

**School's Out For the Summer:
Slowing the Growth of Summer Educational
Achievement Gaps in British Columbia**

**By
Samuel Hogg**

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Approval

Name: Samuel Hogg
Degree: Master of Public Policy
Title: School's Out For the Summer: Slowing the Growth of Summer Educational Achievement Gaps in British Columbia
Examining Committee: **Chair:** Nancy Olewiler
Director, School of Public Policy, SFU

Dominique Gross
Senior Supervisor
Professor

Joshua Gordon
Supervisor
Assistant Professor

Maureen Maloney
Internal Examiner
Professor

Date Defended/Approved: March 2, 2018

Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

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Abstract

The summer reading setback is a major driver of educational inequality across British Columbia. This capstone research project examines educational inequality in the province and analyzes policy options to reduce the growth of summer educational achievement gaps. The analysis focuses on three international case studies, with a literature review and interviews that confirm the results. The policy options considered include targeted summer programs in low-achieving schools, targeted summer programs across the province, and the expansion of existing summer reading programs in libraries.

Keywords: Educational inequality; summer setback; British Columbia; educational achievement gaps.

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List of Acronyms

AP	Advanced Placement
BC	British Columbia
BCLA	British Columbia Library Association
BCSRC	British Columbia Summer Reading Club
BCTF	British Columbia Teachers' Federation
BELL	Building Educated Leaders for Life
CIESLS	Community Indicators of Effective Summer Learning Systems
CODE	Council of Ontario Directors of Education
LAC	Library and Archives Canada
NSLA	National Summer Learning Association
OECD	Organization for Economic Co-Operation and Development
PISA	Programme for International Student Assessment
PIAAC	Programme for the International Assessment of Adult Competencies
PMK1	Person Most Knowledgeable
SES	Socio-economic Status
SFU	Simon Fraser University
SLP	Summer Learning Programme
YMCA	Young Men's Christian Association

Executive Summary

The summer setback describes the trend of educational achievement gaps that result during and after summer vacation. This trend has been observed in several countries around the world, as well as in Ontario. British Columbia (BC) lacks significant data on this subject, but warning signs hint at a larger issue of educational inequality. These include: disparities in graduation rates between students from different socio-economic backgrounds, growing rates of child poverty, and disparities in adult literacy between Aboriginal and non-Aboriginal students. BC has yet to address summer setback as a whole and local school boards mainly offer remedial or advancement courses, which do not act as an alternative to more expensive summer camp.

To investigate this problem, I use case studies to evaluate how other jurisdictions have addressed the issue of summer setback, as well as larger issues of illiteracy and educational inequality. I look at three case studies: the country of New Zealand; the province of Ontario; and the city of Baltimore. These three jurisdictions provide three unique perspectives on how to address summer setback.

From the case study analysis, I found five key characteristics that all three jurisdictions use to address summer setback. First, successful programs make partnerships with community organizations. These partnerships allow programs to be offered with a recreational focus, differentiating themselves from remedial summer school. Second, programs should explicitly target low socio-economic students. The goal of this policy area is to directly reduce educational attainment gaps between students from different backgrounds. Third, successful programs offer classes free of charge and make an effort to eliminate barriers for students and their families. Fourth, successful programs provide programming throughout the summer. This long duration bridges the long period of time that students spend outside of a classroom. Fifth, summer programming provides an opportunity for teachers to collaborate and for new teachers to gain more experience.

Based on the case study analysis, I develop three policy options. The first option creates summer learning programs in key schools across BC. This program will model itself on the Summer Learning Programme in Ontario. To keep costs reasonable, and to keep with the goal of this capstone, students in the program will be from low socio-

economic status backgrounds or will be struggling readers. The second option expands these same summer learning programs to schools across the province. The same selection criteria for students will be maintained, but programs will be open to any school board that expresses interest in holding a summer program. The third option expands the existing summer reading club in BC. This maintains the same structure of the program but creates permanent funding for staffing and expands the in-library sessions to five days a week.

To evaluate these three policy options, I establish five criteria for evaluation. *Effectiveness* estimates the number of students enrolled in the program and the percentage of enrolled students from the target population. *Equity* measures the cost and daily length of the summer program, as well as other major barriers. *Development* estimates the reading level improvement of students in the program. *Stakeholder Acceptance* measures how parents and families respond to the program. *Cost to Government* estimates the cost of the program.

Through the policy analysis, I recommend creating summer learning programs in low-performing schools. This policy option is the strongest because of its direct focus on the lowest achieving students, allowing a significant response with a moderate cost to government. This policy option also maintains a recreation focus, allowing it to act as an alternative to prohibitively expensive summer camps. Rolling out summer programming across the province came at too high of a cost to government and expanding the summer reading club did not offer a strong enough impact. For these reasons I recommend creating targeted summer learning programs in key schools.

Chapter 1.

Introduction

Canada is a successful, developed country, but still shows signs of inequality in students' achievement. Children from low-income families face an uphill battle, when compared to their middle- and high-income peers, as they move through the school system. An achievement gap between these students starts as early as Kindergarten and only expands as children age. A growing consensus now points to the summer months as a key period when achievement gaps are the greatest, most notably in literacy levels of young students. During the summer, the reading ability of children from lower socio-economic backgrounds does not progress at the same rate as it does for children from advantaged backgrounds. This is known as the summer learning setback, or the summer slide. It has been well demonstrated that the summer learning setback is a major contributor to the growth of achievement gaps as students move through the school system (Alexander et al., 2007; Allington et al., 2010; Davies and Aurini, 2013a; Slates et al., 2012).

Across Canada the summer learning setback has been demonstrated substantively in Ontario only (Davies and Aurini, 2013a). However, British Columbia (BC) shows several of the risk factors associated with learning inequality, including high rates of child poverty and inequality between schools. These risk factors hint at larger issues of educational inequality hidden beneath the surface. Educational inequality should be a major concern for Canada, as a leader of developed nations. Other countries around the world are making literacy a priority in an attempt to prepare their citizens to excel in a complex world.

This paper is written with a policy focus, by first trying to understand the root of the summer setback and then assessing policy options to address inequalities in summer learning across the province of BC. The central research question, which guides this methodology, is: *how can policy be used to improve the gap in summer reading achievement between students from high- and low-income backgrounds across BC?*

To explore the research question, this capstone uses a case study and secondary analysis. The case study analysis identifies jurisdictions around the world that have, in unique ways, successfully addressed the summer setback. The secondary analysis identifies five key characteristics that drive success and must be elements of a summer learning program. Two interviews are carried out with experts to confirm these five characteristics. This analysis confirms that BC is lagging behind other jurisdictions in addressing the summer setback.

From this analysis the capstone proposes three policy options: 1) targeted summer learning programs in key low-performing schools; 2) targeted summer learning programs province-wide; and 3) expanding the BC summer reading club. These three options were selected because they successfully bridge the gap between the end and beginning of the school year for low socio-economic status students.

This capstone is organized with eight chapters. Chapter 2 provides an overview of educational inequality in Canada, examining how achievement gaps grow as children move through the school system. Chapter 3 examines the characteristics of students with lower education levels, looking at the role of parents and children, and how time is spent in the summer. This capstone will ultimately examine how policy can be used to improve the gap in summer reading achievement between students from high- and low-income backgrounds. Chapter 5 outlines the methodologies used in this paper, including case studies and interviews. Chapter 6 analyzes the three case studies, looking at summer reading programs in New Zealand, Ontario, and Baltimore. Chapter 7 looks at key characteristics found in each of the three jurisdictions. Chapter 8 outlines policy objectives and criteria and measures that are later used to analyze policy alternatives. Chapter 9 presents the policy analysis, and Chapter 10 provides concluding remarks.

Chapter 2.

Achievement gaps in the Canadian school system

Although the Canadian public-school system consistently performs well in international rankings, a real issue of inequality exists. Despite goals of equality and equal opportunity for all Canadian students, children of different socio-economic backgrounds do not perform at the same level (Frenette, 2007). This chapter examines gaps in achievement in the Canadian school system through the examination of three criteria: 1) public versus private and high- versus low-income schools; 2) achievement gaps upon entering and exiting the school system; and 3) the timing of the school year.

2.1. Public vs. private; high- vs. low-income schools

According to international data provided by the Organization for Economic Co-Operation and Development (OECD), Canada is a world leader in educational equality (The Organisation for Economic Co-operation and Development, 2016). The OECD's Program for International Assessment (PISA), which uses a standardized test to measure academic achievement in over 72 countries, ranks Canada seventh in average score—measuring achievement in reading, science, and math—for 15-year-olds (The Organisation for Economic Co-operation and Development, 2016). A significant proportion of Canadian students (23 percent) are categorized as high achievers in at least one of the three subjects and a small proportion (six percent) of students are categorized as low achievers in all three subjects (The Organisation for Economic Co-operation and Development, 2016).

These results may be hiding a larger issue of less-advantaged Canadian students not excelling at the same rate as their peers. The term “less advantaged” in this case refers to students from families of low socio-economic status. PISA testing places a significant value on standardized testing and teacher performance (The Organisation for Economic Co-operation and Development, 2016). Academic research suggests placing more of an emphasis on the non-school environment (Alexander et al.1997), suggesting that all students progress at relatively the same rate during the school year, regardless of the quality of their teacher or school.

