Protestant Separate School District in Alberta switched from a Separate board to a Public board. Due to an historical anomaly, the Catholic School Board in the city was categorized as public while the Protestant School Board was categorized as separate. The decision switched the categorization of both schools. Both school boards remain fully funded. For a summary of the change, see: <http://www.stalbertgazette.com/article/20120225/SAG0801/302259988/-1/sag/st-albert-protestant-school-board-concerned-about-loss-of-rights>.

Table 3: Anglophone and Francophone Enrolment, fully-funded, religious public schools (separate schools), 2009-10

	Anglophone		Francophone		Anglophone and Francophone	
	Number	% of Total Enrolment	Number	% of Total Enrolment	Number	% of Total Enrolment
AB	135,720	22.8	871	0.1	136,591	22.9
SK	35,184	21.1	0	0.0	35,184	21.1
ON	590,196	27.1	69,421	3.2	659,617	30.3

General notes

1. Based on total head count enrolment, not full-time equivalent. 2. Total enrolment includes students enrolled in fully-funded religious and non-religious public schools and independent schools as well as homeschooled students attending K-12 education, unless otherwise mentioned. Adults attending continuing education programs and/or alternative programs, as well as Aboriginal students are not included. 3. Data includes students enrolled in French Immersion programs. 4. Home Education can be included within the public school count or a separate count depending on the province. 5. Numbers either taken directly from Ministry of education documents or calculated using mulitple documents.

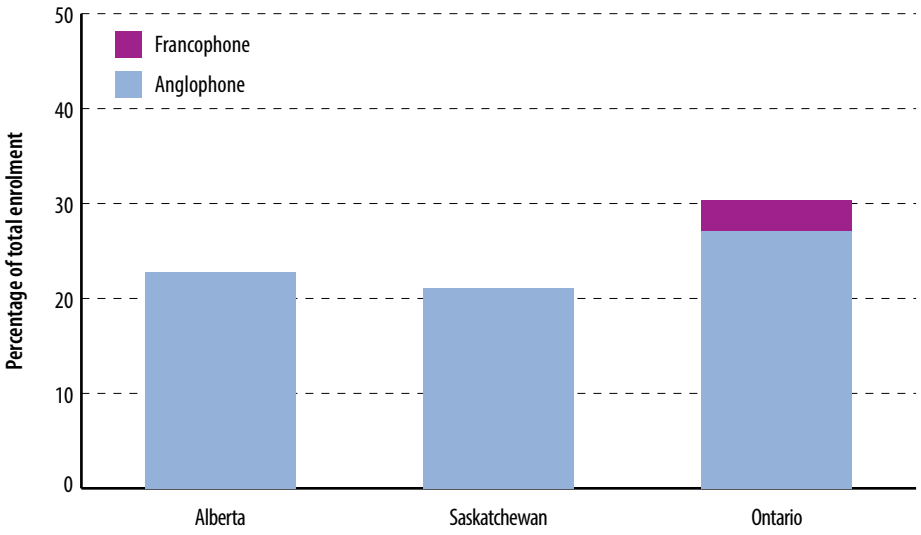
Specific notes

AB 1. Total public enrolment includes Charter Schools enrolment. 2. Early child services (ECS) include pre-kindergarten and kindergarten students and cannot be disaggregated. For this reason, enrolment numbers includes pre-kindergarten students.
SK 1. Total enrolment includes adults non-residents attending Saskatchewan schools.

Sources

AB Alberta Education, *Student Population by Grade, School, and Authority, 2009/2010 School Year*, <http://www.education.alberta.ca/apps/eireports/pdf_files/iar1004_2010/iar1004_2010.pdf>; and information sent by email by the Ministry.
SK Calculations made by the authors based on information sent directly by the Department of Education (snapshot as of November 15, 2013).
ON Ministry of Education, *Education Facts*, <http://www.edu.gov.on.ca/eng/educationFacts.html>; and calculations by the authors based on information sent directly by the Ontario Ministry of Education through a Request of Information (ROI).
Calculations by authors.

Figure 3: Anglophone and Francophone enrolment, fully funded, religious public schools (separate schools), 2009-10



Notes and sources: see table 3.

Table 4: Enrolment, fully-funded public schools, 2009-10

	Non-religious				Religious		Total	
	Anglophone	% of Total Enrolment	Francophone	% of Total Enrolment	Anglophone and Francophone	% of Total Enrolment	Total non-religious and religious	% of Total Enrolment
BC	498,816	86.7	4,369	0.8	0	0	503,185	87.5
AB	419,147	70.4	4,694	0.8	136,591	22.9	560,432	94.1
SK	126,737	76.0	1,231	0.7	35,184	21.1	163,152	97.9
MB	169,909	89.1	4,872	2.6	0	0	174,781	91.7
ON	1,378,218	63.3	23,555	1.1	659,617	30.3	2,061,390	94.7
QC	94,992	9.4	786,643	78.1	0	0	881,635	87.5
NB	75,974	70.4	30,420	28.2	0	0	106,394	98.6
NS	126,008	94.1	4,214	3.1	0	0	130,222	97.3
PEI	20,718	95.1	798	3.7	0	0	21,516	98.8
NL	69,409	98.5	256	0.4	0	0	69,665	98.8

Notes and Sources: See Appendix and table 3.

Table 4 and Figure 4 combine the data for publicly funded education presented thus far in order to calculate the total percentage of enrolment in each province represented by the public system, including linguistic and religious education options offered within the public system. As is clear from the data for public school enrolment in table 4, the vast majority of students in Canada attend public schools. The range of public school enrolment varies from a low of 87.5 percent in Quebec and British Columbia to 98.8 percent in Prince Edward Island and Newfoundland & Labrador.

