VANCOUVER'S INNER-CITY ELEMENTARY SCHOOLS: EVALUATING POLICY ALTERNATIVES FOR IMPROVING STUDENT OUTCOMES

by

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B.A., Queen’s University, 2008

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF PUBLIC POLICY

School of Public Policy
in the
Faculty
of
Arts and Social Sciences

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SIMON FRASER UNIVERSITY
Fall 2010

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Abstract

This study investigates the effects of open catchment boundaries on Vancouver's inner-city elementary schools. Enrolment levels in these schools have declined over the past ten years despite a stable number of local school-aged children, suggesting that the perception of school quality among parents is low. Foundation Skill Assessment results have also declined in recent years. The challenges facing these schools include high numbers of immigrant and Aboriginal children and high poverty levels. Policy recommendations to improve student outcomes in these schools include changes to the administration of school choice, enhancement of the Inner City Schools Project, and school closure.
Executive Summary

This study uses a policy analysis approach to explore options for public school reform in Vancouver. Specifically, the study proposes alternatives designed to address the problem of declining enrolment in inner-city public elementary schools and the negative educational outcomes associated with this trend.

The study uses enrolment and demographic data from the British Columbia Ministry of Education and socioeconomic data from the Vancouver School Board to explore the impact of provincial school choice policy on inner-city schools. The key findings of this analysis include:

- The number of school-aged children living in the Downtown Eastside health area over the last ten years has been stable
- Three inner-city elementary schools (Admiral Seymour, Lord Nelson, and Sir William Macdonald) are projected to experience on-going enrolment decline
- Of these three schools, two (Seymour and Macdonald) are also facing an increasing concentration of vulnerable children relative to the 28 most vulnerable schools in the city
- The birth-to-kindergarten progression ratio accounts for most of the difference between the number of children aged 5-12 living in the area and local elementary enrolment levels
The results of the data analysis are used along with research literature to identify alternatives to improve student outcomes in inner-city elementary schools. The following alternatives are identified as potential reforms to the public school system in Vancouver:

- Returning to the neighbourhood school model by repealing the provincial legislation requiring school boards to allow parents to choose non-catchment schools for their children
- Implementing a “universal choice” program where all parents complete a single application form that asks them to list the schools for which they wish their children to be considered
- Providing counselling to parents of vulnerable children prior to their submission of the school application form, ensuring that these parents choose the school that best fits their child’s needs
- Incorporating an enrolment trend variable into the vulnerability ranking used by the Inner City School Project to determine staffing distribution
- Closing one or more inner-city schools

Each of the proposed alternatives is evaluated on the basis of the following criteria: cost, effectiveness, equity, political feasibility and stakeholder feasibility. As a result of this analysis, three alternatives are recommended: enhanced school choice, an enhanced Inner City Schools Project, and the closure of Sir William Macdonald Elementary.
Dedication

To Joan, and the memory of Yasmine
Acknowledgements

I would first like to sincerely thank Dr. Jon Kesselman for his guidance, his insights, and especially his patience throughout this project. I would also like to thank John Richards for his invaluable comments on my work and for always keeping his door open to students. I further thank Dr. Nancy Olewiler and the rest of the M.P.P. faculty for providing me with this great opportunity for learning over the past two years.

I am grateful to Andrew Yan for providing the intellectual spark that led to this research, as well as for providing important data used in my analysis.

Thank you also to everyone in my cohort who made these past two years in Vancouver such a great experience. Finally, thanks to my parents for supporting me in all my educational endeavours and to Andrew for keeping me sane.
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1 Introduction

The number of students enrolled in British Columbia’s public schools declined by 60,000 between 2000 and 2009 – a decline of almost 10 per cent (BC Ministry of Education, 2009b). At the provincial level, this decline is attributable to two factors. First, the end of the baby boom echo and a cultural tendency towards smaller family size has resulted in a demographic shift away from school-aged children. Second, more parents are enrolling their children in non-public schools, as the number of independent school students in B.C. increased by almost 10,000 over the same period (FISA, 2010). Despite being a large city with significant levels of immigration to offset demographic shifts, Vancouver has not escaped these trends. Enrolment in the Vancouver School Board’s (VSB) elementary schools has declined by 7.7 per cent (32,785 to 30,269) since 2001 (BC Ministry of Education 2009d), primarily as a result of increased enrolment in independent schools.

1.1 Policy Problem

The public elementary schools located in Vancouver’s inner city (see Appendix A) have suffered greater enrolment declines than those in any other area in the city. Since 2001, enrolment in the seven elementary schools located in the Downtown Eastside health area has decreased by 504 students – a decline of 24 per cent (BC Ministry of Education, 2009d). This decline has occurred despite a stable population of children aged 5-12 living in the area since 2001 (BC Stats, 2010), which suggests that an increasing number of children attend independent schools or non-local public schools. That many parents are willing to pay the tuition costs associated with independent schools or the
travel costs associated with non-local public schools suggests that these schools may not be meeting the needs of parents and children.

In addition to the basic problem of parental dissatisfaction, ongoing enrolment decline in Vancouver’s elementary schools may have negative consequences for the Vancouver School Board and the children who continue to attend these schools. For the board, the schools become a financial burden, since schools with excess capacity have higher per-student operating costs relative to fully utilized schools (Ouchi, 2006). For the students who remain at these schools, the quality of the education they receive may worsen. Since the children who choose to attend non-local schools tend to be relatively more advantaged, those that remain in local schools no longer benefit from the positive peer effects of these children (Lee et al. 1996). In this way, enrolment decline that is driven by parental choice (as opposed to demographic trends) may be promoting socioeconomic segregation and intensifying the issues that caused parental dissatisfaction in the first place.

1.2 Study Framework

The purpose of this study is to explore the causes of enrolment decline in Vancouver’s inner-city public elementary schools and the adverse effects this decline has had on students and schools. I will use this information to formulate and assess options for the Vancouver School Board to increase parental satisfaction with these schools and avoid the negative consequences associated with enrolment decline. First, in a background section, I outline how Vancouver’s public elementary schools are governed, how school choice is administered, and the recent population and elementary school enrolment trends in the city. Second, I examine the relevant academic literature on how
parents choose schools for their children, how individual schools respond when parents are allowed to choose which public school their child attends, and the relationship between social stratification and school choice. Third, I examine enrolment and demographic data from inner-city elementary schools to determine the effect of open boundaries legislation. Fourth, I formulate policy alternatives that address the issue of declining enrolment based on the literature on school choice and interviews with Vancouver elementary school principals. Finally, I evaluate these alternatives and make policy recommendations for possible action by the Vancouver School Board.
2 Background

2.1 Governance of Vancouver Public Schools

The Ministry of Education has overall responsibility for the administration of kindergarten to grade 12 (K-12) in British Columbia. The central piece of legislation governing public education in the province is The School Act, which lays out the powers and duties of the Ministry and the school boards. The most important role played by the Ministry is the allocation of funds for the education system, as the school boards have minimal fundraising capability and rely overwhelmingly on provincial grants. The Ministry also has primary responsibility for setting educational standards for instructional time, subject offerings, and learning outcomes through the general curriculum, to which all schools whether public or private must adhere. As part of its role of setting standards, the Ministry monitors student performance and reports the results to the public. It does this primarily through the Foundation Skills Assessment, which tests the reading, writing, and numeracy skills of grade four and seven students each year (BC Ministry of Education, 2009a).

School districts in BC are required to govern schools in their district in a fiscally responsible and cost effective manner in accordance with The School Act (BC Ministry of Education, 2009a). Districts are free to determine educational programming and the school calendar of the district so long as it conforms to the curricular requirements set out by the Ministry of Education. The Vancouver School Board is governed by the Board of School Trustees and is made up of nine members that are elected every three years at the same time as the mayor and city council. Trustees are responsible for appointing the Superintendent of Schools, who acts as the chief executive officer of the VSB. While the
Superintendent provides leadership in the planning and delivery of education services, the Trustees have the final say on all budgetary, hiring, and educational policy matters.