In comparison, Canadian research from Frenette, Ching and Chan (2015) looks at the relative success of public versus private school graduates. Canadian private school students have stronger academic outcomes than public school students, performing better on PISA tests at age 15 and progressing further academically by the age of 23 (Frenette et al., 2015). There is an 18-percentage point gap in university attendance between private and public-school graduates by the age of 23 (Frenette, Ching, & Chan, 2015a). This would not show up in PISA data, which does not track the educational attainment of graduates based on their socio-economic background, and only shows results during a brief snapshot in time.

Although private school students have stronger academic outcomes, they do not receive better instruction. Their academic successes are attributed to a combination of socio-economic and peer effects (Frenette et al., 2015). Students in these schools are more likely to possess characteristics that make them successful—they are more likely to live in urban settings and come from high income, two-parent homes. In addition, they are more likely to be surrounded by students whose parents graduated from university and are able to take advantage of these, and other, social connections (Frenette et al., 2015). Therefore, the private education system in Canada does not provide better education, but instead offers a vehicle to connect advantaged students with a range of social connections that allow them to benefit later in life.

If private school students are able to take advantage of their social connections and their advanced starting point, then surely the same should be expected for students attending high-income public schools. In Canada, there is a substantive difference between the characteristics of high- and low-income schools. High-income public schools may be able to fundraise upwards of \$75,000 a year in discretionary funds (People for Education, 2013). These funds could be used to purchase computers, play equipment, or provide extra-curricular activities. Schools in low-income areas are likely to fundraise closer to \$5,000, providing only enough to cover the extra costs of children from the lowest income families.

The BC Teachers' Federation (2015) noted that after the BC Liberals prioritized School Choice, parents began funnelling their children into schools with students of matching socio-economic backgrounds. Affluent schools began filling with more affluent students. One teacher noted that only 34 percent of students in their Fraser Valley

catchment go to their local school, which has a reputation of being a low-income school (BCTF Research, 2015). The majority of students from higher socio-economic backgrounds now leave the catchment (BCTF Research, 2015). Public schools across the province do not have an equal level of funding, and provincial policy has allowed affluent parents to concentrate their children in specific schools.

In BC, rates of child poverty have worsened in the past few years. Based off of research from the BC Teachers' Federation, about one in six teachers indicate that at least half their class is experiencing poverty (First Call BC Child and Youth Advocacy Coalition, 2017). Forty-five percent of teachers note that the number of students experiencing poverty in their class has increased while working at their current school. The same trend is especially true of teachers working in low-income schools, with 53 percent of teachers in low-income schools indicating that the number of students experiencing poverty in their class had increased. The child poverty rate in BC has exceeded the national average for the past 15 years (BC Ministry of Education, 2014). There is also a larger issue of growing income inequality in BC. The province has the third highest disparity between rich and poor families, with the richest half of BC families earning 73 percent of the total income in BC. Disadvantaged children will not achieve the same academic success as their wealthy peers.

Despite strong PISA results, in Canada there are serious inequalities in the academic achievement of students from different socio-economic backgrounds. Results point at differences between private, public, high-income, and low-income schools, as students in these different systems are provided with unequal opportunities and social connections.

2.2. Achievement gaps upon entering and exiting the school system

Research indicates that there is an academic achievement gap at two key points during a student's interaction with the school system: 1) as they begin Kindergarten; and 2) when they graduate high school (Geoffrey et al., 2010).

Children from lower socio-economic backgrounds are less likely to be prepared to enter the school system. Research from Quebec demonstrates that children whose

mothers are poorly educated are less prepared to start Kindergarten and show less improvement between Kindergarten and Grade 1 (Geoffrey et al., 2010). Research from the United States indicates a similar trend for low socio-economic status (SES) children (Downey 2004). Low SES American children fell behind their peers by two and half months between Kindergarten and Grade 1 (Downey 2004). This research indicates that an achievement gap between low and high SES children exists as early as Kindergarten.

An achievement gap also exists at the end of students' interactions with the school system, which is demonstrated in post-secondary enrolment rates. From 2001 to 2014, the gap in post-secondary enrolment between high- and low-income students lowered from 35 to 31 percentage points (Frenette, 2017). Post-secondary enrolment data can also be used to measure regional variation. From 2001 to 2014, the ratio of high- to low-income students enrolled in post-secondary grew the most in Ontario (29%), Newfoundland and Labrador (21%), and New Brunswick (20.5%) (Frenette, 2017). In comparison, BC has made gains (9.4%) but not close to the same rate as these top three provinces.

Across BC the first-time high school graduation rate has remained steady, hovering around 80 percent from 2011 to 2016 (BC Ministry of Education, 2014). However, graduation rates for Aboriginal students (59% in 2016), English language learners (53%), and special needs students (66%) are all significantly below the provincial average (BC Ministry of Education, 2014).

The socio-economic divide in enrolment can be explained by looking at a broad range of factors. Frenette (2017) shows that 84 percent of the post-secondary enrolment gap can be explained by long-term factors, including parental education (30%), reading scores (20%), and high school grades measured at age 15 (14%). Reading scores and high school grades are the strongest predictor of post-secondary enrolment, explaining 34 percent of the post-secondary enrolment gap between students from high and low SES backgrounds. This suggests that high school inequalities have long-term consequences for adult success.

Evidence from the 2012 Programme for the International Assessment of Adult Competencies (PIAAC) indicates disparities in educational outcomes among Canadian adults (Figure 1; Statistics Canada, 2012). Although 46 percent of BC adults aged 16 to

65 have poor literacy skills—below PIAAC Level 2—literacy rates for Aboriginal peoples and immigrants in BC are even worse (Figure 2; Statistics Canada, 2012). Adults below Level 2 are unable to perform simple tasks such as matching to different sets of data. This brings into question whether the BC workforce has the literacy skills necessary to succeed in society.

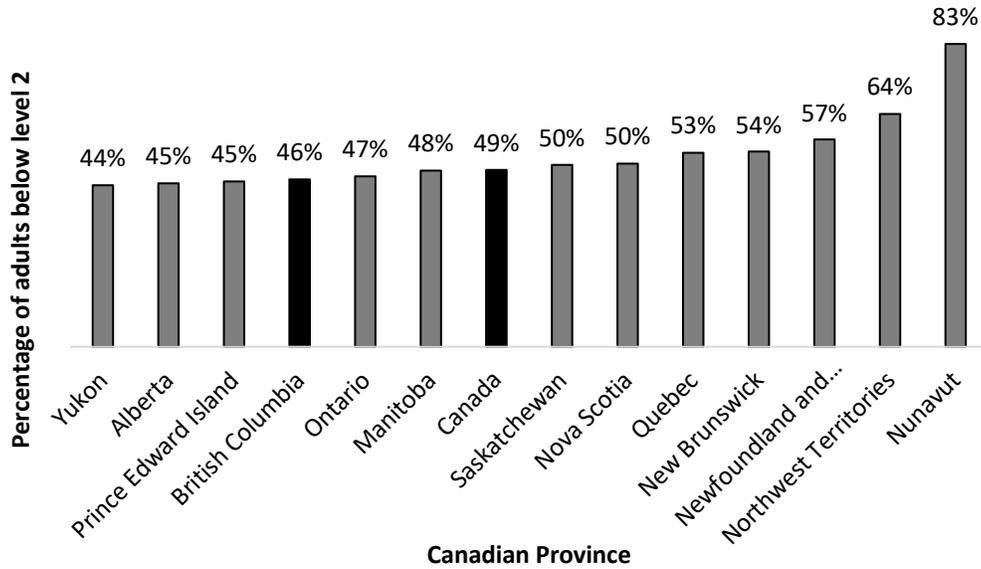


Figure 1. Percentage of Canadian adults scoring below PIAAC literacy level 2, 2012.

Source: Statistics Canada (2012)

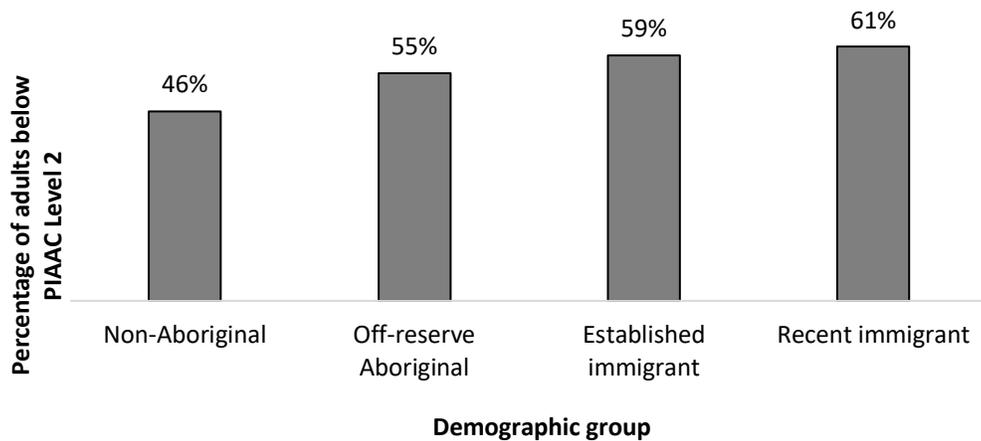


Figure 2. Percentage of BC adults scoring below PIAAC literacy Level 2, 2012.