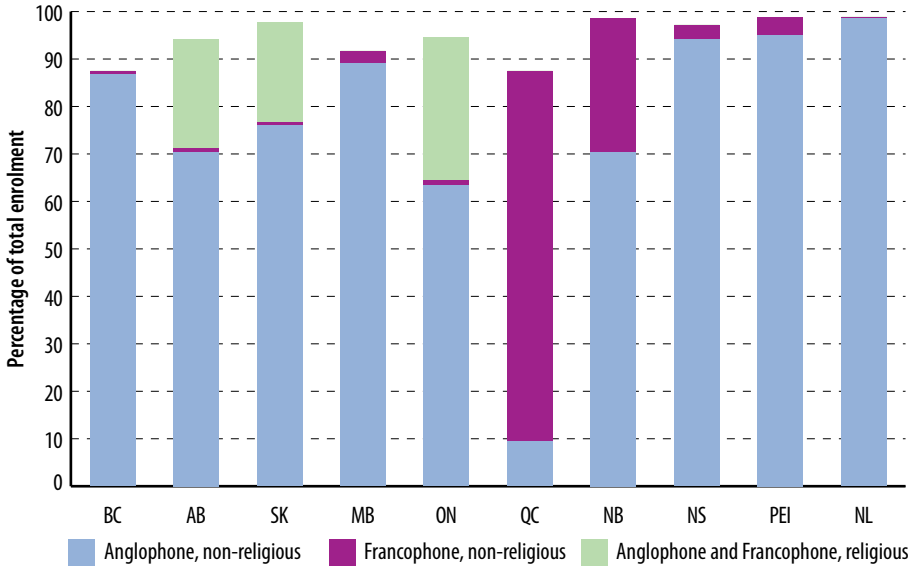
The key, however, is to understand that some level of choice is offered to parents within the existing public systems across the country. Some provinces, such as Ontario and Alberta, offer parents quite a bit of choice within the public system and impose competition by offering multiple public schools. Such choices, however, are largely limited to linguistic and religious alternatives to standard public education.

iv. Charter schools in the public system

There are also charter schools to consider, which despite popular perception, are part of the public, not the private, education system. Charter schools are autonomous, not-for-profit schools within the public system that provide alternative education programs to complement the public system and generally have greater discretion in selecting curriculum and teaching and learning styles than public schools. In addition, teachers at charter schools are not normally required to be active members of the respective teachers' union.[66]

66. Alberta does not require Charter school teachers to be active members of the Alberta Teachers Association (ATA). Alberta, Department of Education (2011), *Charter Schools Handbook, 2011*. Government of Alberta, <http://education.alberta.ca/media/434258/charter_hndbk.pdf>: 9.

Figure 4: Enrolment, public Anglophone, public Francophone, and separate schools, 2009-10



Notes and sources: see Appendix and table 3.

Perhaps the most attractive feature of charter schools is their autonomy, which allows them to cater to students whose needs are not met in the public system.[67] These schools can design their curriculum to meet the needs of students marginalized in traditional public schools. In this respect, charter schools demonstrate that "students have different needs and that not all parents share the same values or educational goals".[68] This autonomy is crucial to their ability to deliver a unique program to students not available in the traditional public school system.

Unlike the United States, which has experimented broadly with charter schools,[69] Canada's experience with charter schools is quite limited. Currently,

67. Bosetti, Lynn (2001), The Alberta Charter School Experience, in Claudia R. Hepburn (ed.), *Can the Market Save Our Schools?* (Fraser Institute): 103.

68. Bosetti, Lynn (2001): The Alberta Charter School Experience:113.

69. In the United States, enrolment in charter schools has increased by 59 percent since 2007. Although criticisms of school choice suggest this change will cause public school quality to decline, new studies argue that school districts do in fact respond to competitive pressure, most commonly by cooperating and collaborating with the local charter schools and improving student recruitment efforts. Holley, Mark J., Anna J. Egalite, and Martin F. Lueken (2013), Competition with Charter Schools Motivates Districts: New Political Circumstances, Growing Popularity. *Education Next* 13, 4, <http://educationnext.org/competition-with-charters-motivates-districts/>: 29–35. General studies on the impact of Charter schools include: Booker et al. (2009), *Achievement and Attainment in Chicago Charter Schools* (RAND Corporation), <http://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR585-1.pdf>; Bettinger, Eric P. (2005), The Effect of Charter Schools on Charter Students and Public Schools, *Economics of Education Review* 24, 2: 133–147; Betts, Julian R., and Y. Emily Tang (2011), *The Effect of Charter Schools on Student Achievement: A Meta-Analysis of the Literature* (National Charter School Research Project), <http://www.econ.ucsd.edu/~jbetts/Pub/A75%20pub_NCSRP_BettsTang_Oct11.pdf>; and Raymond, Margaret (2009), *Multiple Choice: Charter School Performance in 16 States* (Center for Research on Education Outcomes, Stanford University). For Massachusetts, see: Angrist et al. (2011), *Who Benefits from KIPP?* IZA DP 5690, <http://economics.mit.edu/files/6965>, as of December 5, 2013; for North Carolina, see: Bilfulco, Robert, and Helen F. Ladd (2006), The Impacts of Charter Schools on Student Achievement: Evidence from North Carolina, *Education Finance and Policy* 1, 1:

Alberta is the only province to offer charter schools, with legislation allowing a total of 15 schools in the province. Currently, 13 charter school authorities accounting for approximately 1.3 percent of the province's total enrolment has been established.[70] Out of these 13 schools, six are located in the Calgary region, three in the Edmonton region, and the remaining four elsewhere in the province.[71] The two outstanding charter schools that are allowed under current legislation have yet to be established.

In Alberta, charter schools must be authorized by the Ministry of Education after proving that the local school board currently does not provide the service that they propose to offer and will not provide the service going forward.[72] Although charter schools have operated on a five-year term before renewal was required, recent changes increased the period for renewal to every 15 years.[73] Should the local school board begin to provide the same services as the charter school, this is grounds for non-renewal of the school's charter. While charter schools do have more autonomy than traditional public schools, they are still accountable to the Ministry, school boards (must maintain similar standards), parents, and the broader community. They receive full funding from the Ministry of Education, provided they do not deny students access, have a religious affiliation, or charge tuition.[74]

Currently many of these charter schools have long waiting lists for admittance, with the six charter schools in Calgary having a list of over 8,000 prospective students.[75] Despite this waiting list, Alberta's government appears to have no plan to raise the current legislative cap of 15 total charter schools or to encourage the creation of two new charter schools to reach the threshold.[76]

50–90; for New York City, see: Hoxby, Caroline M., and Sonali Murarka (2009), *Charter Schools in New York City: Who Enrolls and How They Affect Their Students' Achievement* (National Bureau of Economic Research), <http://www.nber.org/~schools/charterschoolseval/nyc_charter_schools_technical_report_july2007.pdf>; for Michigan, see: Ni, Yongmei (2007), *Are Charter Schools More Racially Segregated than Traditional Public Schools?* Policy Report #30 (Education Policy Center at Michigan State University), <http://files.eric.ed.gov/fulltext/ED498628.pdf>.