At the school level, principals are responsible for the placement of students within the school, setting the program of student evaluation and parental feedback, and administering matters concerning the general conduct of students. With respect to teachers, principals are required to set their timetables within the school and provide evaluations of their performance to the school board. Within each school, principals also work with their School Planning Council, which is an advisory body composed of parents, teachers, and principals mandated by Section 8 of The School Act. The major responsibility of School Planning Councils is to consult with the school community in developing, monitoring, and reviewing school plans for improving student achievement.

2.2 Public School Choice in Vancouver

Prior to 2002, school choice within most British Columbia public school districts was highly restricted at both the elementary and secondary level. Children were expected to attend the elementary school in whose catchment area they lived (in Vancouver’s case, an area of about one square kilometre). Parents wishing to send their children to any school other than their local school needed approval from the sending and receiving principals of each school, and this was given primarily to children with exceptional educational needs (Brown, 2004). In the 2002/03 school year, British Columbia enacted open enrolment legislation through section 74.1 of The School Act with the goal of simplifying and encouraging enrolment in out-of-catchment schools. The section requires all school boards to establish a due date for applications from students to attend schools other than their neighbourhood school. If space and facilities are available in the school
to which the student has applied, boards must accept the request for transfer. The selection process for when the number of students wishing to attend a school exceeds its capacity varies across school boards. In the case of the VSB, a lottery is held to select the students accepted into over-subscribed schools, although priority is given to students with siblings at the same school (VSB, 2010a). This policy is relevant for the enrolment levels in inner-city schools, as it allows students the flexibility to attend public schools outside their catchment area. The VSB does not provide transportation services to children without physical or mental limitations, regardless of the distance from their home to school.

### 2.3 City-Wide Population and Enrolment Trends

From 1991 to 2002, Vancouver experienced 12 per cent growth in the number of elementary school-aged children living in the city (see Figure 2.3.1). Since 2002, this population has been stable, hovering around 40,000 children. However, enrolment levels in the city’s public elementary schools have not reflected this demographic stability. From 1991 to 2005, enrolment was stable between 32,000 and 33,000 children; it decreased by 7 per cent between 2005 and 2009. As a result, the percentage of children aged 5-12 not captured by Vancouver’s public school system has grown from 10 per cent in 1991 to 25 per cent today. This shows that the introduction of provincial open boundaries legislation in 2003 has not prevented a decline in the popularity of public elementary schools in the city.
This decline in the percentage of children attending Vancouver’s public elementary schools reflects the growth of independent school enrolment in the city. While a small number of Vancouver children attend public schools in other school districts, enrolment in independent schools accounts for most of the discrepancy between the number of children in the city and the number attending public schools. This growth can be explained in two ways. First, the period between 1987 and 1999 saw significant growth in private school attendance throughout Canada (with the exception of the Atlantic Provinces), reflecting a general increase in demand for private education (Statistics Canada, 2001). Second, in 1989 British Columbia increased the maximum public funding level for independent schools from 35 per cent of the per-student funding allocated to public schools to 50 per cent (Barman, 1991), effectively lowering the cost of
private education in the province. One of the consequences of the growing popularity of independent schools in Vancouver has been that the city’s elementary schools have operated well below their maximum physical capacity of about 37,000 students throughout the last 20 years (VSB, 2010b).

While public elementary school enrolment in Vancouver has declined over the last five years, an increase in the total number of school-aged children over the next ten years is expected to reverse this trend. By taking current enrolment levels and projecting forward using provincial population projections, the BC Ministry of Education predicts that Vancouver public elementary school enrolment will grow by about 15 per cent over the next eight years (see Figure 2.3.2). This growth will move enrolment levels much closer to the maximum physical capacity of the VSB’s elementary schools.

*Figure 2.3.2  Projected Vancouver Public Elementary School Enrolment*

Source: BC Ministry of Education (2010c)
2.4  Enrolment Trends by Sub-Vancouver Local Health Area

The combination of slack physical capacity in the VSB elementary schools and the provincial government’s open boundaries legislation has meant that, since 2003, parents have had a great deal of discretion in choosing their children’s school. One way of tracing the extent to which children are attending schools outside their catchment area is to compare population estimates of children aged 5-12 with the number of children attending public elementary schools in the same area. BC Statistics divides Vancouver into six local health areas (see Figure 2.4.1) and provides yearly population estimates by age and gender using the natural base population from each census and historical residual net migration data (BC Stats, 1994). While the boundaries of these local health areas do not correspond exactly with the 77 catchment areas of Vancouver’s public elementary schools, the data provide a rough estimate of the proportion of children who attend local schools in each area.¹ The level of independent school enrolment in each area is also useful in helping distinguish whether children are attending public schools in other areas or local independent schools.

¹ Note that since the entire city is divided into only six large areas, some children may not be attending the school nearest their home but are still attending a school within the boundaries of their local health area.
2.4.1 City Centre

Over the past 20 years, construction of residential condominium towers in the City Centre area has flourished, resulting in rapid population growth. Possibly due to real estate affordability issues throughout the city, the area is home to an increasing number of elementary school-aged children (see Figure 2.4.2). However, despite the opening of Elsie Roy Elementary School in 2004, the number of children in the area greatly exceeds the physical capacity of the local elementary schools. The result is that more than a third of City Centre children attend schools outside the area, with the public schools in the three neighbouring local health areas being the most convenient destination for most of these children.
2.4.2 Downtown Eastside

The population of children aged 5-12 residing in the Downtown Eastside has grown slowly but steadily from 1991 to 2009, increasing by 14 per cent (see Figure 2.4.3). However, over the same period, the number of children attending local public elementary schools has fallen by 28 per cent. The result is that barely half the children in the area attend local public elementary schools, and Downtown Eastside schools are operating at 55 per cent of their physical capacity. As the area has only one independent school (St. Francis of Assisi) and is plagued by severe poverty issues, most of the difference can likely be attributed to children attending public elementary schools outside the area.

Source: BC Stats (2010a); BC Ministry of Education (2009d, 2010a); VSB (2007)
2.4.3 Northeast

Enrolment in public elementary schools in the Northeast area of the city has been consistently higher than the number of children aged 5-12 living in the area over the last 18 years (see Figure 2.4.4), suggesting that these schools have been successful in attracting students from the adjacent Downtown Eastside area. While enrolment has declined steadily since the 2000/01 school year, the number of children living in the area has also declined at the same rate. Housing affordability relative to neighbouring municipalities rather than school quality may be an issue for the area, especially since the combined independent and public enrolment level exceeds the number of children living in the area.
Figure 2.4.4  Northeast Enrolment and Population Trends

Source: BC Stats (2010a); BC Ministry of Education (2009d, 2010a); VSB (2007)

2.4.4 Westside

The Westside is the most affluent of the six Vancouver local health areas, and this is reflected by the large number of children attending independent elementary schools in the area (see Figure 2.4.5). Despite this, the Westside’s public schools are well attended, and enrolment levels have gradually approached the maximum physical capacity of the area’s schools since 2003. The high price of Westside real estate along with the fact that the combined independent and public enrolment level exceeds the number of children in the area suggest that Westside public elementary schools are successful at attracting children from the other local health areas.
Figure 2.4.5  *Westside Enrolment and Population Trends*

From 1991 to 2000, the Midtown area’s public elementary schools operated at almost full capacity while serving a stable population of children aged 5-12 (see figure 2.4.6). The enrolment level in the area has dipped below the physical capacity of the local schools since 2001, but this is mostly attributable to a corresponding decline in the number of children aged 5-12 living in the area. Note that L’école-Rose-des-Vents, despite being a local public elementary school, is not included in the calculation of the number of public students since it operates under the Conseil scolaire francophone and derives its enrolment from across Vancouver.