Source: Statistics Canada (2012)

In summary, a clear achievement gap exists in Canadian schools between students from different socio-economic backgrounds. Graduates from private schools consistently perform better than public school graduates. The achievement gap exists as early as Kindergarten and expands as students grow older and move through the school system. School boards across BC are not providing an equal educational experience for all students.¹

¹ See Appendix C for details on the timing of the school year in Canada and BC.

Chapter 3.

Characteristics of children with lower education levels

Specific groups of children are not benefitting from the structure of the Canadian school system. This chapter discusses three key factors that impact a child's learning potential: 1) family characteristics; 2) student characteristics; and 3) the summer setback. The majority of the experimental research and data on this subject has come from the United States. However, due to the similarity of the two countries' school systems, such as their shared calendar and length, it is possible to use these American conclusions to explain Canadian issues.

3.1. Family characteristics

One theory of family characteristics suggests that low-income families fail to develop their children's talents and solely provide basic needs such as love, food, and safety (Lareau 2002). This outdated theory suggests that middle-class families are more likely to enrol their children in "age-specific activities" with the intention of providing them with early life skills (Karl L. Alexander & Entwisle, 1988; Stevenson et al., 1990). Under this train of thought middle-class families are better at nurturing their children's talents and teaching them early life skills.

Whether or not this theory is valid, low-income families may still be less likely to discuss books with their children and may be less knowledgeable about their children's reading interests or achievements (Lawrence, 2012). Middle-class parents may be able to make learning and reading more appealing to their children (Lawrence, 2012). In practice, low-income parents may bring home books and educational materials that are either too difficult or too easy for their children. Parents may also misinterpret their child's misunderstanding of the material as a lack of motivation (Lawrence, 2012). Middle-income families have a financial advantage but may also have the knowledge to be able to engage their children in learning.

Canadian data shows that low-income parents have lower expectations regarding their children's academic prospects. The Access and Support to Education

and Training Survey (2009) shows that the majority of parents in each income bracket are more likely than not to expect their child to attend post-secondary education. However, high-income parents are the most likely to expect their children to attend post-secondary education (Access and Support to Education and Training Survey, 2008). The correlation between income and post-secondary expectations variables is significant at 99 percent.

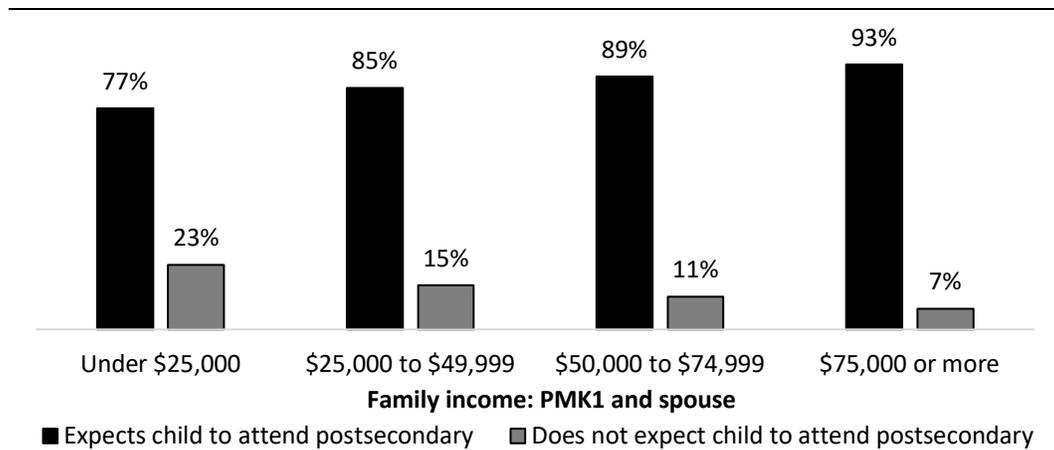


Figure 3. Parents' expectations regarding their child's post-secondary attendance, by family income, 2008.²

Source: Statistics Canada (2009).

Higher income families are also more likely to be engaged in their children's schooling. Data from the same Statistics Canada survey shows that 80 percent of high-income parents attended a school event that their child participated in, compared to only 65 percent of low-income parents (Access and Support to Education and Training Survey, 2008).

² Income data in this dataset groups the annual income of the PMK1 (person most knowledgeable) and their spouse, providing a measure of family income.

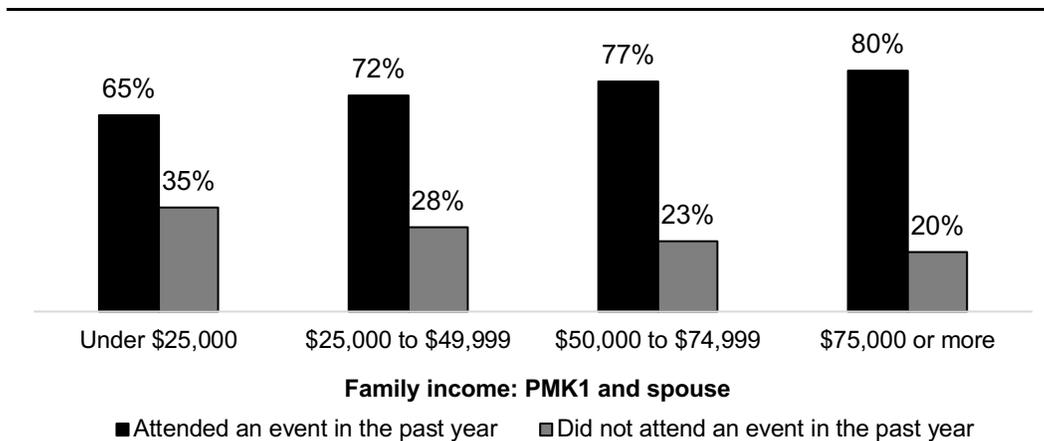


Figure 4. Attended a child's school event, by family income, 2008.
 Source: Statistics Canada (2009).

Low-income families can still raise resilient children. Resilience is defined as children in the lowest socio-economic category who perform in the top academic quarter of OECD children (The Organisation for Economic Co-operation and Development, 2016). Low-income families can draw on their social capital to make up for a lack of financial resources (Slates et al., 2012). Parents of resilient children are more likely to take their children to the library, check homework, and read to their children for long periods of time (Slates et al., 2012). Motivated students can make the most of their limited starting point, taking advantage of their relatively limited family resources.

At the same time, Statistics Canada data shows that low-income families are just as likely to speak with their children about books or school work and are more likely to reach out to teachers regarding their child's behaviour or achievement at school. Between the highest and lowest income brackets, there is an 11-point gap in the likelihood that a parent spoke to their child's teacher (Access and Support to Education and Training Survey, 2008).

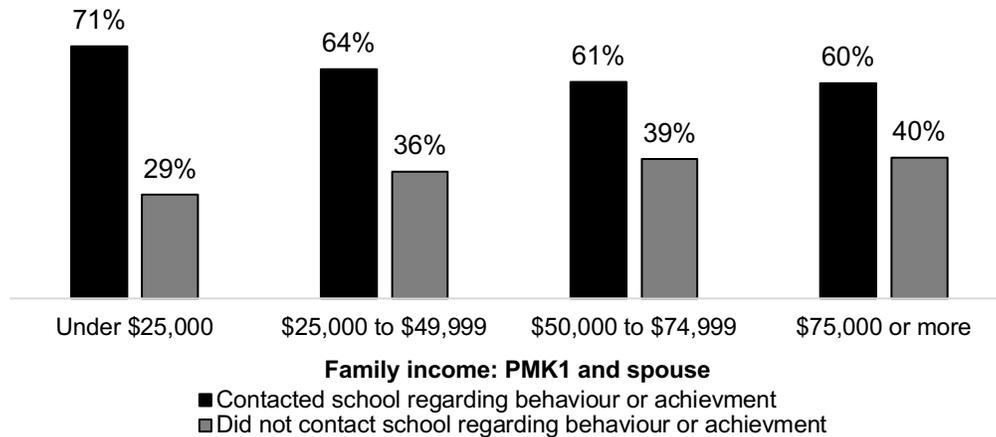


Figure 5. Contacted school regarding child’s behavior or achievement at school, by family income, 2008.

Source: Statistics Canada (2009).

These results bring into question the notion that low-income families do not care about their children’s development, suggesting that with the right combination of resources, these families can create resilient children. These families may not be able to take their children to Paris, but they can take them to the library.

3.2. Aboriginal students

In Canada, Aboriginal students are at risk of falling behind their peers (Flanagan et al., 2013). For example, they are at a higher risk of developing low literacy skills (Flanagan et al., 2013). This has been connected to several factors, including colonialism, racism, and the years of injustice caused by residential schools (Flanagan et al., 2013). Despite several programs designed to support literacy in Aboriginal communities, there has been little research on the success of these programs. Gaps between Aboriginal and non-Aboriginal students can also be attributed to differing standards of education and the use of English at home (Flanagan et al., 2013).