70. Calculated from the 2012-13 enrolment data published by the Alberta's Department of Education. See: Alberta, Department of Education (2013), *Student Population by Grade, School and Authority, 2012-2013*, <http://education.alberta.ca/apps/eireports/pdf_files/iar1004_2013/iar1004_2013.pdf>.

71. The Association of Alberta Public Charter Schools (2011), *Our Members*, <http://www.taapcs.ca/members.html>, as of July 29, 2013.

72. Alberta, Department of Education (2011), *Charter Schools Handbook, 2011* (Government of Alberta), <http://education.alberta.ca/media/434258/charter_hndbk.pdf>: 32.

73. *CBCNews* (2013), Minor Regulation Changes Made for Coveted Charter Schools (March 2), <http://www.cbc.ca/news/canada/calgary/minor-regulation-changes-made-for-coveted-charter-schools-1.1274695>, as of September 5, 2013.

74. For a comprehensive summary of regulations to which Charter Schools must adhere to receive funding, see: Alberta, Department of Education (2011), *Charter Schools Handbook, 2011*.

75. *CBC News* (2013), Charter School Hopefuls Face Long Waitlists (Sept 6), <http://www.cbc.ca/news/canada/calgary/story/2013/09/05/calgary-charter-schools-wait-lists-edu.html>, as of September 13, 2013.

76. Government of Alberta (2009), *Charter School Concept Paper* (October), <http://education.alberta.ca/media/6389633/abed_charterschoolconceptpaper_web%20pdf.pdf>, as of September 13, 2013.

Public enrolment conclusion

Table 5 and figure 5 extend the data presented in table 4 and figure 4 to include charter schools, and so capture the entirety of the public education system in Canada.[77] Given the small number of students in charter schools in Alberta, the numbers differ only slightly from those presented in table 4 and figure 4, and only for Alberta. Specifically, Alberta went from having 94.1 percent of students enrolled in public schools (table 4) to 95.4 percent in public schools once charter schools were included. It is worthwhile noting that the presence of even a limited number of charter schools in Alberta extends the choice (and nature of that choice) enjoyed by parents and the degree of competition imposed on public schools.

2. Independent schools

Independent schools are characterized by alternative approaches to teaching, academic focus, and religious orientation.[78] Alternative academic schools include Waldorf and Montessori schools. Most religiously defined independent schools in Canada are either Catholic (in provinces without a separate, fully funded public school board) or Christian. Some provinces also have Islamic, Jewish, Mennonite, Amish, and other denominational schools. Religiously defined schools usually offer similar courses to the public system while incorporating additional religious courses.

All provinces in Canada have independent schools,[79] some of which are eligible to receive government (provincial) funding, depending on the province where they operate. Independent schools in these provinces must register with their respective ministry of education and must meet and maintain certain criteria to qualify for funding, including use of a provincially approved curriculum. Currently, the governments of Alberta, British Columbia, Manitoba, Quebec, and Saskatchewan[80] offer a percentage of funding for students wishing to attend an independent school.

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77. The sum of percentages of total public, independent, and home-schooled enrolment provided in this paper for the provinces in some cases do not tally to 100% because home-schooled enrolment may be included in the public and/or independent school count or in a separate count, depending on the province.

78. For a comprehensive list of different types of private schools in Ontario, see: Van Pelt, Deani A., Patricia A. Allison, and Derek J. Allison (2007), *Ontario's Private Schools: Who Chooses Them and Why?* Studies in Education Policy, May (Fraser Institute). While this list is specific to Ontario, the three main categories (academically defined, religiously defined, and special) are reflective of many independent schools within Canada.

79. In Ontario, Quebec, and the Atlantic provinces, independent schools are called "private schools". For the purpose of this paper, private schools will be referred to as independent schools.

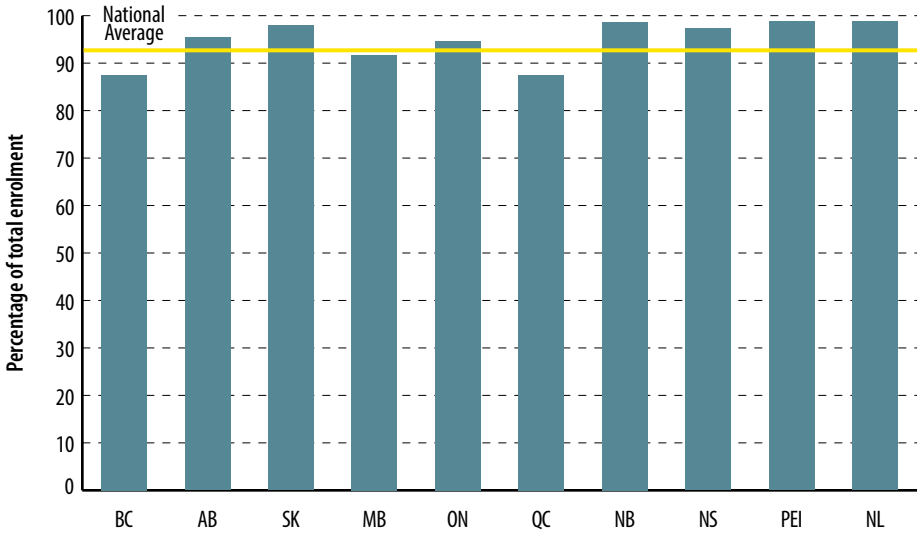
80. Saskatchewan has two unique types of independent schools. Firstly, Historical High Schools receive funding because they were labeled as "schools of necessity" at a time when public schools were not available in all areas. They are still funded 70% of the provincial public school funding per student; however, additional schools cannot be added to the current list. Saskatchewan also has Associate Schools, which are independent, faith-based schools that receive 80% of provincial funding per student. Since Associate Schools operate with the local school board, the student enrolment count is included in the public school

Table 5: Total Public enrolment, 2009-10

	Number	Percent of total enrolment		Number	Percent of total enrolment
BC	503,185	87.5	QC	881,635	87.5
AB	567,979	95.4	NB	106,394	98.6
SK	163,152	97.9	NS	130,222	97.3
MB	174,781	91.7	PEI	21,516	98.8
ON	2,061,390	94.7	NL	69,665	98.8

Notes and Sources: See Appendix and table 3.