Source: BC Stats (2010a); BC Ministry of Education (2009d, 2010a); VSB (2007)
2.4.6 South Vancouver

Since 1991, fluctuation in public elementary enrolment levels in South Vancouver has generally corresponded to changes in the number of children aged 5-12 living in the area (see Figure 2.4.7). The proportion of children not attending public schools within the area increased from 11 per cent to 19 per cent over this time, which corresponds with the growing popularity of independent education across the city. Combined independent and public school enrolment is less than the number of school-aged children, showing that the area experiences a small net loss of students to schools in other parts of the city. Note that École Anne-Hébert, despite being a local public elementary school, is not included in the calculation of the number of public students since it also operates under the Conseil scolaire francophone.
Figure 2.4.7  South Vancouver Population and Enrolment Trends

Source: BC Stats (2010a); BC Ministry of Education (2009d, 2010a); VSB (2007)
3 Literature Review

School choice is a hotly contested issue in the field of education policy. Proponents of choice argue that competition among schools for student enrolment increases schools’ responsiveness to the preferences of parents and students and improves school quality and efficiency. Detractors argue that increased choice favours those with greater resources and encourages economic and racial segregation. Unfortunately, much of the public debate is fuelled by competing value systems rather than systematic examination of the effects of choice. Advocates of school choice often hold individualistic or libertarian values, while opponents tend to believe in the primacy of equality (Brown, 2004). This section outlines the empirical evidence on how school choice policies affect public schools while avoiding the larger ideological debate on relative importance of freedom and equality in society.

3.1 Determinants of Parental Choice

Implementation of school choice plans is usually justified by rational choice theory: the idea that families are utility maximizers who make decisions based on their educational preferences and definitions of school quality. Schools operating in a choice environment are thus encouraged to adapt to these parental preferences. However, various researchers have shown that parental decision-making is not just a result of individual rational calculations; rather, it is a social process influenced by a variety of factors including race, religion, and socioeconomic status.

Based on a large-scale survey of elementary school parents in Alberta, Bosetti (2004) suggests that parents employ a mixture of rationalities in choosing elementary
schools for their children, with the majority deciding based on information from social networks, school visits, and talks with teachers. The quality of information from social networks varies considerably depending on socio-economic status and education level, limiting the opportunities of economically disadvantaged families. Parents of low socio-economic status tend to be less motivated to exercise their choice options, typically sending their children to designated schools without first seeking information. This is reinforced by the complexity of the application process for parents wishing to send their child to an alternative school as well as the time and money costs of sending their child to a more distant school. Bosetti concludes that choice schemes should target families of low socio-economic status with additional resources to enable them to exercise choice.

Using a survey of elementary school parents in two Manhattan school districts, Schneider et al. (1998) consider the ability of low-income parents to gather information about schools and make appropriate choices. The authors borrow the concept of the “average” consumer versus the “marginal” consumer from studies of competitive markets. Marginal consumers are the subset of consumers that gather extensive information about their purchases and thus pressure producers to deliver services efficiently. The authors find that marginal consumers of public education make up a small minority of parents. They are also likely to be better educated and less likely to be a member of a racial minority, suggesting that school improvement arising from the behaviour of marginal consumers may not be spread evenly across the entire market. The practical implication of this finding is that the elimination of restraints on school choice may result in “winners” and “losers” based on race and education levels. As such, special measures may be required to offset the losses faced by these groups.
3.2 School Responses to Choice Environments

One of the rationales for increasing school choice opportunities is that schools will respond to competition by improving the quality of education they provide. This view assumes that school administrators make choices that determine whether schools succeed or fail. Several studies have examined in detail how schools respond to choice environments and what effect their responses have on educational outcomes.

Levin and Riffel (1996) conduct case studies of five school districts in Manitoba using interviews of trustees, senior administrators, and school principals to see how schools respond to parental choice. The authors find that schools do not systematically gather or analyse information about their changing situations, making long-term strategies difficult to implement. They also find that the regulatory burden placed on schools with respect to curriculum requirements and staffing configurations limited their ability to fundamentally change how education is delivered. Most measures undertaken by schools in response to choice are aimed at maintaining the status quo and avoiding large fluctuations in enrolment. Levin and Riffel conclude that the impact of parental choice on schools is likely minimal.

Maguire (2006) examines the responses of four Edmonton Catholic schools to enrolment decline in a competitive choice environment. The Catholic school system in Alberta is publicly funded and has traditionally drawn its students from the province’s Catholic community. However, secularization of Canadian society in the twentieth century has meant that Catholic schools now compete with the public system for students. Through interviews with each school’s principal and analysis of enrolment data, Maguire identifies strategies used to combat enrolment decline. All four schools place a great deal
of emphasis on public relations and marketing through message boards, newsletters, mail drops, and home visits. The elementary schools provide school information to local kindergarten, pre-kindergarten and daycare programs. The schools also made curriculum adjustments such as extended kindergarten, implementation of the International Baccalaureate program, and aboriginal language courses.

3.3 School Choice and Social Stratification

The most serious criticism of school choice policies is that they contribute to the segregation of children according to socio-economic, ethnic, or religious background due to the differing abilities of parents to respond to the opportunities afforded by educational markets. However, supporters of school choice often counter that choice can actually decrease segregation by encouraging parents to choose schools other than on the basis of race or residency.

Lee et al. (1996) examine the merits of making school choice available to inner-city children in Detroit, one of the most racially and economically segregated metropolitan areas in the United States. Using survey data, the authors show the characteristics of families that favour school choice and take advantage of increased opportunities. Their findings suggest that the children most likely to transfer out of inner-city schools are from families headed by adults with relatively more education and higher incomes. Thus, while benefiting some children, the exercise of choice results overall in greater stratification of educational quality as inner-city schools face increasing concentrations of marginalized students.
Gorard et al. (2003) also consider whether increased school choice leads to greater social stratification. Specifically, they test the hypothesis that school choice leads to “spirals of decline” in which less popular schools in a choice environment simultaneously suffer enrolment decline and an increase in the percentage of socially disadvantaged students. The authors use data taken from British secondary schools from 1989 to 1999, the decade following the introduction of a national open boundaries policy for public schools. They find no evidence that school choice contributes to increased segregation, though they caution that the total number of secondary students in the UK rose over this time period, offsetting enrolment pressure on weak schools. Gorard et al. conclude that the way the local education authorities administer choice policies is a more important determinant of segregation. The use of catchment areas, school closures, transportation policy, and admission criteria to out-of-boundary schools are all ways that segregation can be managed. Finally, the authors point out that the largest single factor determining the level of segregation in schools is the pattern of local housing, regardless of the system of choice in place.

3.4 Peer Effects on Educational Achievement

Peer effects are the causal effect that the background or behaviour of students in a peer group can have on the educational achievement of other students in the same peer group. The idea of peer effects is an important factor in explaining parents’ school choices for their children, as it is widely believed that students tend to perform better in school when surrounded by stronger students. However, the actual magnitude of peer effects is a controversial subject in the academic literature, as it is difficult to measure. The central problem with estimating peer effects in education systems is that the vast
majority of cross-sectional variation in student achievement is generated by selection rather than the influence of schools themselves (Hoxby, 2000). The goal of most studies on peer effects is thus to isolate the role of peer influence from the self-selection of families into schools.

Hanushek et al. (2003) use panel data from three successive cohorts of Texas public elementary students to identify the impacts of specific peer group characteristics on academic achievement. The authors successively eliminate components of individual student achievement growth that are most likely to lead to confusion of family and school influences with peer groups, including socioeconomic background, average class size, and per cent of teachers with zero or one year of experience. Their results show that peer achievement does indeed have a positive effect on achievement growth and that students throughout the school test score distribution appear to benefit from higher achieving schoolmates. However, because these effects are similar across the test score distribution, their results also suggest that reallocation of students will only affect the distribution of achievement across schools and thus have little impact on the overall average achievement of schools.