Aboriginal children in BC are more likely to grow up in poverty—30.9 percent of Aboriginal children are growing up in poverty, in comparison to the provincial average of 18.4 percent (First Call BC Child and Youth Advocacy Coalition, 2017). These socio-economic differences result in discrepancies in high school graduation rates, as discussed in Chapter 2. Despite the Aboriginal graduation rate growing ten percent in eight years, the rate is still below the provincial average.

Looking at school results across the province (Appendix A), the lowest performing schools and communities are predominantly rural, and many have large Aboriginal populations. For example, elementary schools in Fraser Lake, a rural community with a 22 percent Aboriginal population, scored a collective zero out of ten on provincial school rankings (Cowley and Easton, 2017). It is unclear whether these students are failed by the school system because of their Aboriginal status or because of their residency in rural areas.

3.3. The summer setback

The summer setback is the most significant factor contributing to the long-term growth of achievement gaps in Canadian schools. During the summer children are outside the structure of the school system, and a larger burden is placed on families to structure their children's education and activities. Once children have started preschool, the longest period of time they spend away from school is during the summer. Schools have an equalizing effect, softening inequalities in children's education (Alexander et al., 1997). The "faucet theory" explains this effect. When school is in session the faucet is turned on and children from every economic background progress at the same rate. During the summer the faucet is turned off, advantaged children continue progressing, while less advantaged children cease advancing or improving their reading (Alexander et al., 1997; Martins & Veiga, 2010). The term "summer reading setback" describes how the reading progress of children from low-income backgrounds slows during the summer while their advantaged peers continue to improve (Cooper et al., 1996).

The summer setback has been demonstrated and replicated across the United States. In one study, summer vacation was shown to create a three-month gap in the reading ability of students from high- and low-income backgrounds (Cooper et al., 1996). In a more recent study in Baltimore's low-income schools, over four summers the lowest-income students lost a total of 1.90 points on a standardized reading test, while the highest-income students gained a total of 46.58 points in that same time (Allington et al., 2010).

Shifting the focus to Canada, Davies and Aurini (2013) use a survey of Ontario primary students to replicate American data estimating summer learning rates. The authors find that most students break even over the summer. In their sample, socio-

economic status was found to be the most important predictor of summer reading gain or loss, more important than secondary factors such as gender or the language children spoke at home. The top income quartile of children entered the summer 5.28 months above the bottom quartile and gained 1.8 months of literacy over the bottom quartile throughout the summer (Davies and Aurini, 2013). This is the first case of Canadian research estimating the summer reading setback, and clear evidence that it also exists in Canadian schools.

There are many barriers preventing low SES children from experiencing the same kind of structure in their summers as their higher SES peers. Middle-class children lead more structured and organized lives throughout the summer (Chin and Phillips, 2004). To create this structure, a family must possess a combination of delicate resources: money, parental time, parental knowledge, and a safe environment. Low-income parents have fewer of each of these resources—summer camps and activities can contain significant barriers preventing low SES children from attending. These barriers can be as simple as money, with summer camps carrying a prohibitively expensive price tag. The average summer camp in BC costs between \$200 and \$600 per week (Our Kids, 2014). Up to \$500 per child can be claimed against the Federal Fitness and Federal Arts tax credits, but parents still need to pay upfront for summer programs. Other barriers can include timing and the inflexibility of work hours. Low-income parents often lack the flexibility at work to take long vacations or to change their work hours to ferry their children to and from activities. A stimulating summer requires money and just as importantly time—few summer activities provide full-time childcare (Chin and Phillips, 2004). Finally, transportation is a barrier for low SES families. For example, Chin and Phillips (2004) tell the story of a mother who took the bus 40 minutes in each direction to bring her child to a summer camp.

Children from high-income families across Canada are more likely to attend summer camp and generally more likely to be enrolled in extracurricular activities. There is a 17-point gap in the summer camp attendance of students from the highest and lowest income brackets (Access and Support to Education and Training Survey, 2008). This trend is fairly consistent across the country, with a similar percentage of children from high- and low-income families attending summer camp in each province. However, due to sample size issues, it is difficult to make conclusions regarding provincial variation. Although students receive the same quality of education, regardless of the

school they attend (as discussed in Chapter 2), there is a clear discrepancy in out-of-school experiences and opportunities for students from high- and low-income families (Figures 7–8).

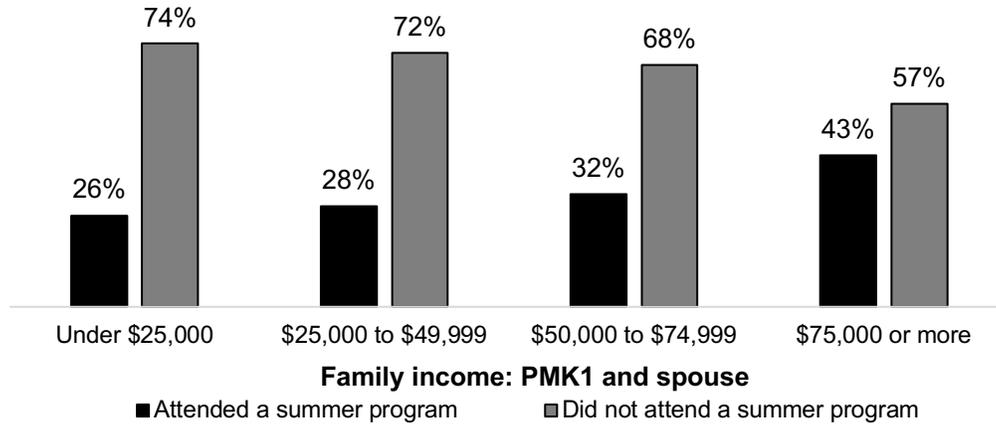


Figure 6. Child's summer program attendance in the past year, by family income, 2008.

Source: Statistics Canada (2009).

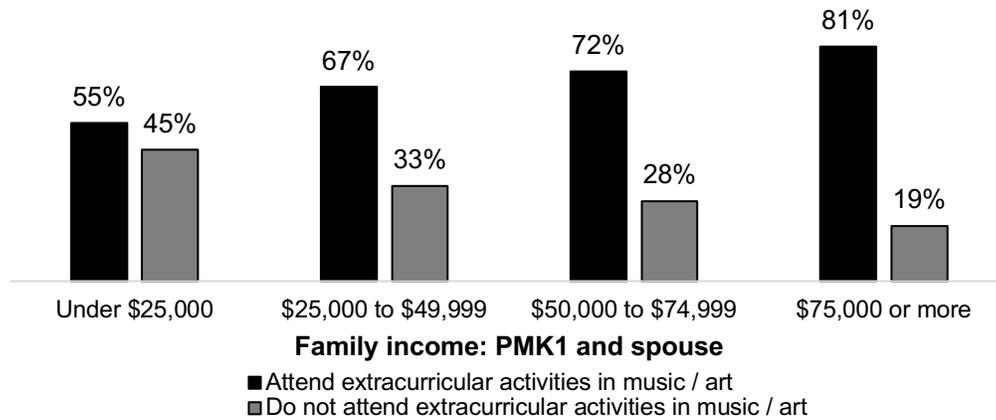


Figure 7. Child's attendance in extracurricular music / art activities, by family income, 2008.

Source: Statistics Canada (2009).

The structure and activities of a summer are not the only indicators of summer learning loss. Socio-economic status may be the only substantive predictor of a child's future successes—the quantity of summer activities is not a statistically significant predictor of a child's summer learning (Burkam et al., 2004). Family practices may only explain a small portion of the summer setback (Davies and Aurini, 2013). Socio-economic status may have an “unconscious and inadvertent influence” on summer

learning. It is made up of a number of factors, including access to health care, employment, or even lead exposure, which all have an impact on a child's academic success (Burkam et al., 2004). It is not just the activities that a child attends in the summer, but the larger set of socio-economic advantages, that creates a summer setback.

3.4. Summer reading in British Columbia

There are several successful examples of summer learning programs in BC. One example is the BC Summer Reading Club (BCSRC), funded by the British Columbia Library Association (BCLA). The BCSRC provides free resources for BC libraries to operate summer reading programs (C. Ford, personal communication, January 30, 2018). The BCLA allows individual libraries to determine the type and format of summer literacy programs they provide, allowing for local flexibility. Although approximately 177,000 children come into contact with an SRC each year, programs that operate in libraries may face difficulties attracting their target populations. Summer reading clubs tend to attract frequent library users, who are not likely at risk for a summer learning setback (Library and Archives Canada Program Branch, 2006). Other programs in BC are offered in community centres or are provided as remedial classes in school. However, remedial classes do not provide an alternative to summer camp.

In summary, there are three key factors that contribute to the achievement gap in Canadian schools: 1) family characteristics; 2) student characteristics; and 3) the summer setback. Family characteristics, and most notably family income, play a role in how families support their children's learning. Specific student characteristics, such as Aboriginal status, can also start students at a disadvantage compared to their peers. However, the summer setback is the most significant factor contributing to the growth of achievement gaps. Summer vacation is the longest period of time that a child spends outside of school, and disparities in summer learning create long-term achievement gaps between high and low SES students.

Chapter 4.

Policy problem and stakeholders

My policy problem is stated as: in British Columbia a gap exists in the summer academic achievement of elementary school students from differing socio-economic backgrounds.