Figure 5: Total public enrolment, 2009-10



Notes and sources: see Appendix and table 3.

Most provinces require their independent schools to adhere to certain government regulations in order to receive funding. Notably, independent schools in Quebec must "operate with budgets similar to, if slightly smaller, than those of public schools".[81] Caldas and Bernier argue that, because the government imposes heavy regulation on private schools yet offers significant funding, Quebec independent schools actually act as charter schools.[82] Independent schools in other provinces, such as British Columbia and Alberta, could also

total instead of the total for independent school enrolment. For more information on Historical High Schools, see: Saskatchewan, Ministry of Education (2012), *Handbook for Registering in an Independent School in Saskatchewan*, <http://www.education.gov.sk.ca/handbook-register-independent-school>: 6; and Saskatchewan, Ministry of Education (2013), *Saskatchewan Manual of Funding, 2013/2014*, <http://www.education.gov.sk.ca/funding-manual>: 78. For more information on Associate Schools, see: Saskatchewan, Department of Education (2013), *Saskatchewan Manual of Funding, 2013/2014*: 45, 70.

81. Caldas, Stephen J., and Sylvain Bernier (2012), The Effects of Competition from Private Schooling on French Public School Districts in the Province of Quebec, *The Journal of Educational Research* 105: 354–365.

82. Caldas and Sylvain (2012), The Effects of Competition from Private Schooling: 354.

be described as acting like charter schools because of the regulations imposed by these provinces as a condition of funding, particularly with respect to the use of a provincially approved curriculum.

Independent school funding formulas and amounts are different in each province. For example, "in British Columbia and Manitoba, amount per student is a function of the funding of the public school district in which the private school is located".[83] In British Columbia, Group 1 schools are eligible to receive 50 percent of their funding per student (operating funding only) while Group 2 schools are eligible to receive 35 percent of their funding per student. These groups are determined by comparing their operating costs with local public schools within the region.[84] Quebec has a similar formula whereby the amount of the per-student subsidy given to private schools is revised yearly to reflect the subsidy given to public schools.[85] This makes the amount of funding of each private school directly based on the region in which it is located, although generally the funding level is about 60 percent of the amount given to public schools.

Table 6 summarizes the available funding by province for independent schools. In Alberta, the total funding provided by the Department of Education for accredited independent schools amounts to 60 to 70 percent of the base instruction rate.[86] Saskatchewan and Manitoba both offer 50 percent funding for tuition.[87] Moreover, Saskatchewan also has Historical High Schools, which are funded 70 percent, and Associate Schools, which are funded 80 percent, due to agreements with the local school boards in the region within which they reside.[88]

Table 7 presents the enrolment data and **figure 6** illustrates it for independent schools across the country. Quebec and British Columbia have the highest independent school enrolment at 12.5 percent and 12.1 percent, respectively. Both provinces provide funding to independent schools. New Brunswick and

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83. Teyssier, Ronan (2011), The Organizational and Electoral Determinants of the Provincial Funding of Private Education in Canada: A Quantile Regression Analysis, *Canadian Journal of Political Science / Revue canadienne de science politique* 44, 4 (December): 831.

84. British Columbia, Ministry of Education (no date), *Grants to Independent Schools*, <http://www2.gov.bc.ca/gov/topic.page?id=699A7E1C76EF494D9918D067921A86F1&title=Grants%20to%20Independent%20Schools>, as of January 24, 2014.

85. Lefebvre, Pierre, Philip Merrigan, and Matthieu Verstraete (2011), Public Subsidies to Private Schools Do Make a Difference for Achievement in Mathematics: Longitudinal Evidence from Canada, *Economic of Education Review* 30: 82.

86. Alberta, Department of Education (2013), *Alberta Funding Manual 2013/2014*, <http://education.alberta.ca/media/6858020/part83privateschoolrates.pdf> : 82.

87. Government of Saskatchewan (2011), Education Minister Announces Funding for New Category of Independent Schools, Changed Funding for Associate Schools (December 21), <http://www.gov.sk.ca/news?newsId=92fd507e-7e47-45ad-aaf4-4cebd32981fb>, as of September 12, 2013; Owens, Dennis (2006), *Why are Parent? Paying Twice? Ending Two-Tier Education* (Frontier Centre for Public Policy), <http://www.fcpp.org/pdf/FB048AlternativeEducation.pdf>, as of January 24, 2014.

88. For more information, see: Saskatchewan, Ministry of Education (2012), *Handbook for Registering in an Independent School in Saskatchewan*; and *Saskatchewan Manual of Funding, 2013/2014*.

Table 6: Independent School Funding in Canada

	Eligible funding (%)		Eligible funding (%)
BC	35–50	MB	50
AB	60–70	QC	60
SK	50–80		

Note
SK Independent school funding differs for Historical High Schools and Associate Schools.