Lefgren (2004) approaches the challenge of isolating peer effects by taking advantage of variation in how third and sixth grade students in Chicago public schools are allocated to classes. In tracked schools, students are placed into classes on the basis of initial ability, whereas in untracked schools, classes contain children of varying ability levels. Lefgren hypothesizes that, if peer effects are important, students with high initial ability in tracked schools should outperform similar students in untracked schools, and conversely students with low initial ability in tracked schools should lag behind their
counterparts in untracked schools. He finds that statistically significant class-level peer
effects do exist but stresses that they are modest in magnitude. He concludes by
suggesting that peer effects may be more important at the school or neighbourhood level
and that classroom peer effects may be more influential on behaviour as opposed to
academic achievement (as measured through test scores).
4 Methodology

Section 2.4 showed that, of the six sub-Vancouver local health areas, the percentage gap between public elementary school enrolment and children aged 5-12 is by far the largest and fastest growing in the Downtown Eastside. The next section provides a more detailed examination of the public elementary schools in the area with the goal of showing why this is the case. Vancouver’s inner city is one of the poorest areas in Canada. The incidence of low income in households is 2.5 times the provincial average; almost three times as many children receive income assistance versus the provincial average; and 41 per cent of households with dependent children are headed by a single parent versus 26 per cent for the province (BC Stats, 2008). These social conditions create considerable educational challenges for the seven elementary schools located within the boundaries of the Downtown Eastside health area. These schools plus three neighbouring schools that are also experiencing sharp enrolment decline are analyzed using enrolment, demographic, and Foundation Skills Assessment data. This information is placed in context by examining official school plans submitted by School Planning Councils and the range of programming offered at the schools.

The first issue I consider is the respective contributions of changing birth rates, independent school enrolment, out-of-catchment school attendance, and out-migration to declining enrolment over the last five years. The standard method of analyzing changes in enrolment is through grade progression ratios: the ratio of the number of children in a grade to the number of children in the adjacent lower grade the previous year. Deviations from 100 per cent must be explained by movement to or from other schools or repeats/drop-outs. Average grade progression ratios for each grade in each school will be
calculated using BC Ministry of Education data. The role of birth rates in school enrolment is captured by the birth-to-kindergarten grade progression ratio: the number of children born in a representative area to the number who attend kindergarten in the area five years later. BC Stats’ regional population estimates provide figures for the number of children by age for the Downtown Eastside local health area. Any deviation from a birth-to-kindergarten grade progression ratio of one must be accounted for by the other three factors—indirect school attendance, out-of-catchment attendance, or net migration for the catchment.

The second issue I consider is whether school choice has contributed to increasing concentrations of vulnerable students in inner-city elementary schools. As part of its Inner City Schools Project, the VSB tracks the percentage of children in each elementary school who are in the care of the Ministry of Children and Family Development or are receiving income assistance (VSB, 2009). This percentage is known as the Social Services Index (SSI). Using SSI data on Vancouver’s 28 most vulnerable elementary schools, I employ the formula used by Gorard et al. (2003) to calculate the segregation ratio of each school:

\[ SR = \frac{A}{X} / \frac{C}{Z} \text{ or } \frac{(A/C)(Z/X)}{1} \]

where A is the number of vulnerable children in a school; X is the total number of vulnerable children in the 28 most vulnerable schools; C is the total number of children in a school; and Z is the total number of children in these 28 schools. This ratio expresses the proportion of children in a particular school who are vulnerable relative to the overall proportion of children who are vulnerable in the 28 most vulnerable schools. A school is
considered to be in a potential “spiral of decline” when its enrolment level is decreasing and its segregation ratio is increasing simultaneously (Gorard et al. 2003).
5 Inner-City Schools Data Analysis

While the 2002 introduction of open enrolment legislation in British Columbia was highly controversial, its effect on enrolment patterns within school districts has been little studied. In this section, I examine the available data for nine of Vancouver’s inner-city elementary schools to determine recent trends in enrolment, economic and racial segregation, and educational achievement. The goal of this analysis is to reveal ways in which policymakers can improve educational outcomes for students who attend Vancouver’s inner-city schools. By elucidating how school choice has affected these schools, appropriate policies can be put in place to support the students who choose to remain in these schools.

5.1 Admiral Seymour Elementary

Admiral Seymour is located just west of the centre of the Downtown Eastside health area, and its catchment is mostly the north-central section of the area. The school has experienced a decline in enrolment of 32 per cent since the 2002/03 school year and is currently operating at a third of its physical capacity (see Figure 5.1.1). ESL students make up almost half of the school’s population, and Aboriginal students represent more than a quarter. The school’s five-year average SSI from 2005 to 2009 was 37.36, the second highest among Vancouver elementary schools (VSB, 2009). In 2006, 17 per cent of the school’s students came from outside its catchment area, and the school’s enrolment levels are projected to continue to decline through to 2015 (VSB, 2007). FSA results for the school reflect the highly vulnerable nature of the school’s students, with only 45 per cent of grade fours and 41 per cent of grade sevens meeting expectations for reading (BC
Ministry of Education, 2009f). The school is home to two special programs: Junior Kindergarten (an early intervention program providing half-day instruction to vulnerable 4-year-olds) and a Learning Disabled/Behaviour Disorder Program.

**Figure 5.1.1  Admiral Seymour Enrolment Levels**

![Graph showing enrolment levels from 1991/92 to 2009/10]


Admiral Seymour’s grade progression ratios show that on average only 87 per cent of grade one students progressed to grade two within the school from 2004 to 2009 (see Figure 5.1.2). However, this was mostly offset by grade two to grade three progression of 110 per cent, suggesting that students were perhaps repeating the grade rather than leaving the school. This is borne out by the fact that the average net progression for all grades was exactly one to one over the six years. The number of kindergarten students at Admiral Seymour has been declining since 2007, reinforcing the VSB projection of future enrolment decline.
Admiral Seymour’s segregation ratio rose from 2.6 in 2004 to 3.9 in 2008 (see Figure 5.1.3). This means that the proportion of vulnerable students at the school is 3.9 times higher than the average of the 28 most vulnerable schools, making it the second most segregated public elementary school in Vancouver. The combination of enrolment decline at a faster than average rate and a rising segregation ratio suggests that the school is in a spiral of decline where school choice is reinforcing negative perceptions of the school.
5.2 Britannia Community Elementary

Britannia Community Elementary is located in the centre of the Downtown Eastside health area, and its catchment forms the core of the area. The school has experienced a decline in enrolment of 21 per cent since the 2002/03 school year and is currently operating at 72 per cent of its physical capacity (see Figure 5.2.1). The school offers special Aboriginal programming and is home to an Aboriginal Education Enhancement Worker (VSB, 2009b). More than half of Britannia’s students are Aboriginal, and almost 40 per cent speak English as a second language. The school’s segregation ratio in 2008/09 was 3.09, ranking it third among Vancouver elementary schools. In 2006, 37 per cent of the school’s students came from outside its catchment area, and the school’s enrolment levels are projected to stabilize at their current level.

Note that schools are capable of operating beyond their physical capacity through the use of portable classrooms.

Source: BC Ministry of Education (2009d); VSB (2009a)
through to 2015 (VSB, 2007). The school is home to a Strong Start centre, which offers early learning opportunities to parents and children.