To summarize Chapters 2, 3, and 4, evidence points to larger issues of educational inequality within the Canadian school system (Frenette, 2007). Students' socio-economic status can either act as a hindrance or an advantage, resulting in an achievement gap between students from differing socio-economic backgrounds (Frenette, 2007). Achievement gaps start as early as Kindergarten and escalate as students move through the school system (Geoffroy et al., 2010). Although all students learn at similar rates during the school year, learning rates diverge during the summer break (Allington et al., 2010). This trend is known as the summer setback.

Given the shortfalls of the current education system, this capstone will recommend what policies and programs should be implemented or reformed to improve the summer learning of students from lower socio-economic backgrounds. This research does not specifically address summer learning for Aboriginal students. Focusing on the needs of Aboriginal students would require a larger scope, and this is a topic which should be addressed in future research. Summer programming for Aboriginal students should be provided in a culturally safe manner, in coordination with community elders and leaders.

Stakeholders involved in this issue are:

- Teacher's associations. The BC Teachers' Federation has a rooted interest in child development and educational inequality. Schools and teachers play a key role in balancing educational inequalities and preventing achievement gaps from escalating during the school year.

- Parents and families of low SES children. Parents and families play a key role in supporting learning during the summer, and determining the strength of a child's non-school environment.
- Community centres operating summer learning programs across BC. An example is the Ray-Cam Centre in the Downtown Eastside. These organizations have a history of providing summer programming for low SES children.
- Organizations providing summer literacy programs. An example is the BC Summer Reading Club. These organizations operate province-wide summer literacy programs in libraries.
- Independent research organizations. An example is the Fraser Institute, which ranks elementary and secondary schools across the province. These organizations have a key interest in achievement gaps and educational achievement.

The key stakeholders for this analysis are: 1) parents and families; and 2) teachers' associations. These stakeholders play the largest role in the success of any future policy option.

Chapter 5.

Methodology

The primary analysis for this capstone is a series of case studies from international jurisdictions. Jurisdictions are chosen based on a series of criteria, and policy options are assessed using a traditional criteria and measures approach. The secondary analysis uses a literature review and key interviews with experts in order to confirm the case study findings. The process for these interviews is explained in Chapter 7.

The case study analysis assesses the ways in which different jurisdictions have addressed the summer setback. For each jurisdiction, I examine targeted programs used to improve literacy and reduce achievement gaps.

5.1. Case study selection

The case study analysis includes three jurisdictions: 1) the country of New Zealand; 2) the province of Ontario; and 3) the city of Baltimore. Three criteria justify the use of these jurisdictions: 1) research demonstrating a summer setback; 2) literacy as a governmental priority; and 3) targeted programs designed to reduce the academic achievement gap between students. At the same time, these jurisdictions demonstrate how summer learning can be conducted on different scales. Programs are restricted to those that have been backed up by research. Comparisons of these criteria for each jurisdiction are provided in Table 1.

Table 1. Case study criteria

Characteristic	New Zealand	Ontario, Canada	Baltimore
Research demonstrating a summer setback?	Yes	Yes	Yes
Has literacy been made a governmental priority?	Yes: Focus on adult literacy	Yes: Under larger poverty strategy	Yes: STEP UP act
Targeted summer reading programs, backed by academic research?	Yes: Partnered with schools and libraries	Yes: Carried out over the past 7 years	Yes: 10-20 programs implemented by researchers

New Zealand was chosen for this analysis for three reasons. First, several research programs on the summer setback have occurred here. Second, literacy is a government priority. Third, various actors have implemented literacy programs in traditionally low-income schools.

Ontario was chosen for this analysis for three similar reasons. First, Ontario is the only province with a demonstrated summer setback, as researchers have estimated learning rates over the summer. Second, literacy is a provincial priority under the Ontario poverty strategy. Third, Ontario has an expanded summer learning program across the province.

Baltimore was chosen for this analysis for the same three reasons. First, Baltimore researchers Richard Allington, Doris Entwisle, and Karl Alexander were among the first to write about the summer setback. Second, across the United States, literacy was made a national priority through the STEP UP Act. Third, the National Summer Learning Association (NVSLA) is based out of Baltimore and has been a key source of leadership in implementing summer learning programs. Following the guidance of the NVSLA, school boards across the country are implementing summer learning programs.

As discussed in Chapter 3, there are several positive examples of summer reading programs across BC. However, unlike the jurisdictions examined in this analysis, there is no provincial strategy on summer learning.

5.2. Evaluation framework

As discussed in the previous section, three jurisdictions were chosen for this case study analysis. This section details how the three jurisdictions will be evaluated. Table 2 illustrates the framework of analysis for three jurisdictions. This framework is based on critical features found in the previous literature review (Chapters 2 and 3), which focus on increasing resiliency and improving rates of summer learning.

The framework of analysis is made up of three categories. The first category defines each jurisdiction's priorities surrounding literacy and summer learning. The second category looks at the institutional structure of each jurisdiction. The three characteristics within this category provide basic information on the length and structure of the school year, as well as the average rate of pay for most teachers, providing insights as to how teachers are valued in each jurisdiction. The third category describes summer learning opportunities for low SES students. This category is split into five characteristics: 1) session characteristics; 2) support for parents and families; 3) support for children at risk of a summer setback; 4) resources for teachers; and 5) transition into the school year.

In summary, out-of-school learning activities can create resilient students and make up for a lack of structure and opportunity during the summer. This framework of analysis provides a comprehensive summary of successful summer programs in each jurisdiction.

Table 2. Case study characteristics.

Characteristic		
Priorities surrounding literacy and summer learning	Stated goals, objectives, or priorities	At what level is literacy handled by the government?
		Is summer learning a stated priority by government?
		Has the national or provincial level of government provided long-term funding for summer learning?
		Does a non-government organization or collective exist focused on summer learning?
		Who are the members of such a collective?
Institutional structure	School characteristics	Length and structure of the average school year?
		Are schools allowed to adopt a compressed calendar?
		What is a teacher's average salary?
Learning opportunities for low SES students during the summer	Session characteristics	One-time only, or ongoing?
		Hours per day?
		Weeks per summer?
		How old are the target students?
	Support for parents and families	Partnerships with community organizations?
		Are parents or family members involved in programming?
		How are parents encouraged to participate?
		What is the cost to the family?
	Support for children at risk of a summer setback	Are low-income families required to pay fees?
		Which students are targeted?
		How are these students selected and recruited?
	Resources for teachers	How do programs maintain enrollment?
		Are teachers offered training?
		Do programs offer opportunity to test new models or ideas?
	Transition into school year	Opportunities for collaboration between teachers?
		Does the program offer a preparatory or transition phase?
		Does the program directly prepare students for the next year?

Chapter 6.

Analysis

This chapter discusses the analysis of three jurisdictions: Baltimore, New Zealand, and Ontario. I use the framework described in Chapter 5 (Table 2) to conduct this analysis. This framework is divided into three sections, which I systematically analyze: 1) priorities surrounding literacy and summer learning; 2) institutional characteristics; and 3) learning opportunities for low SES students during the summer. From this analysis, I determine what characteristics and program elements are present in the three jurisdictions but missing in British Columbia (BC). Results are summarized in Table 3, which follows the detailed analysis.

6.1. New Zealand

This section examines the key characteristics from Table 3 for New Zealand, which are analyzed at a country level.

6.1.1. Priorities surrounding literacy and summer learning

Stated goals, objectives or priorities: New Zealand has set lofty literacy priorities, with the goal of preparing their citizens to excel in society. The National Library of New Zealand published a set of strategic directions in 2015 (National Library of New Zealand, 2016). These goals address issues such as the transition to digital media and improving literacy. The government notes the need to connect with community partners that focus on literacy, such as the New Zealand Book Council.

Throughout these goals, the New Zealand government maintains a clear focus on its Maori and Pacific population (National Library of New Zealand, 2016). The National Library reiterates that it will work with Maori peoples and other stakeholders to meet each goal set by its strategic planning document. These include goals to preserve Maori cultural heritage, and to improve functional and digital literacy (National Library of New Zealand, 2016).

6.1.2. Institutional structure

School characteristics: The compressed schedule and collaborative nature of the New Zealand school system creates a unique environment for learning. Teachers are given opportunities to collaborate through morning and afternoon tea breaks, as well as weekly staff and professional development meetings (Provist, 2013). This time spent together is not common for teachers in North American schools (Provist, 2013). New Zealand also uses a more compressed school calendar, with short two-week holidays three times each year, and one long summer holiday from approximately December 20 to January 30. This reduces students' time out of the school system.

6.1.3. Learning opportunities

Session characteristics: Programs in New Zealand addressing the summer setback have taken place in just a few schools. Unlike in Ontario or Baltimore, an explicit summer learning strategy does not exist across the country. However, these programs show how small-scale interventions can bridge large-scale achievement gaps. This analysis looks at three examples of summer learning programs: 1) Clayton Park School; 2) an Auckland program; and 3) Papatoetoe Central. Each of these examples is used to support different sections of the analysis.

Clayton Park School explicitly targets literacy improvement by engaging with families. The school uses summer reading contracts to encourage parents and children to read together (Wright and Wright, 2011). Mary Louise (2013) studied the summer setback in New Zealand and tested a summer program in ten Auckland elementary schools. Programming in Papatoetoe Central provides literacy activities for two hours each day throughout the month of January (the summer holiday). This program involved a local library and a researcher from a local university (Gwilliam and Limbrick, 2016).