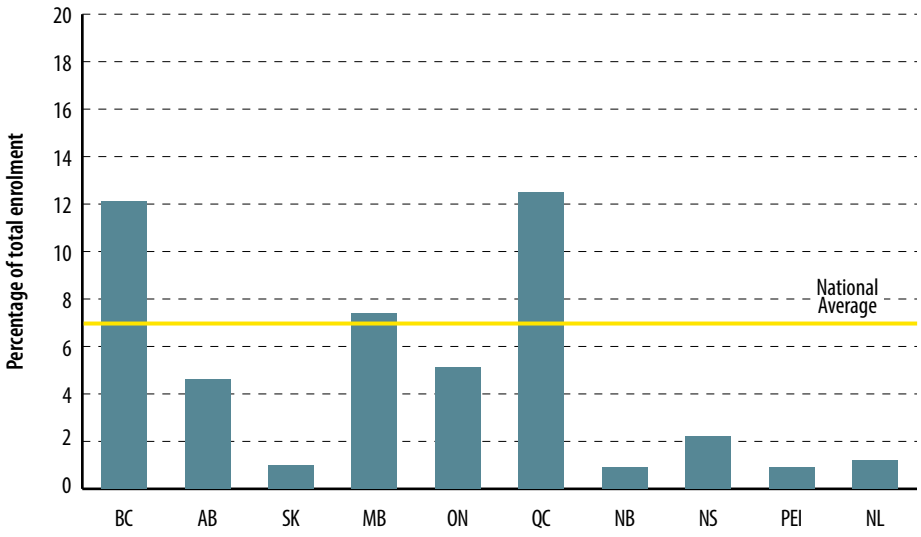
Sources
BC BC Ministry of Education, *Grants to Independent Schools*, <http://www2.gov.bc.ca/gov/topic.page?id=699A7E1C76EF494D9918D067921A86F1&title=Grants%20to%20Independent%20Schools>.
AB Alberta Education, *Accredited Funded Private Schools Funding Rates*, <http://education.alberta.ca/media/6858020/part83privateschoolrates.pdf>; *School choice, Private schools*, <http://education.alberta.ca/parents/choice/private.aspx>.
SK Government of Saskatchewan (Dec 21, 2011), *Education Minister Announces Funding for New Category of Independent Schools, Changed Funding for Associate Schools*, News release, <http://www.gov.sk.ca/news?newsId=92fd507e-7e47-45ad-aaf4-4cebd32981fb>.
MB Frontier Centre for Public Policy (October 2006), *Why Are Parents Paying Twice?* <http://www.fcpp.org/pdf/FB048AlternativeEducation.pdf>.
QC Frontier Centre for Public Policy (October 2006), *Why Are Parents Paying Twice?*

Table 7: Independent Enrolment, 2009-10

	Number	Percent of total enrolment		Number	Percent of total enrolment
BC	69,455	12.1	QC	125,913	12.5
AB	27,426	4.6	NB	990	0.9
SK	1,593	1.0	NS	2,949	2.2
MB	14,172	7.4	PEI	206	0.9
ON	111,168	5.1	NL	830	1.2

Notes and Sources: See Appendix.

Figure 6: Independent enrolment, 2009-10



Notes and sources: see Appendix.

Prince Edward Island maintain the lowest rate of independent school enrolment as a share of total enrolment at 0.9 percent, followed by Saskatchewan at 1.0 percent of total enrolment (table 7).

Interestingly, Ontario has a higher percentage (5.1 percent) of students enrolled in independent schools than Alberta (4.6 percent) and Saskatchewan (1.0 percent), two of the five provinces that provide financial support for independent schools. In contrast, Ontario does not provide financial support for independent schools. Moreover, Ontario does not require its independent schools to adhere to provincial curriculum and related regulations, which provides independent schools in Ontario a degree of autonomy to create their own programs, hire teachers based on their school mission, and respond directly to the needs of their parents and students in a way that is distinctly different from other independent schools in much of the country.[89]

Independent schools should rightfully been seen as important complements to the public systems of education across the country. They provide additional choice and competition across a wide range of educational factors including approaches to teaching, religious and linguistic orientation, and alternative educational approaches.

3. Home schooling

The final type of education examined is home schooling, where parents have opted to educate their children themselves. Parents in every Canadian province are legally entitled to educate their children at home according to Article 29 of the Canadian Charter of Rights and Freedoms. Some provinces allow parents more discretion in their choice to home educate, solely requiring a notification to the local school board, while others require approval of education plans prior to beginning home schooling as well as reports on the student's progress.[90] Reasons including ideological, pedagogical, improving family relationships by providing a more open schedule, and protecting their children against peer pressure and other negative influences have contributed to the growth of home schooling in Canada in the past 20 years.[91]

Currently, only Alberta offers funding directly to parents who choose home schooling for their children. Specifically, Albertans choosing to home school can receive up to $1,641 with additional amounts depending on funding formulas.[92]

89. Aurini, Janice, and Linda Quirk (2011), Does Market Competition Encourage Strategic Action in the Education Sector? *Canadian Journal of Sociology* 36, 3: 179.

90. For an overview of Canadian home schooling, see Basham, Patrick, John Merrifield, and Claudia R. Hepburn (2007), *Home Schooling: From the Extreme to the Mainstream, 2nd edition*, Studies in Education Policy (Fraser Institute): 6.

91. Arai, A. Bruce (2000), Reasons for Home Schooling in Canada, *Canadian Journal of Education* 25, 3: 204–217, <http://www.csse-scee.ca/CJE/Articles/FullText/CJE25-3/CJE25-3-arai.pdf>.

92. Alberta, Department of Education (2013). *Funding Manual for School Authorities 2013/2014 School Year*, <http://education.alberta.ca/media/7407830/2013-2014%20funding%20manual-updated.pdf>, as of September 13, 2013: 78.

Parents are eligible for this funding only after they register their child with the school board, prove that they reside in the province, and, in the case of some grants, present receipts for eligible expenses. As a result, however, there are likely a number of unregistered students within the province.

Saskatchewan offers some reimbursements or financial assistance for parents choosing to educate their children at home, depending on the school district the student is registered with.[93] Other provinces allow home educated students to enroll in specific school courses, participate in school extracurricular activities such as sports teams and field trips or offer curriculum material and resources without charging any fees.

Alberta's home schooling enrolment count includes both home schooling students and students enrolled in "blended programs". In these programs, a teacher employed by the local school board provides the parent with "planning, resources selection, instructional delivery, assessment and evaluation of student progress in selected courses" for 50 percent (until grade 9) or 20 percent (in grades 10 to 12) of the student's total schooling program.[94] These programs offer both parents and students a more flexible alternative to public school that still allows the student to participate in the public school system.