Figure 5.2.1 Britannia Enrolment Levels


Britannia had average progression ratios of less than one for grade threes and grade sixes from 2004 to 2009 (see Figure 5.2.2). However, as a result of ratios greater than one for every other grade, average net progression was one to one over the six years. This suggests that Britannia did not have a net loss of students to other schools over the period. Since the number of children in kindergarten at the school has been stable since 2005, the current enrolment level will likely be maintained.
Britannia’s segregation ratio rose from 2.7 in 2004 to 3.1 in 2008 (see Figure 5.2.3), making it the third most segregated public elementary school in Vancouver. Despite this, the school does not appear to be in a spiral of decline, as enrolment levels have been relatively stable. This is reflected by Britannia’s recognition by the Fraser Institute in 2008 as being the “fastest improving school” over the previous five years (VSB, 2009b).
Figure 5.2.3  Britannia Segregation Ratios

Source: BC Ministry of Education (2009d); VSB (2009a)

5.3 Grandview Elementary and Queen Victoria Annex

Grandview Elementary is located at the southern edge of the Downtown Eastside health area, and its catchment borders on both the Midtown and the Northeast local health areas. The school has had steady enrolment since the 2002/03 school year, and it currently operates at 78 per cent of its physical capacity (see Figure 5.3.1). Aboriginal and ESL students each make up more than half the student body, and the school emphasizes Aboriginal learning by employing a First Nations Resource Teacher to integrate Aboriginal content into the school’s core curriculum (VSB, 2009c). In 2006, 28 per cent of the school’s students came from outside its catchment area, and the school’s enrolment levels are projected to remain stable through to 2015 (VSB, 2007). FSA results for the school reflect the school’s high SSI, with only half of grade fours and sevens meeting expectations (BC Ministry of Education, 2009f).
Only the grade two students at Grandview progressed at a ratio of less than one on average from 2004 to 2009 (see Figure 5.3.2). The average kindergarten to grade one progression ratio of 1.07 suggests that Grandview was successful at attracting graduating kindergarten students from other schools over this period. This helped contribute to a net progression ratio of greater than one for the school, making it likely that it attracted more students from other schools than it lost.

Queen Victoria Annex is administratively attached to Grandview Elementary and thus shares the same catchment area. The school has experienced 18 per cent growth since 2003 and currently operates at 77 per cent of its physical capacity (see Figure 5.3.3). The proportion of ESL and Aboriginal students at the school is small relative to other schools in the Downtown Eastside health area. Queen Victoria Annex draws 55 per cent of its students from outside of its catchment area (VSB, 2007), by far the most of any school in the area.
Grandview and Queen Victoria’s combined segregation ratio has not risen since 2004 (see Figure 5.3.5), making them the seventh most segregated public elementary schools in Vancouver. This lack of change in segregation and steady enrolment suggest that these two schools are performing well, especially given Grandview’s focus on attracting Aboriginal students through its specialized curriculum.
5.4 Lord Nelson Elementary

Lord Nelson Elementary is located in the south-east section of the Downtown Eastside health area, with its catchment area extending part way into the Northeast health area. The school has experienced a decline in enrolment of 38 per cent since the 2002/03 school year and is currently operating at 55 per cent of its physical capacity (see Figure 5.4.1). While the number of Aboriginal students at the school is small, ESL students make up 32 per cent of the school’s enrolment. The school is home to an Autism Resource Program and Special Remedial Program. In 2006, 19 per cent of the school’s students came from outside its catchment area, the second lowest proportion of the seven public elementary schools in the Downtown Eastside area (VSB, 2007). Only two thirds of Lord Nelson’s grade fours and 12 per cent of its grade sevens met expectations in the 2009 FSA tests (BC Ministry of Education 2009f).

3 For this reason, I do not include Lord Nelson’s annex school, Garibaldi, as a DTES school.
As Lord Nelson’s annex school (Garibaldi) does not have grade five to seven classes, most of these students transfer to Lord Nelson after grade 4. This is reflected by the grade five to six progression ratio of greater than 1.2 from 2004 to 2009 (see Figure 5.4.2). This yearly influx of grade five students more than offset progression ratios that were less than one for most other grades, leading to an average net progression ratio that was greater than one. The number of kindergarten students at the school dropped sharply from 36 to 24 in the most recent school year, which could result in a small decline in the overall population over the next seven years. SSI data for the school was unavailable, as it was not among the 28 most vulnerable elementary schools in Vancouver, which suggests that enrolment decline is primarily related to demographic trends.
5.5 Lord Strathcona Elementary

Lord Strathcona Elementary is located in the west of the Downtown Eastside health area, and its catchment area covers the western corner of the area. For the 2009/10 school year, Strathcona’s catchment was temporarily extended into the City Central area pending the completion of a new elementary school at the “International Village” development. The school’s enrolment levels have been stable since the 2002/03 school year, and it operates at 59 per cent of its physical capacity (see Figure 5.5.1). ESL students make up 44 per cent of the population, and while the proportion of Aboriginal students at the school is relatively small, it has increased to 15 per cent over the last six years. In 2006, only 20 per cent of Lord Strathcona’s students came from outside its catchment area (VSB, 2007), despite the fact that it is located near the City Centre health area and its surplus of school-aged children. Strathcona offers French Immersion from K-1 and is planning to expand to a K-7 program. A combined 67 per cent of the school’s

Source: BC Ministry of Education (2010b)
students either did not meet expectations or did not complete the provincial FSA tests (BC Ministry of Education 2009f).

Figure 5.5.1 Lord Strathcona Enrolment Levels

![Graph showing enrolment levels from 1991/92 to 2009/10](image)


Lord Strathcona’s high average grade six to seven progression ratio from 2004 to 2009 may be an indicator of students repeating the seventh grade rather than moving on to secondary school (see Figure 5.5.2). Despite this, the school’s net progression ratio was less than one, suggesting that the school had a net loss of students to other schools over this period. The school’s recent growth since 2007 is attributable to consecutive years with very large incoming kindergarten classes, making it likely that the school’s population will continue to grow into the near future.
Figure 5.5.2  Lord Strathcona Six-Year Average Progression Ratios (2004-2009)

Strathcona’s segregation ratio rose from 1.9 to 2.3 between 2004 and 2008 (see Figure 5.5.3), making it the fifth most segregated school in Vancouver. This gradual increase has not prevented the school from attaining higher enrolment levels in its kindergarten classes, perhaps in part as a result of the full-day kindergarten program offered. The opening of a new elementary school nearby may place future pressure on Strathcona to avoid losing student enrolment and enter into a spiral of decline.

Source: BC Ministry of Education (2010b)
Figure 5.5.3  Lord Strathcona Segregation Ratios

Source: BC Ministry of Education (2009d); VSB (2009a)

5.6  Sir William Macdonald Community Elementary

Macdonald Community Elementary is located in the northeast corner of the Downtown Eastside health area. The school has experienced a dramatic decline in enrolment since the 2002/03 school year and is currently operating at less than a quarter of its physical capacity (see Figure 5.6.1). Aboriginal students make up more than half of the school’s population, and more than a third of its students speak English as a second language. While FSA tests were not completed by more than half of the grade 4 students, 64 per cent of grade 7 students met or exceeded expectations (BC Ministry of Education, 2009f). The school does not house any special programs.
Figure 5.6.1  Sir William Macdonald Enrolment Levels


Macdonald’s average progression ratios were well below one for every grade except grade four from 2004 to 2008 (see Figure 5.6.2), indicating that many students were leaving for other schools over the period. Plummeting kindergarten enrolment over the same period was also a key contributing factor to the school’s overall enrolment decline.
Sir William Macdonald’s segregation ratio rose from 2.8 to 4.0 between 2004 and 2008 (see Figure 5.6.3), making it the most segregated elementary school in the city. Given that its enrolment levels have plummeted since 2003, it is highly likely that Macdonald is in a spiral of decline arising from local parents’ ability to freely choose their child’s school.
5.7 Neighbouring Schools

Three schools with catchment areas that border on the Downtown Eastside health area have also experienced significant enrolment decline since 2002. Mount Pleasant Elementary is located in the Midtown health area, and its catchment area borders with those of Lord Strathcona and Grandview. The school has suffered an enrolment decline of 42 per cent since the 2002/03 school year and is currently operating at less than two thirds of its capacity (see Figure 5.7.1).
Queen Alexandra Elementary is located in the North East health area, and its catchment area borders with those of Grandview and Mount Pleasant. The school has suffered an enrolment decline of 38 per cent since the 2002/03 school year and is currently operating at about two thirds of its capacity (see Figure 5.7.2).
Dr. A.R. Lord Elementary is located in the North East health area, and its catchment area borders with that of Sir William Macdonald. The school has suffered an enrolment decline of 45 per cent since the 2002/03 school year and is currently operating at less than two thirds of its capacity (see Figure 5.7.3).