Support for parents and families: The Clayton Park School Program started after the school recognized negative trends surrounding literacy and summer achievement (Wright and Wright, 2011). The Clayton Park school explicitly creates partnerships with families, using home/school partnership meetings and summer reading contracts (Wright and Wright, 2011). These tools inform parents and provide them with strategies to support learning over the holidays. The school sets up home/school

partnership meetings encouraging parents to play a more active role in discussing what their children are reading. Children, families, and schools agree on a summer reading contract that sets out goals and expectations, setting up a structure for children to continue progressing throughout the summer (Wright and Wright, 2011). Program results are promising, as after eight years 65 percent of families kept up their contracts every day in the holidays. The program has since been expanded to the shorter mid-year holidays (Wright and Wright, 2011).

Support for children at risk of a summer setback: Of the three programs examined, the summer learning program across Auckland made the greatest effort to target only those children at risk of a summer setback. This program experimented by placing students in different categories, giving them combinations of books and quizzes matched to their reading level and interest (Louise, 2013). These interventions bridged part of the literacy gap that had previously existed in the schools. In her recommendations, Louise suggests further involving parents in the process. She suggests giving families book packs, with reading activities for adults and children to do together (Louise, 2013).

Resources for teachers: In Papatoetoe Central, the school made an explicit effort to provide teachers with opportunities to collaborate and reflect on how they taught (Gwilliam and Limbrick, 2016). Activities in the program ranged from interactive presentations, discussions with children's authors, as well as writing plays and graphic novels. A book was read aloud at the end of each day. The summer reading program was the end result of a long-term review between teachers in the school. This gave them an opportunity to implement school-wide programs, such as a cohort-wide read aloud.

Transition into school year: The Papatoetoe Central school program shows the value of coordinating a summer reading program to transition smoothly from the school year into summer vacation. The summer program at Papatoetoe was likely insufficient to make up achievement gaps that grow over the summer (Gwilliam and Limbrick, 2016). Extra teaching time was incorporated at the end of the school year to prepare students for the summer program. Students were placed in small groups leading up to the end of the year, where a book was read aloud and discussed. This created a shared experience between students, sparking conversations, and creating opportunities for further projects such as drawing posters or writing character studies. Teachers made an

effort to use the summer program as an extension of the school year, giving them a chance to re-evaluate how they taught reading as students transitioned from year four to five.

6.2. Ontario, Canada

This section examines the key characteristics from Table 3 for Ontario, which are analyzed at a provincial level.

6.2.1. Priorities surrounding literacy and summer learning

Stated goals, objectives or priorities: There are several agencies and organizations committed to improving literacy in Ontario. Although the Ontario government has not addressed summer learning as a stated priority, it has addressed achievement gaps within the larger Poverty Reduction Strategy (Province of Ontario, 2013). Funding for Ontario's Summer Learning Programmes (SLPs) have been provided as part of this Strategy. This funding came from the Ministry's Literacy and Numeracy Secretariat (Council of Ontario Directors of Education, 2014). The Council of Ontario Directors of Education (CODE) has been responsible for administering the funds and providing resources for schools as they set up their SLPs. There are no other non-governmental organizations that exist supporting summer learning.

6.2.2. Institutional structure

School characteristics: The province of Ontario follows a standard Canadian school schedule with schools in session from September to June. Teachers are paid close to the Canadian average, with salaries averaging close to \$47,000 per year. Jurisdictions within Ontario (and elsewhere in Canada) have experimented with year-long schooling. The most notable example is the Roberta Bondar public school in Brampton, Ontario. It uses a full-year calendar but still maintains 187 instructional days. By adding a week to spring and winter breaks, as well as a short mid-winter break, the school is able to reduce summer break to four weeks (Vancouver School Board, 2010). Unfortunately, there is little academic research evidence supporting this type of school calendar. Extending the school year does not exclusively target low-achieving students

and does not increase the number of hours that these low-achieving students are spending in class time.

6.2.3. Learning opportunities

Session characteristics: Ontario is an example of a jurisdiction that implemented a successful small-scale summer learning program and replicated it across the province. Since 2010, CODE has organized SLPs in school boards across Ontario (Davies and Aurini, 2013a). The SLP began as a research study, with a few programs operating in model schools across the province. It has since become a full-time program offered in all 72 school boards (Council of Ontario Directors of Education, 2014). Schools across the province are eligible to receive \$15,000 per class participating, with a minimum of 15 students per class (Council of Ontario Directors of Education, 2017).³ Students eligible for the program are in Grades 1 to 5, and programming must be offered for at least 45 hours for a minimum of three weeks. This comes out to at least a half-day of programming over three weeks. Ontario is not the only jurisdiction to offer such a program, but the program's direct research focus is unique. Since 2010, Davies and Aurini have released yearly reports on the SLP (Davies and Aurini, 2010, 2013b). They argue that participants in the program narrow their learning gap by 20 to 30 percent over the course of one summer. The SLP does not explicitly target Aboriginal children and is offered as a universal summer program targeted at students at risk of a summer setback.

Two key features of the SLP are its focus on recreation and its partnerships with local community groups. By providing a recreation focus, SLPs differentiate themselves from typical summer school programs with more of a remedial focus (S. Davies, personal communication, January 12, 2018). SLPs are required to offer a healthy living and activity component, which may include “fitness, nutrition, cultural activities, physical activity/games, dance, drama, music, art, and excursions” (Council of Ontario Directors of Education, 2017). SLPs coordinate with local community partners to provide cultural experiences, integrating art, drama and music. Partnerships have been set up with organizations such as the Young Men's Christian Association (YMCA), which offered

³ \$15,000 per class, for at least 15 students. Class time is a minimum 45 hours over the summer but may be closer to 90 hours. Final costs come to approximately \$1,000 per student, or approximately \$11-22 per hour, per student (Council of Ontario Directors of Education, 2017).

swimming lessons once a week. Another school board organized a pancake breakfast for children and their families with community partners. These community organizations often paid the costs of bussing children to and from different activities. These initiatives differentiate the SLPs from traditional remedial summer schools, while also increasing interest from students and families and keeping students engaged in a non-traditional classroom setting.

Frontier College offers a similar program focused on literacy for Aboriginal children at risk of a summer setback (Frontier College, 2017). These programs are offered in Aboriginal communities across the country, with a significant number in Ontario. Efforts are made to hire young adults from local communities, and to engage with elders where possible. The program also makes an effort to distribute books to children in these communities. According to teachers, this program increases students' school readiness, improved self-confidence, and encourages better reading habits (Frontier College, 2017).

Support for parents and families: The Ontario SLPs try to involve parents and families as much as possible. Parents are given an opportunity to act as active partners—they decide whether their child participates and are provided with opportunities to interact with other parents and SLP staff. Teachers appreciate the opportunities they have to interact with parents, including volunteering, working with students, and attending celebrations (S. Davies, personal communication, January 12, 2018). This is partly due to the relaxed nature of the SLPs. These programs make a note of not replicating year-round schooling, providing a more relaxed environment for parents and teachers. Parents are invited to attend the first or last 30 minutes of class time on certain days (S. Davies, personal communication, January 12, 2018). A lending library was set up for parents and children to bring home books (Davies and Aurini, 2013a). Other sessions, often with special lecturers, are organized strictly for parents. SLPs are offered for free, through partnerships with community organizations, and are able to offer a range of activities that many families would not otherwise be able to afford. Some districts also provide breakfast and a snack for students (Greater Essex County District School Board, 2017)

Support for children at risk of a summer setback: SLPs were designed by school boards, with some input from researchers, resulting in a few compromises.

Where the ideal summer program would run for the entire summer break (two months), SLPs only run for a minimum of three weeks during the summer, with at least 45 hours covering interactive or engaging literacy (Council of Ontario Directors of Education, 2017). The ideal program would also only target low-achieving students, giving them a targeted benefit not offered to other students. However, school boards decided to open the programs to any students with interest from Kindergarten up to Grade 5 (S. Davies, personal communication, January 12, 2018).

Resources for teachers: SLPs hire temporary teachers for the program, providing an opportunity for new teachers to gain experience (under the supervision of a more experienced head teacher) (S. Davies, personal communication, January 12, 2018). Class sizes in SLPs are smaller than during the school year, and the atmosphere surrounding the program is more relaxed, which provides a positive learning environment for teachers, parents, and children (S. Davies, personal communication, January 12, 2018). Although not mandated by the program, teachers from the SLP have been able to communicate with each student's full-time teacher. This provides an opportunity to discuss progress and other specifics related to specific students.

Transition into school year: Ontario has also looked at providing year-round early childhood learning, operated by individual school boards. Such a program would be targeted at four- and five-year-olds, with the option of full- or half-day programming (Pascal, 2009). The SLP could also be expanded to fill winter and spring holidays. This would provide additional catch-up time, while still maintaining the traditional calendar that students, families, and teachers have become accustomed to. Providing these optional programs would extend the number of instructional hours for students most at risk of a summer setback.

6.3. Baltimore, United States

This section examines the key characteristics from Table 3 for Baltimore, which are analyzed at a municipal level.