Table 8 contains home school enrolment data, which is illustrated in **figure 7**.[95] Alberta and Saskatchewan have the largest share of home schooling, with 1.6 and 1.2 percent of their enrolment, respectively, in home schools. Ontario and Quebec have the lowest percentage share of home school enrolment at 0.2 and 0.1 percent, respectively. Alberta is unique in having "blended programs", which give students the option to be educated partly in schools and at home. Alberta is also unique because it is the only Canadian province to fund parents directly. This provides parents a greater incentive to home school their children than they might have in other provinces. Alberta, likely due to this funding for home schooling and the presence of "blended programs" has the highest percentage of home schooling in Canada. Nevertheless, it still accounts for only 1.6 percent of total enrolment and, more generally, there is still a very small share of Canadian students being home schooled.

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93. In Saskatchewan, each local school board has its own education policy and home school policies are found on webistes of individual school boards rather than on the Ministry of Education's website. Examples include: Prairie Spirit SD, <http://www.spiritsd.ca/parents/Home-Based/606%20Home%20Based%20Education%20-%20PROCEDURES.pdf>; Prairie Valley SD, <http://www.pvsd.ca/ProgramsServices/Home-basedEducation/Pages/default.aspx>; Prairie South SD, <http://www.prairiesouth.ca/division/programs-a-services/home-based-education.html>; Regina Public Schools, <http://www.rbe.sk.ca/sites/default/files/admin_procedures/ap_280.pdf>; Chinook SD, <http://www.chinooksd.ca/index.php/showpdf?pdf=http://warehouse.chinooksd.ca/alfresco/d/d/workspace/SpacesStore/6697a579-11c9-4f2a-b569-442d1fe3e36c/Chinook%20Policy%20606-%20Home-Based%20Education.pdf?guest=true>; Regina Catholic SD, <http://www.rcsd.ca/uploads/Homebased%20Educator%20Hdbk_0.pdf>; Greater Saskatoon Catholic SD, <http://www.gscs.sk.ca/instructional_services/documents/2013_Home_Based_Education_Parent_Handbook_June.pdf>.

94. For detailed funding formula, see Alberta, Department of Education (2012), *Funding Manual for School Authorities 2012/2013 School Year*, <http://www.education.alberta.ca/media/6661328/2012_2013fundingmanual_updated_january_2013.pdf >: 128.

95. Only Alberta and Quebec include home education within the public and/or independent school count.

Table 8: Home Education Enrolment, 2009-10

	Home Education	% of Total Enrolment		Home Education	% of Total Enrolment
BC	2,463	0.4	QC	1,032	0.1
AB	9,761	1.6	NB	537	0.5
SK	1,923	1.2	NS	732	0.5
MB	1,677	0.9	PE	55	0.3
ON	3,584	0.2	NL	n/a	n/a

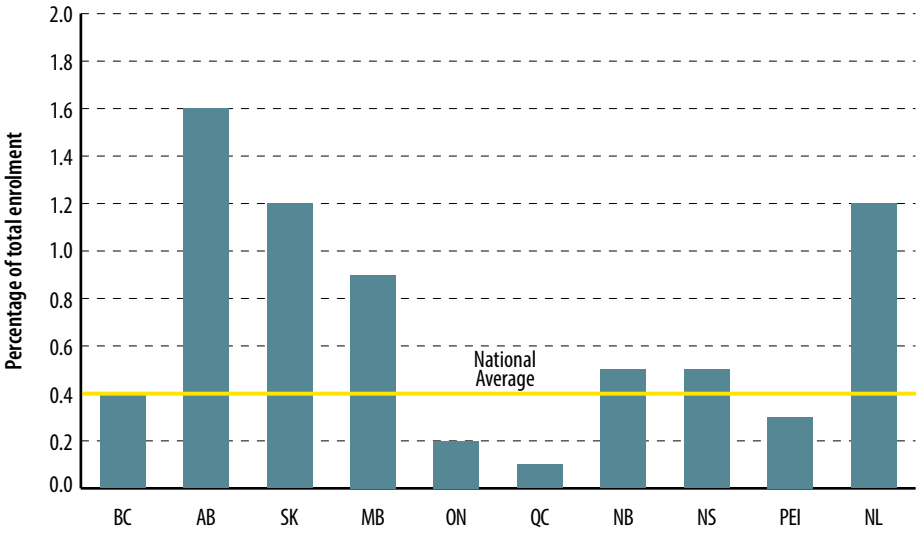
Notes

AB Home schooled students are counted under the supervising authority (either public or independent school boards).
QC Home schooled students are included in the public school boards.
NL Home education enrolment is not available. Home schooled students are included, by grade, within the enrolment of a supervising school (either public or independent) as students are technically members of that school even if they are home schooled.
All other provinces Home school enrolment is counted separately.

Sources

BC Ministry of Education, *Student Statistics 2012/13*, <http://www.bced.gov.bc.ca/reports/pdfs/student_stats/prov.pdf>.
AB Information provided by e-mail from the Ministry of Education on November 26, 2012
SK Calculations by authors based on information sent directly by the Department of Education (snapshot as of November 15, 2013).
MB Manitoba Education, *School Enrolment Reports*, <http://www.edu.gov.mb.ca/k12/finance/sch_enrol/index.html>.
ON Information sent directly by the Ontario Ministry of Education through a Request of Information (ROI) on December 7, 2012.
QC Information provided by e-mail by the Ministère de l'Education, du Loisir et du Sport.
NB Information provided by e-mail from the Department of Education and Early Childhood Development on June 14, 2013.
NS Information provided by e-mail from the Department of Education on January 29, 2013.
PE Information provided by e-mail from the Department of Education and Early Childhood Development on September 13, 2012 and November 21, 2013.
Calculations by authors.

Figure 7: Home school enrolment, 2009-10



Notes and sources: see table 8.