**Figure 5.7.3 Dr. A.R. Lord Elementary Enrolment Levels**


Mount Pleasant, Queen Alexandra, and Lord face similar challenges to the schools located in the Downtown Eastside health area. All three have high proportions of ESL students and, with the exception of Lord Elementary, significant Aboriginal student populations. Queen Alexandra and Mount Pleasant had the sixth and eighth highest segregation ratios respectively in the 2008/09 school year, though segregation did not increase between the 2004 and 2009 (see Figure 5.7.4). SSI data for Lord Elementary was unavailable since it was not among the 28 most vulnerable elementary schools in
Vancouver, suggesting that enrolment decline at that school is primarily related to
demographic trends.

*Figure 5.7.4  Queen Alexandra and Mount Pleasant Segregation Ratios*

Source: BC Ministry of Education (2009d); VSB (2009a)

### 5.8 Summary of Key Findings

The data above show that of the seven public elementary schools in the
Downtown Eastside health area, two (Queen Victoria and Lord Strathcona) are projected
to have modest enrolment growth, two (Britannia and Grandview) are stable at their
current enrolment levels, and three (Admiral Seymour, Lord Nelson, and Sir William
Macdonald) are predicted to experience enrolment decline. Section 2.4.2 showed that the
number of children aged 5-12 living in the area has actually been relatively stable over
the last ten years, suggesting that out-of-catchment school attendance has driven this
decline in enrolment. Of the three schools experiencing enrolment decline, two (Seymour
and Macdonald) are also taking on a higher concentration of vulnerable children relative
to the 28 most vulnerable schools in the city. These two schools thus face an enormous challenge in trying to prevent future enrolment decline.

The demographic data also show that Aboriginal students are highly concentrated in three schools (Britannia, Grandview, and Macdonald). Britannia and Grandview both offer special Aboriginal programming, which suggests that they operate as magnet schools for Aboriginal children. It appears that this has had a positive effect on enrolment levels, as these two schools have not experienced as much decline as most of the other schools in the area. However, the effect on the educational outcomes of these students is unclear. Curricula and staff that are sensitive to Aboriginal cultural concerns likely have a positive effect on educational outcomes; the peer effects of having higher numbers of vulnerable children in these schools are likely negative. Further research is required on the relative educational outcomes of Aboriginal students in regular schools versus those that offer special emphasis on Aboriginal culture.

Another key finding is that the birth to kindergarten progression ratio accounts most for the difference between the number of children aged 5-12 and elementary enrolment levels. Figure 5.7.1 shows kindergarten enrolment in the area tracked against births five years prior as well as the concurrent number of five year olds. The gap between births five years prior and the number of five year olds shows that many families opt to migrate out of the area by the time their children reach school age. In addition, local schools capture only between half and two thirds of the children that remain in the area until they reach school age. While some students shift to other schools during the later grades (particularly in the case of Sir William Macdonald), initial school choice has lasting effect on enrolment levels.
Figure 5.8.1  Downtown Eastside Health Area Kindergarten Enrolment vs. Births

Source: BC Stats (2010a); BC Ministry of Education (2009d)
6 Policy Alternatives

In this section, I explore several policy alternatives that could be used to improve outcomes for students attending inner-city public elementary schools. These alternatives were determined by considering initiatives undertaken by other public school systems to help inner-city schools with the specific patterns revealed by the data analysis in the previous section. While the policy alternatives are meant to address the challenges of open boundaries for Vancouver’s elementary schools, they are not restricted to altering the mechanics of public school choice.

6.1 Status Quo

The status quo is considered as a policy option and as the basis of comparison for the other policy options. The feasibility of the status quo may vary from school to school in Vancouver’s inner city, as each is facing a unique set of circumstances. Its feasibility also depends on whether recent enrolment trends can be expected to continue into the future or reverse course naturally without a policy intervention.

6.2 School Choice Restrictions

The simplest option for reversing enrolment decline in inner-city schools is to revoke the provincial legislation requiring school boards to allow parents to choose non-catchment schools for their children. The VSB could then return to the pure neighbourhood school model that existed prior to 2003 where children attend their local school except in special or extenuating circumstances. In order to minimize implementation disruptiveness, this policy would need to be phased in so that children currently attending out-of-catchment schools are allowed to continue with their present
schools. Since it has been shown that declining enrolment in Downtown Eastside health area public schools has not been driven by demographic decline of school-aged children, this policy would result in an immediate boost to these schools. In addition, since the parents that tend to take advantage of school choice opportunities tend to be of higher socioeconomic status, this option would likely reduce the trend towards increased concentration of vulnerable children in these schools.

### 6.3 Enhanced School Choice

This policy alternative entails a multi-pronged approach to altering the VSB’s school choice system so that it treats families of different socioeconomic and educational background more equitably. The first part of this option is to change the procedures that parents face in enrolling their child in elementary school. The VSB currently employs an “option-demand” system of school choice where parents are required to register their child at their default (neighbourhood) school. They may then make separate applications to cross-boundary schools by picking up application forms from the schools and submitting them on-site (VSB, 2010c). Multiple form application processes require a relatively high level of involvement from parents, especially when these forms are not available in a central location and must be delivered to separate locations (Gorard et al. 2003). The VSB could replace this procedure with a “universal choice” program where all parents complete a single application form that asks them to list the schools for which they wish their children to be considered. Mailing parents of kindergarten-aged children a single school-choice form written in their first language would ensure that all are given an equal opportunity to take advantage of the VSB’s full range of schools and programs.
The second part of this option is to target parents of vulnerable children with information on school choice and provide additional resources to help facilitate access to out-of-catchment schools. Bosetti (2004) lists access to quality information about choice options, guidance on how to select a school, and affordable transportation as the essential foundations for parents to actively engage in school choice. Accordingly, the VSB could provide counselling to parents of vulnerable children prior to their submission of the school application form, ensuring that these parents choose the school that best fits their child’s needs.

6.4 Inner City Schools Achievement Project

This policy alternative involves expanding and renaming the VSB’s existing Inner City Schools Project (ICSP). The ICSP was established in 1988 “to provide support and services to children who face obstacles to success at school for economic and social reasons” (VSB 2009a, 1). The current goals of the program are to enhance language development, enhance the social development and self-esteem of students, and develop parent and community involvement. Schools are designated as inner-city schools if the five-year average of their social services index added to the absolute number of vulnerable students at the school is greater than 50. The project provides 48 full-time equivalent staff to 14 elementary schools and their three annexes above and beyond their regular staff, with staffing priority going to those schools ranked highest by the previous calculation. Table 6.1 shows the ICSP staffing allocation to the five downtown Eastside elementary schools that are eligible for the program. The result is that these schools have teacher to student ratios that are higher than the VSB average.
Table 6.1  Differentiated Staffing for Inner City Schools Program

<table>
<thead>
<tr>
<th>School</th>
<th>Vulnerability Rank (5-year SSI + # Vul. students)</th>
<th>Teacher (FTE)</th>
<th>Youth and Family Worker (FTE)</th>
<th>Staff Assistant (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lord Strathcona</td>
<td>1 (148.6)</td>
<td>1.0</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Admiral Seymour</td>
<td>3 (105.4)</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Grandview/Queen Victoria</td>
<td>4 (91.3)</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Britannia</td>
<td>5 (91.1)</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Macdonald</td>
<td>7 (79.1)</td>
<td>0.6</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: VSB, 2009a

The Inner City Schools Program could be enhanced by dedicating additional resources to schools that are simultaneously experiencing increasing concentrations of vulnerable students and declining enrolment levels. Schools in this situation face great difficulty in reversing the trend, as school character and performance and parental perceptions of that character and performance are mutually reinforcing (Levačić and Woods, 2002). As Table 6.1 shows, Sir William Macdonald receives considerably less staff support than the schools ranked ahead of it, despite it being the most segregated school in the city and experiencing rapid enrolment decline. This could be rectified by incorporating an enrolment trend variable into the vulnerability ranking used by the ICSP to determine staffing distribution.