6.3.1. Priorities surrounding literacy and summer learning

Stated goals, objectives or priorities: Baltimore has found success by joining community partners together to discover what summer learning resources exist within the city (Family League of Baltimore & National Summer Learning Association, 2015). The National Summer Learning Association (NSLA), which started in Baltimore, has grown to include nearly 40 school districts and partners that have agreed on the core principles of the NSLA (Smink & Deich, 2010). Since 2009, these districts have spent over \$200 million on summer programming. Their core principles include increasing and enhancing the scope of traditional summer school, targeting participation by students who would benefit the most, strengthening systems-level supports through community-wide partnerships and coordination, providing innovative professional development for staff, and embedding summer learning into the district's school-year operations (Smink & Deich, 2010).

The NSLA initiated a community snapshot across the city of Baltimore to better understand the existing summer learning programs existing across the region. This involved a long process of focus groups, interviews, and data requests to stakeholders (Family League of Baltimore and National Summer Learning Association, 2015). Through this process the NSLA mapped summer programming across the region, discovering that the existing programming only had capacity for 25 percent of Baltimore's youth from Kindergarten to Grade 12 (Family League of Baltimore and National Summer Learning Association, 2015). Their recommendations look at the problem from a policy-specific angle, suggesting how to coordinate stakeholders and funding to create more efficient programming for youth.⁴

6.3.2. Institutional structure

School characteristics: Public schools in the United States follow a standard schedule, similar to Canada's. Most students begin school in September and end in late June, with around 170 or 180 instructional days. Teachers are paid slightly more on

⁴ See Appendix D for details.

average than in Canada, and in all respects when compared to Canadians, American students should be receiving a similar level of education during the school year.

6.3.3. Learning opportunities

As mentioned previously, work in Baltimore has focused on creating a high-level coordinated approach to dealing with summer programming. This makes it difficult to write clearly about specific features of programs across the city, seeing as the city is still transitioning towards a collective summer learning system. I do not identify summer programming in Baltimore targeting Native Americans.

Session characteristics: Baltimore is home to the City Schools Learning Express program, a partnership between Building Educated Leaders for Life (BELL) and a coalition of private donors (*The new vision for the summer school network*, 2017). This is a six-week enrichment program, providing full-day programming throughout the summer. Teachers offer two hours of math and reading enrichment in the morning, followed by drama, art, and physical education in the afternoon. College and graduate students act as teacher assistants (*The new vision for the summer school network*, 2017).

Support for parents and families: Under the goal of sustainable resources, the school district and city cover about 25 percent of the \$1.1 million budget for the City Schools program, while the rest of the funding comes from BELL, other community organizations, and private donors (Smink & Deich, 2010). A number of community organizations have come together to form the Baltimore Summer Funding Collaborative, which provides grants for high quality summer programs serving low-income youth in Baltimore. This includes corporate sponsors such as Under Armor. These different funding mechanisms allow the programs to continue, allowing families to attend free or at low cost (Smink & Deich, 2010).

Support for children at risk of a summer setback: At their very core, every community association in Baltimore recognizes the need to target summer programming to low SES children. Targeting may take place in different ways, but it is not explicitly discussed in the city's learning plan.

Resources for teachers: Under the goal of continuous quality improvement, the Baltimore Summer Learning plan discusses providing resources and training for teachers (Family League of Baltimore and National Summer Learning Association, 2015). The plan also mentions mapping out the roles of tertiary staff, finding ways to better train and involve them. Members of the NSLA work collaboratively with other school boards, engaging in webinars and meetings, sharing resources, working together to promote summer learning (Family League of Baltimore and National Summer Learning Association, 2015). Being a member in this organization allows a more coordinated approach to summer learning.

Transition into school year: Under the goal of a shared vision and city-wide coordination, the Baltimore plan discusses the need to articulate a “city-wide, year-round collective impact vision” for Baltimore’s school-aged youth (Family League of Baltimore and National Summer Learning Association, 2015, p. 9). This means understanding summer learning in a broader sense, as a year-round, collective achievement.

6.4. Summary of findings

Now that the programs in each jurisdiction have been analyzed, I will identify the most important features that create achievement success for elementary school students. All three jurisdictions have summer learning programming targeted at students from low SES backgrounds, and there are several shared design features between the jurisdictions. These shared characteristics are discussed in Chapter 7.

Table 3. Case study summary.

Characteristic			New Zealand	Ontario, Canada	Baltimore, United States
Priorities surrounding literacy and summer learning	Stated goals, objectives, or priorities	Government has made literacy a stated priority.	Yes	Yes	Yes
		Government has made summer learning a stated priority.	No	No	Yes, Obama position paper

Characteristic			New Zealand	Ontario, Canada	Baltimore, United States
		Has the national or provincial level of government provided long-term funding for summer learning?	Focused on literacy during school year	Through poverty reduction strategy	No, separate funding for Title I schools
		Does a non-government organization or collective exist focused on summer learning?	No	No	Yes
		Who are the members of such a collective?	-	-	Public school districts, community organizations
Institutional structure	School characteristics	What is the length and structure of the average school year?	February to December	September to June	September to June
		What is a teacher's average salary?	\$36,000 - \$45,000	\$47,000	\$69,000
		Are schools allowed to adopt a compressed calendar?	Already in place	Yes	Yes
Learning opportunities	Session characteristics	One-time only, or ongoing?	One-time	Ongoing	Ongoing
		Hours per day?	2 hours	45 hours	Full day
		Weeks per summer?	Entire summer (4 weeks)	minimum over the summer	6 weeks
		How old are the target students?	Year 5	Kindergarten to Grade 3	Varying opportunities for all ages
	Support for parents and families	Partnerships with community organizations?	Yes	Yes	Yes
		Are parents or family members involved in programming?	No	Yes	Yes
	How are parents encouraged to participate?	-	Invitation to activities, morning sign-in	Not explicit	

Characteristic			New Zealand	Ontario, Canada	Baltimore, United States
		What is the cost to the family?	\$0	\$0	\$0
		Are low-income families required to pay fees?	-	-	-
	Support for children at risk of a summer setback	Which students are targeted?	No targeting	Focus on struggling and low SES students	Students entering transition years
		How are these students selected and recruited?	-	Teacher recommendations	Students from Title I schools
		How do programs maintain enrollment?	Alternative activities	Alternative activities, recreation focus	Student engagement, alternative learning and recreation
	Resources for teachers	Are teachers offered training?	No	No	Yes
		Do programs offer opportunity to test new models or ideas?	Yes	No	Yes
		Opportunities for collaboration between teachers?	Yes	No	Yes
	Transition into school year	Does the program offer a preparatory or transition phase?	Yes	No	Yes
		Does the program directly prepare students for the next year?	Yes	Not directly	Yes, focus on school transition years

Chapter 7.

Secondary methodology

This chapter analyzes the characteristics that are shared between the three jurisdictions that made up the case study analysis. I use literature reviews and semi-structured interviews with educational experts to assess the validity of five shared characteristics. It is difficult to rank the five characteristics in terms of importance, but they should be considered as a list of best practices that help support student success. Each section in this chapter expands on one of the characteristics.

7.1. Partnering with community organizations

The first characteristic that each of the three jurisdictions share is partnering with community organizations. Community partnerships provide opportunities for programs to expand their scope, offering extra services at a reduced cost. In Ontario, Scott Davies notes the success of community partnerships (S. Davies, personal communication, January 12, 2018). Partners such as the YMCA provide subsidized swimming lessons and, in some cases, organize transportation. Davies also gave the example of school boards organizing activities with local Aboriginal Friendship Centres.

These partnerships allowed Summer Learning Programmes to maintain a recreation focus and exist as an alternative to summer school. There is value in providing a recreation focus, but keep in mind that these programs are designed with academics at their core. Recreation and outdoor activities keep children engaged in the summer, but at their very core, these programs are focused on reducing summer achievement gaps.

Corporate partners were also used in a few key school boards, but there was no coordinated effort to obtain corporate funding. In New Zealand, partnering with libraries provides teaching space, extra instruction, and opportunities for families to further engage in reading. This partnership also helps to maintain enrolment by keeping classes engaging. In Baltimore, engaging with community partners opened up new funding streams, providing private sources to fund summer programming.

7.2. Targeting programs towards low SES students

The second shared characteristic is targeted programs for low SES students. One theory is that high-income parents will find a way to enrol their children in better quality programs and that “across-the-board programming” may widen achievement gaps (Ceci and Papierno, 2005). A clear difference exists between a limited program designed to narrow a societal gap and a universal program designed to narrow that same gap. Research has indicated that making interventions universally available may actually widen achievement gaps between high and low SES students—high SES students may progress at a faster rate in these programs and are likely to find their way into better quality programs (Ceci and Papierno, 2005). For example, in theory, Advanced Placement (AP) classes are universally available, but these classes are more likely to be offered in high-income, urban schools. AP enrolment and grades are closely linked to the socio-economic makeup of a school (Ceci and Papierno, 2005).