3. Conclusion

While still developing, the existing research on school choice and competition tends to support the basic economic principle that choice and competition spur quality, lower prices, and innovation. More specifically, the available research tends to indicate that school choice and competition improves student performance and enhances the general educational system. The combination of heightened awareness of the importance of education coupled with the growing body of research illustrating the benefits of school choice and competition result in a need for updated information and measurements on the state of school choice and competition in Canada.

School choice and competition in Canada

1. Public education

There is a great deal of misunderstanding about school choice and competition within the public education systems that dominate Canadian education. Between 87.5 percent (British Columbia and Quebec) and 98.8 percent (Newfoundland & Labrador and Prince Edward Island) of Canadian K-12 students are enrolled in public schools. Too many people, however, equate this fact with a lack of school choice and competition.

The reality of school choice and competition in the public education system is much more complicated. It is true that the principal-language public schools—Anglophone in all provinces except Quebec, which is Francophone—dominate enrolment, educating between 63.3 percent (Ontario) and 98.5 percent (Newfoundland & Labrador) of students enrolled in Canada.

One form of choice and competition afforded students across the country is education in a second language—French in all provinces except Quebec, where it is English. Enrolment in these public schools ranges from 0.4 percent in Newfoundland & Labrador to 28.2 percent in New Brunswick. Put simply, depending on your province and particular city (and school district), there is the possibility of selecting a public school based on a linguistic preference that provides parents with additional choice and competition between schools.

In addition to Francophone schools outside Quebec and English schools in Quebec, there are language immersion programs provided by the principal language schools in the provinces, which provide yet another layer of choice and competition within the public education system.

Separate religiously oriented schools within the public education system provide yet another source of parental choice and competition. Alberta, Saskatchewan, and Ontario provide full funding for religious, principally Roman Catholic, schools (table 9). Between 21.1 percent (Saskatchewan) and 30.3 percent (Ontario) of students in these provinces are enrolled at such

schools. The primary source of choice for these schools is the provision of religious instruction. However, the loosening of regulations regarding the degree of religious instruction and the admittance of non-religious students (or students of different faiths) heightens the degree of parental choice and competition since such schools are not exclusively available to religiously oriented families.

Finally, charter schools are another method by which to inject parental choice and competition into the public education system. Charter schools are autonomous, not-for-profit schools within the public system that provide alternative education programs to complement the public system; they generally have greater discretion in selecting curriculum, teaching, and learning styles than public schools. Currently, the only province to provide charter schools as an alternative is Alberta (table 9). There are currently 13 charter schools in Alberta with a provision in the current legislation for an additional two. Waiting lists for such schools are substantial, with one estimate indicating that 8,000 students would like to attend one of the six charter schools in Calgary.

All told, enrolment in public schools, which includes principal language schools, alternative language schools, immersion programs, separate religious public schools, and charter schools, ranges from 87.5 percent in British Columbia and Quebec to 98.8 percent in Newfoundland & Labrador and Prince Edward Island. Critically, there is a range of parental choice and competition provided in the public education system depending on one's province and city. The choices offered in the public system principally include language and religion although additional choices are offered in Alberta through charter schools.

2. Independent schools

In addition to the public education system, every province in Canada also has an independent school system that is separate and distinct from the public system. The nature of the independent school sectors, their funding, and regulation of independent schools varies greatly by province, as does the enrolment. Student enrolment in independent schools ranges from 0.9 percent in New Brunswick and Saskatchewan to 12.5 percent in Quebec. British Columbia (12.1 percent), Manitoba (7.4 percent) and Ontario (5.1 percent) also record fairly high levels of independent school enrolment.

As already discussed, Alberta, Saskatchewan, and Ontario provide Roman Catholic education within their public education systems. The remaining provinces, however, provide all religious education including Roman Catholic schools outside the public education system through independent schools. This in part explains some of the variance in both public school enrolment and independent school enrolment in provinces like British Columbia, Alberta, Ontario, and Quebec.

In addition to the differences in the treatment of religious schools, there is also fairly wide disparity in how funding is provided and regulations imposed on independent schools. British Columbia, Alberta, Saskatchewan, Manitoba,

Table 9: School Choice by Province

	Public	Public Francophone	Separate Catholic	Separate Francophone	Separate Protestant	Charter
British Columbia	YES	YES				
Alberta	YES	YES	YES	YES	YES	YES
Saskatchewan	YES	YES	YES		YES	
Manitoba	YES	YES				
Ontario	YES	YES	YES	YES	YES	
Quebec	YES	YES				
New Brunswick	YES	YES				
Nova Scotia	YES	YES				
Prince Edward Island	YES	YES				
Newfoundland & Labrador	YES	YES				

Notes

1. Results were determined by reviewing each province's Ministry of Education website and Education/School Act and contacting the appropriate Ministries via email. Some provinces do allow school district or boards to determine open enrollment and catchment policies; these individual policies were not reviewed unless explicitly mentioned in the Act or on the Ministry website.

2. All open enrollment policies tend to be conditional on space and resources being available for students. If conditions are mentioned, it means that conditions other than adequate space and resources are imposed.

3. As of October 2013, the Alberta Education Act is up for review, open enrolment could be a part of potential changes. See <http://www.education.alberta.ca/department/policy/education-act.aspx>.

4. In the Fall 2012 legislative session, an amendment to the Education Act concerning the attendance of students in neighbouring school divisions was proposed but not enacted.

Independent	Historical High Schools	Home schooling	Open Enrolment in Public System (1, 2)	Total Public Choice
YES— 35%–50% funded		YES	Province-wide open enrolment.	2
YES— 60%–70% funded		YES— $1,641 per student	Open enrolment allowed but exact rules are determined at the board level. Generally, transportation costs are not covered. (3)	6
YES— 50%–80% funded	YES— 70% funded	YES	No open enrolment policy. (4)	4
YES— 50% funded		YES	Provincial authorization for open enrolment; some conditions apply.	2
YES		YES	Province offers conditional open enrolment for distance and geographic considerations in Schools Act. Additional considerations are determined at the district/board level.	4
YES— up to 60% funded		YES	Provincially authorized open enrolment within the school districts.	2
YES		YES	No open enrolment; student placement determined by school district with appeal process.	2
YES		YES	No provincial open enrollment policy. Issue is determined at the board level.	2
YES		YES	No open enrolment student placement determined by school district.	2
YES		YES	No open enrolment.	2

Sources

BC See Section 2 (1-2) and Section 74, <http://www.bced.gov.bc.ca/legislation/schoollaw/revisedstatutescontents.pdf>.