Renaming the program to underscore academic achievement could also help reduce the stigma for schools in the program and thus help combat enrolment decline. It is likely that some parents are deterred from schools in the program since it signals the
presence of major problems with many of the enrolled students. Making student achievement in the core areas of math, reading, and writing a central focus of the program would likely appeal to many parents, as academic considerations are the most important factor for parents when making school choices (Peters, 2007). An example of this is the Toronto School Board’s Model Schools for Inner Cities Project, which provides inner-city schools with dedicated curriculum resource teachers who focus on literacy and numeracy (TDSB, 2005).

6.5 School Closure

The final policy alternative to be considered is the closure of an inner-city elementary school. Free movement of pupils in a public school system combined with declining overall enrolment tends to result in school closures, regardless of school board efforts to keep all schools supplied with a reasonable number of students (Kelly, 2007). If a BC board of education no longer requires property for educational purposes, it must seek direct approval from the Ministry of Education prior to disposing of the property by sale or by lease of 10 years or more. The board is also legally required to engage in broad community consultation and enhanced planning documentation. The goal of this legislation is to encourage alternative use of underused school buildings prior to their disposal (BC Ministry of Education, 2009e). Dean (1982) provides a list of school closure criteria most frequently used by school boards to determine schools to close (see Table 6.2). Setting aside transportation costs, Macdonald appears to be the best candidate for closure, ranking first in enrolment decline and segregation.
Table 6.2  Top Five School Closure Criteria by Frequency of Use

<table>
<thead>
<tr>
<th>Closure Criteria</th>
<th>Per cent Districts Using Criteria</th>
<th>Highest Ranked School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining Enrolment</td>
<td>73.4</td>
<td>Macdonald</td>
</tr>
<tr>
<td>Age of Building</td>
<td>46.9</td>
<td>Strathcona</td>
</tr>
<tr>
<td>Desegregation</td>
<td>42.8</td>
<td>Macdonald</td>
</tr>
<tr>
<td>Transportation Costs</td>
<td>22.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Proximity to other Schools</td>
<td>18.4</td>
<td>Britannia</td>
</tr>
</tbody>
</table>

Source: Dean (1982), BC Ministry of Education (2009d); VSB (2009a)
7 Criteria and Measurements

The policy alternatives proposed in the previous section must be assessed using criteria relevant to policymakers in order to make recommendations for future action. I use cost, effectiveness, equity, political feasibility, and stakeholder feasibility as a basis for this assessment. A measure of high (3), medium (2) or low (1) on each criterion is assigned to the five policy alternatives. Table 7.1 summarizes the criteria and their definitions.

Table 7.1 Criteria for Assessment of Policy Alternatives

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Net cost of implementation to the VSB</td>
<td>High=3&lt;br&gt;Medium=2&lt;br&gt;Low=1</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>The extent to which the policy mitigates the negative consequences of DTES enrolment decline</td>
<td>High=3&lt;br&gt;Medium=2&lt;br&gt;Low=1</td>
</tr>
<tr>
<td>Equity</td>
<td>The extent to which the policy reduces current levels of segregation</td>
<td>High=3&lt;br&gt;Medium=2&lt;br&gt;Low=1</td>
</tr>
<tr>
<td>Political Feasibility</td>
<td>The acceptability of the policy to elected decision-makers</td>
<td>High=3&lt;br&gt;Medium=2&lt;br&gt;Low=1</td>
</tr>
<tr>
<td>Stakeholder Feasibility</td>
<td>The acceptability of the policy to stakeholder groups, including parents, teachers, and school administrators</td>
<td>High=3&lt;br&gt;Medium=2&lt;br&gt;Low=1</td>
</tr>
</tbody>
</table>

7.1 Cost

The first criterion to be considered is budgetary cost for the VSB. An inverse ranking will be used to assess this criterion, meaning that a result of “high” for an
alternative indicates that it is relatively inexpensive. The cost of an alternative is considered to be high if it adds greater than $1,000,000 to the VSB’s operating budget, medium if it adds less than $1,000,000 but greater than $100,000, and low if it adds less than $100,000 or results in cost savings. As the primary stakeholder, a policy alternative is unlikely to be accepted if it results in substantial costs to the VSB, making this criterion important relative to the other criteria. This is particularly true given that the VSB is currently facing a $17-million shortfall in its budget planning process (VSB, 2010c).

7.2 Effectiveness

An equally important criterion is effectiveness: the extent to which any policy alternative maximizes educational outcomes for children living in Vancouver’s inner city. Successful completion of primary and secondary education is essential for significant participation in the labour force in modern society, and high quality K-12 schooling provides the opportunity for disadvantaged children to escape from poverty (Walters et al. 2004). The effectiveness of the education system can be measured by FSA scores and grade progression/graduation rates.

7.3 Equity

The third criterion to be considered is equity: to what extent the policy alternative reduces current levels of segregation. In particular, I consider the effects of the proposed policies on Aboriginal students, ESL students, and students identified as vulnerable by the Ministry of Children and Family Development relative to those without any of these
disadvantaging characteristics. This will involve considering what effect each policy will likely have on the segregation ratio of each school.

7.4 Political Feasibility

All changes to Vancouver’s public school system are subject to the approval of the VSB, making their support a necessary condition for any policy. VSB support takes into account the political position of the Trustees that govern the board as well as the administrative difficulty of implementing a policy alternative. In addition, all VSB policy must conform to the Ministry of Education’s School Act, making the position of the provincial government relevant for some policies.

7.5 Stakeholder Feasibility

The final criterion is the acceptability of each alternative to key stakeholders in public education in Vancouver’s inner city not directly affiliated with the VSB or the provincial government. The British Columbia Teachers’ Federation (BCTF) has considerable influence over the implementation of policy as a result of its size and looks carefully at any decision affecting staffing levels. The views of school administrators and parents must also be taken into consideration.
8  Assessment of Policy Alternatives

This section uses the criteria described in the previous section to evaluate the proposed policy alternatives. A policy matrix is used to compare the relative merits of each policy option and provide an overall ranking of the options (see Table 8.1). All relevant criteria are weighted equally, with higher scores indicating better policy options.

Table 8.1  Scoring of Policy Evaluation

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Status Quo</th>
<th>School Choice Restrictions</th>
<th>Enhanced School Choice</th>
<th>Inner City Schools Achievement Project</th>
<th>School Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Equity</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Political Feasibility</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Stakeholder Feasibility</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>11</td>
</tr>
</tbody>
</table>

8.1  Evaluation of the Status Quo

The status quo receives a medium score in terms of cost. Enrolment decline is expected to continue in the future, driving up per capita operating costs at schools such as Admiral Seymour, Lord Nelson, and Sir William Macdonald. Given that the average operating cost per student space at Macdonald is $631, the 149 current surplus spaces at that school is costing the VSB approximately $95,000 per year (VSB, 2010e). When the surplus spaces at other local schools are taken into account, the cost of the status quo is somewhere between $100,000 and $1,000,000 per year. While it is true that, as shown in
section 2.3, city-wide elementary school enrolment is expected to rise starting in 2012 as a result of demographic changes, this will likely have little effect on these schools. Very few housing developments are planned for the area, and most demographic growth in school-aged children is projected to occur in other parts of the city (VSB, 2010e). For this reason, mothballing these schools in anticipation of future demographic increases is not an attractive option.

The status quo does poorly in terms of effectiveness due to the generally poor performance of Downtown Eastside schools in FSA tests, as all but one of the schools in the area ranked 730th or worse out of the province’s 952 schools by the Fraser Institute (Easton and Cowley, 2009). The status quo scores the worst of all five alternatives in terms of equity, as it has resulted in the segregation of vulnerable children into the area’s local schools while relatively more privileged children seek better schools elsewhere. In terms of political feasibility, the status quo achieves a low score, since the VSB has expressed that it can no longer afford to keep open schools operating well below capacity (VSB, 2010e). In terms of stakeholder feasibility, the status quo receives a low score, as various groups, including the BCTF and UBC’s Human Early Learning Partnership, have spoken out against school conditions in Vancouver’s inner city schools (Herron, 2009).

8.2 Evaluation of School Choice Restrictions

The repeal of provincial open boundaries legislation and a return to a strict neighbourhood school system fares very well in terms of cost because neither the VSB nor the provincial government would incur any cost in implementing it.4 However, it is

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4 Returning to a neighbourhood school model might even save money as a result of reduced administration costs associated with placing out-of-catchment students.
questionable whether restricting school choice would result in better educational outcomes for inner-city children. While vulnerable students would experience positive peers effects from the return of the relatively privileged children from outside the area, these gains would be offset by lower achievement among those returning. Moreover, studies have shown that the competitive pressures of school choice can raise educational outcomes for a school system as a whole (Schneider et al. 1998; Hoxby, 2003), and a return to the neighbourhood school model may undo those gains. As such this alternative receives a low score for effectiveness.

In terms of equity, this alternative would be beneficial for vulnerable children thanks to the positive peer effects from increased contact with better-off children. However, since Hanushek et al. (2003) show that reallocation of students affects only the distribution of achievement across schools, children without disadvantaging characteristics would suffer a proportionate decline in achievement. Accordingly, the alternative is assigned a medium score for equity. The reintroduction of school choice restrictions receives a low score in political feasibility as the current provincial government is unwilling to reverse the open boundaries legislation it passed in its first term. The stakeholder feasibility of this alternative is medium since the issue of school choice tends to polarize different stakeholders, with the BCTF in favour and think tanks such as the Fraser Institute and the Society for Excellence in Education opposed (Gutstein, 2004).

8.3 Evaluation of Enhanced School Choice

The cost of implementing a universal choice scheme along with targeted resources for families with vulnerable children would be medium. The first part of the
policy alternative, establishing a single application form for school applications would not be expensive and has the potential to reduce the administrative burden on individual schools. However, hiring additional staff to provide counselling on school choice would add a significant burden to the VSB’s budget. A full-time equivalent educational assistant costs the VSB approximately $40,000 per year (VSB, 2010f), meaning that adding counselling services to inner-city schools would likely cost more than $100,000 per year.

Schneider et al. (1998) and Hoxby (2003) show that competitive pressure within a school district improves overall educational outcomes for students. Accordingly, the effectiveness of this policy alternative in improving overall education outcomes for inner-city children is listed as high, since it will increase the competitive pressure on all public elementary schools in Vancouver. Enhanced school choice scores medium on equity. While the policy will help level the school choice playing field for all parents regardless of income or English-language skills, there will likely remain a tendency for higher-income parents to take advantage of school choice. Moreover, as in the previous option, gains in peer effects for some students tend be offset by losses for others. In terms of political feasibility, it is unlikely that the VSB would support enhanced school choice, as its stated position is that “the educational interests of most students are best served by attendance at the student’s neighbourhood school” (VSB, 2010g). With respect to stakeholder feasibility, this alternative receives a medium score, since it would polarize stakeholders along similar lines as school choice restriction alternative.

8.4 Evaluation of Inner City Schools Achievement Project

The Inner City Schools Achievement Project is assigned a low score in terms of cost. This alternative would require funding additional teaching and support staff to assist
schools experiencing simultaneous enrolment decline and increasing concentrations of vulnerable children. It would also require adding additional staff to provide all inner-city schools with the capacity to implement specially designed literacy and numeracy initiatives. The initial cost of implementing and integrating the programs, services, and infrastructure required for the Model Schools for Inner Cities Project in Toronto was $1.03 million per school (TDSB, 2005). Accordingly, implementation of a similar project in Vancouver, even on a smaller scale, would likely cost several million dollars.

While expanding the Inner City Schools Project would be expensive, it would likely be an effective way to increase the educational outcomes of inner-city students. All seven Toronto elementary schools that participated in the Model Schools for Inner Cities Project made significant academic gains as measured by standardized tests of math, reading, and writing skills (Yau, 2010). Accordingly, the Inner Cities Schools Achievement Project scores high on effectiveness. It also scores the highest of the five proposed alternatives on equity, as it attempts to offset the negative effects of school choice on the most vulnerable students in the Vancouver school system. Indeed, the essential purpose of the project is to offset the loss of positive peer effects caused by open enrolment. In terms of political feasibility, the Inner Cities Schools Achievement Project scores low as the VSB is likely to be concerned about the long-term cost implications of the policy. Without funding from higher levels of government, the project would likely be impossible since the VSB is facing a $17 million dollar shortfall in its operating budget (VSB, 2010c). In terms of stakeholder feasibility, the Inner City Schools Project in its current form enjoys broad support from the BCTF and various parental
organizations (Herron, 2001), and expanding the program would likely be popular among most stakeholders.

8.5 Evaluation of School Closure

The school closure option receives a score of high for cost as it would result in permanent savings to the VSB. The projected annual cost savings from closing Sir William Macdonald Elementary are $275,593 plus revenue from possible leasing or selling the facility (VSB, 2010e). In addition, demographic projections of school-aged children living in the area do not suggest that the school will be needed within the next 10 years. In terms of effectiveness, the option receives a medium score since it would likely not have a positive or negative effect on overall educational outcomes. The 70 students enrolled at Macdonald can easily be accommodated by the four adjacent schools of Britannia, Nelson, Hastings, and Seymour, all of which have surplus capacity and are located within two kilometres from the school. On equity, the option receives a medium score. While school closures tend to reduce segregation (Gorard et al. 2003), the children in the northern area of Macdonald’s catchment area may suffer from having to travel slightly further to school. Closure of Macdonald Elementary receives a high score on political feasibility since the VSB has already indicated that Macdonald is one of five schools to be closed following public consultation (VSB, 2010h). Stakeholders including the BCTF and local parents associations have already indicated that they will fight all Vancouver school closures (Steffenhagen, 2010), resulting in a low score on stakeholder feasibility.
9 Recommendations

The previous section showed that the status quo is the least desirable course of action for Vancouver’s inner-city elementary schools as it scored cumulatively by far the lowest on the five criteria of cost, effectiveness, equity, political feasibility, and stakeholder feasibility. In this section, I group the remaining four policy alternatives into two stages and consider them in turn in order to provide a policy recommendation for improving educational outcomes for inner-city elementary students.

9.1 Stage One: Schools Choice Restrictions

This stage consists entirely of the first policy alternative, the reintroduction of restrictions on school choice. Restrictions on school choice represent the extreme end of the continuum between equality and freedom of choice equity. As shown in section 8.2 however, this alternative fails to score well on improving educational outcomes, which is perhaps the most important of the five criteria. Moreover, even if restricting school choice did result in improvement to inner-city schools due to increased positive peer effects, it is likely that in the long term, out-migration of better-off families from the area would accelerate as they choose areas with higher-quality schools (Black, 1999). Accordingly, I reject this alternative as a possible solution to the challenges faced by Vancouver’s inner-city elementary students.

9.2 Stage Two: Comprehensive Inner City Schools Strategy

This stage consists of the remaining three policy alternatives: enhanced school choice, the Inner City Schools Achievement Project, and school closure. These three alternatives scored third, first, and second respectively in the evaluation section, making
them the most attractive policies for improving Vancouver’s inner-city schools. All three of the policies would be desirable if implemented individually; however, they are considered together because the strengths and weaknesses of each are complimentary. Enhanced school choice is cost effective, but scores poorly on equity; the Inner City Schools Achievement Project is effective and equitable but extremely costly; and school closure saves money but does not deliver significant effectiveness of equity benefits.

When taken together, however, each of their weaknesses is offset by the strengths of the others, meaning that bundling them together would make their implementation more acceptable to the Vancouver School Board and other stakeholders. In particular, the cost savings generated from the closure of Sir William Macdonald Elementary would help (but not entirely) offset the cost of implementing enhanced school choice and the Inner City Schools Achievement Project. Accordingly, I recommend these three courses of action to be implemented concurrently by the Vancouver School Board in order to improve inner-city students’ educational outcomes.
Appendices
Appendix A

Map of Schools in Downtown Eastside Health Area
Bibliography

Works Cited