AB See Sections 8, 13 and 44, <http://www.qp.alberta.ca/1266.cfm?page=s03.cfm&leg_type=Acts&isbnln=9780779733941>; <http://education.alberta.ca/parents/educationsys/ourstudents/iv.aspx> and Ministry correspondence.

SK See Section 141, 142, 143, <http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/E0-2.pdf> and Ministry correspondence.

MB <http://www.edu.gov.mb.ca/k12/schools/choice/schoolsofchoice.html#GeneralInfo>.

ON See Sections 32, 33, 34, 35, 36, <http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e02_e.htm#BK38> and Ministry correspondence.

QC See Section 4 of the Act: <http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/I_13_3/I13_3_A.html>.

NB See Sections 8, 9, and 11 of Act: <http://www.canadalegal.com/gosite.asp?s=3432>.

NS <http://nslegislature.ca/legc/statutes/education.pdf> and Ministry correspondence.

PE See section 51, <http://www.gov.pe.ca/law/statutes/pdf/s-02_1.pdf>.

NL See Section 4 (2), <http://www.assembly.nl.ca/legislation/sr/statutes/s12-2.htm#3_>.

and Quebec all provide public funding for independent schools ranging between 35 percent and 80 percent of the per-student operating costs, although definitions and formulas for determining the exact funding vary by province (table 9). Ontario and the Atlantic Provinces, on the other hand, provide no funding for independent schools. However, independent schools in these provinces enjoy much more autonomy with respect to provincial regulations. For instance, independent schools in provinces where funding is provided, must comply with provincial guidelines on curriculum and other regulations applied to public schools.

3. Home schooling

The final type of schooling analyzed in this paper is home schooling whereby parents have decided to educate their children on their own. Home schooling is permitted in all ten provinces although the degree to which it is supported varies greatly by province (table 9). Alberta is the most supportive, providing resources, funding, and facilitating mechanisms for home schooling. However, the enrolment in home schooling remains marginal at best. Alberta, for example, which is the most generous and supportive of home schooling, only has 1.6 percent of student enrolment in home schooling. Most of the provinces have enrolment rates below 0.5 percent. Again, however, the ability to choose to home school is an important mechanism allowing additional parental choice and some limited competition or at least the threat of competition in Canadian provinces.

General conclusions

As one might expect given the decentralized nature of K-12 education in Canada, the mix of public, independent, and home schooling varies by province as does the funding and regulations for schools. Some provinces rely more heavily on choice and competition within the public systems while others rely more heavily on independent schools to provide choice and competition.

Generally speaking, Alberta currently offers the greatest degree of school choice in Canada. Apart from having six fully funded public school choices, depending on residential area, it also provides substantial funding to students wishing to attend independent schools and for parents wishing to educate their children at home. The presence of charter schools in Alberta provides parents with additional options outside traditional linguistic and religious alternatives offered by public school boards.

At the other end of the spectrum, the Atlantic Provinces tend to offer comparatively less parental choice and competition between schools. None of the Atlantic Provinces provide parallel public education nor do they offer funding for parents who choose independent schools. Put differently, the Atlantic Provinces tend to offer less choice within the public system and provide no support to parents for independent schools.

The remaining provinces range between Alberta and the Atlantic Provinces with respect to the level and depth of parental choice and competition for schools.

Appendix. Notes and Sources for Tables and Figures

Use for tables 1, 2, 4, 5, and 7; and figures 1, 2, 4, 5, and 6

General Notes

1. Based on total head count enrolment, not full-time equivalent. 2. Total enrolment includes students enrolled in fully-funded religious and non-religious public schools and independent schools as well as home-schooled students attending K-12 education, unless otherwise mentioned. Adults attending continuing education programs and/or alternative programs, as well as Aboriginal students are not included. 3. Data includes students enrolled in French Immersion programs. 4. Home Education can be included within the public school count or a separate count depending on the province. 5. Numbers either taken directly from Ministry of education documents or calculated using mulitple documents.

Specific notes

BC 1. Enrolment numbers include adults registered in regular school programs, but excludes adults enrolled in Continuing Education Programs, Distance Education and Alternate Education.

AB 1. Total public enrolment includes Charter Schools enrolment. 2. Early child services (ECS) include pre-kindergarten and kindergarten students and cannot be disaggregated. For this reason, enrolment numbers includes pre-kindergarten students. 3. Home schooled students are counted under the supervising authority (either public or independent school boards).

SK 1. Total enrolment includes adults non-residents attending Saskatchewan schools. Data has been adjusted to exclude pre-kindergarten students. 2. Students enrolled in post-secondary sites, custody and care programs, and heritage language schools are excluded.

MB 1. Enrolment numbers only includes K-12 students. Enrolment in nurseries is excluded. 2. Public enrolment excludes 8 First Nations Schools managed by Frontier School Division under educational agreements. 3. Enrolment numbers include adults who are registered in public, independent or home schools programs. Adults registered in Adult Education Centres are not included.

QC 1. Totals do not include adults enrolled in public school programs. 2. Langues Autochotones' school boards are excluded in total public enrolment in QC. 3. Education system considers two years of kindergarten (Maternelle 4 ans and Maternelle 5 ans). Both years are included. 4. Home schooled students are included in the public school boards.

NB 1. Enrolment in public schools includes adults registered in regular school programs. Adults attending continuing education centres are not included.

NS 1. Enrolment numbers have been adjusted to exclude pre-kindergarten students from the public and independent school counts. 2. Enrolment numbers include students who previously attended Senior High School for at least three years.

PE Enrolment figures has been adjusted to include kindergarten students.

NL Enrolment figures include students who previously attended Senior High School for at least three years and home schooled students.

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Calculations by authors

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