However, even when targeting programming to low SES students, compromises may need to be made. In Ontario, the student selection criteria were relaxed beyond what Davies and Aurini felt was ideal (S. Davies, personal communication, January 12, 2018). Generally, SLPs targeted struggling readers and low SES students, but they did not turn down students if they showed interest in the program. SLPs also allowed siblings to stay together, even if one was not struggling in reading (S. Davies, personal communication, January 12, 2018). The British Columbia (BC) Summer Reading Club (SRC) also attempts to focus on low SES students but still allows any interested student to attend (C. Ford, personal communication, January 30, 2018). This shows the value of compromise in program design; some program criteria may create the most significant impact in terms of academic achievement but are simply not feasible.

7.3. Providing programs free of charge and eliminating barriers

The third shared characteristic is that programs in all three jurisdictions are provided free of charge. BELL and the Baltimore Summer Funding Collaborative make use of private funding and economies of scale to lower public costs, allowing programs to remain free of charge. Programs in Ontario remain free, but as the program expands into more school districts the burden on the government will continue to grow. Programs

in New Zealand are also offered free of charge. Programs must also ensure that inequalities in fundraising do not create imbalances in programming across school boards.

Outside of cost alone, summer programming must also consider how to eliminate barriers for families, outside of the initial cost of a program. As noted by the British Columbia Teachers' Federation (BCTF), major barriers for families include: transportation, unstable program funding, unstable housing, family health, and language.

Significant to this capstone is the issue of transportation, which the BCTF notes as one of the four most common barriers preventing children from attending school. Low SES families, and especially one-parent families, may face difficulties leaving work at non-traditional times, creating challenges in bringing their children to and from programming. Fifty percent of low SES families in BC are one-parent families, and single parents may face further barriers if programs are not flexible to their needs (First Call BC Child and Youth Advocacy Coalition, 2017). Programs in Ontario started without major funding for transportation and took place predominately in urban areas. Davies acknowledges that transportation may have been a barrier for parents, and that future summer programs in rural areas should consider means to ease this transportation burden (S. Davies, personal communication, January 12, 2018). Cynthia Ford notes that in the summer children are often under the care of elderly relatives, who may have mobility issues making them unable to drive or take public transit (C. Ford, personal communication, January 30, 2018).

Government funding is another large-scale barrier. Cynthia Ford from the BCSRC notes that many SRCs in BC rely on summer staffing from the Canada Youth Works program. However, funding from this program can be volatile from year to year, and individual libraries may only find out that they received a summer intern in May (C. Ford, personal communication, January 30, 2018). In smaller communities, the SRC may be the only free summer program for kids, and when funding dries up it has a real impact on children's summer learning outcomes (S. Davies, personal communication, January 12, 2018).

Successful summer programs also make note of smaller barriers that may exist for families, which may include language skills. Ford addresses language issues by

offering letters in 20 different languages, by using drawings and graphics to make their resources accessible to non-readers, and by encouraging reading in any language (C. Ford, personal communication, January 30, 2018). Differing perspectives towards reading are another barrier. Ford mentions the need to expand what librarians and teachers consider as reading, thinking about alternative ways of learning such as verbal storytelling.

7.4. Providing programming throughout the summer

The fourth characteristic that each of the three jurisdictions share is that programs run as long as possible throughout the summer break, in an effort to have the largest possible impact. In the case of Ontario and Baltimore, day-long programming is provided every day of the week. The National Summer Learning Association (NSLA) sets six to eight weeks as the ideal length of a summer program (Smink & Deich, 2010). SLPs in Ontario ran for three to four weeks, although Davies mentions that a longer duration would have been preferred (S. Davies, personal communication, January 12, 2018). Parents and administrators in Ontario were resistant to a summer-long program (S. Davies, personal communication, January 12, 2018). Programs in New Zealand ran for the length of their shortened summer vacation. Longer programming is ideal, but compromises may need to be made to allow families to take time off and give time for schools to be repaired.

7.5. Offering teacher training and opportunities for collaboration

The fifth and final characteristic that two of the three jurisdictions share is the opportunity for teacher training and collaboration. Summertime offers unique opportunities to train teachers and to provide them with experience. In the case of Ontario and New Zealand, both informal and formal opportunities provide teachers with training and chances to collaborate. In New Zealand, the school-day structure provides teachers with time to collaborate with each other (Provist, 2013). In Ontario, SLPs hire many young teachers, who are able to use the summer to gain professional experience (S. Davies, personal communication, January 12, 2018). SLP teachers also began speaking with classroom teachers, sharing information about certain students' learning

progress (S. Davies, personal communication, January 12, 2018). However, in Baltimore there are few explicit example of teacher training being made a priority. Summer learning provides a unique opportunity to provide new teachers with experience, to test new ideas, and to provide opportunities for teachers to collaborate.

In summary, these five key themes drive success and make summer learning progress possible. These key characteristics support the following policy analysis.

Chapter 8.

Policy objectives, criteria and measures

This chapter outlines the policy objectives, describes the criteria and measures, and proposes three policy options to address the summer setback in British Columbia (BC). Each policy option is assessed, and a policy recommendation is provided.

8.1. Objectives

There are long- and short-term policy objectives for the three selected policy options. In the short term, policy should be used to coordinate summer learning across the province. Summer learning programs exist in libraries and school boards, but they pale in comparison to what exists in other jurisdictions.

In the long term, the province should be concerned with the growth of academic achievement gaps between students of different socio-economic backgrounds. The province should make a concerted effort to balance unequal learning rates that exist between high and low SES students. The province should also address larger issues of child poverty, using the knowledge that these socio-economic inequalities can lead to long-term achievement disparities.

The three policy options address the short-term objective of organizing summer learning across the province, and the long-term objective of addressing the long-term growth of achievement gaps between students.

8.2. Policy criteria and measures

The policy options are compared based on five criteria: effectiveness, equity, development, stakeholder, and cost. Each criterion is given one, two or three measures. Measures are evaluated using three rankings: high (3), medium (2) and low (1). After the measures are tallied each criterion's score is weighted, this process gives equal importance to each criterion—each one counts 20% towards the final score. After the scores are tallied, the policy option the highest score is given the strongest consideration as the selected policy option.

The choice to give each criterion the same weight was made to maintain objectivity. For this type of analysis, weighting criteria is a value-based process. If this analysis is re-evaluated in the future, this weighting can be revisited using a specific set of values. Some may object to this choice, seeing as it gives equal value to social and government management objectives. However, for the purpose of this analysis, this method of weighting is the most consistent and objective. Table 4 shows all the criteria with components and measures listed.

Table 4. Criteria and measures.

Criteria	Definition	Measure	Value
Effectiveness			
Scope of the selected policy option	Number of disadvantaged students impacted by the selected intervention	Number of students impacted	
		Province-wide (cities, towns, and rural areas) Province-wide (cities and towns) Province-wide (cities)	High = 3 Medium = 2 Low = 1
		Percentage of enrolled students that are members of target population (low SES students)	
		75-100% 50-74% 0-49%	High = 3 Medium = 2 Low = 1
Equity			
Equal access and the removal of barriers for parents and families	Ease of access to programming for low SES families	Weekly cost to the family	
		\$0 \$1-\$100 \$100+	High = 3 Medium = 2 Low = 1
		Daily duration of the program	
		Full-day (8 hours) Part-day (6-8 hours) Half-day (4 hours)	High = 3 Medium = 2 Low = 1
		Extent of other major barriers	High = 3 Medium = 2 Low = 1
Development			
Reading ability	Reading level improvement	Reading level improvement	
		Substantial improvement Moderate improvement Low improvement	High = 3 Medium = 2 Low = 1
Stakeholders			
Support from stakeholders	Level of acceptability	Parents and families of low SES children	High = 3 Medium = 2 Low = 1
		Teachers' associations in BC	High = 3 Medium = 2 Low = 1
Cost			
Budgetary impact of program or intervention	Annual cost of each policy option	Cost of intervention	High = 3 Medium = 2 Low = 1

Effectiveness: This criterion measures the scope of the selected policy option, assessing the number of students enrolled in summer programs. This criterion also

measures how targeted the selected option is, measuring the percentage of children enrolled who are members of the selected group. Each option is given a value of high, medium, or low for both measures. The final score is the average of the two individual measures.

Currently in BC, many separate organizations provide summer programs. Unlike in the three case study jurisdictions, programs in BC are not backed by research and lack the guidance or coordination seen in Ontario or Baltimore. This limits the number of children that are attending targeted, effective programs, with a clear intent to reduce summer learning inequalities. Across the country, approximately 36 percent of student from all socio-economic backgrounds attended summer camps in 2008. However, only 26 percent of students from the lowest income bracket attended summer camps (Access and Support to Education and Training Survey, 2008). Each of the three policy options explicitly targets low SES children, which in this case means that the options target the 153,300 children (18.5% of BC children) growing up in poverty across the province (First Call BC Child and Youth Advocacy Coalition, 2017). Ideally any policy option will get as close as possible to this 18.5 percent of children.

Equity: This criterion assesses whether a policy option reduces the barriers that prevent children from attending summer programming. Equity is measured by the ability of a policy option to remove these barriers and allow any motivated family to enrol their child in programming. Each policy option will be assessed on its ability to remove these barriers—whether it makes it easier for children from all socio-economic groups to take part in programs that are offered. The three key measures considered are: 1) the cost of the program; 2) the daily length of the program; and 3) other major barriers. Other major barriers may include issues such as transportation and are considered on a case-by-case basis. Chapters 2 and 3 discuss the barriers that parents experience, which may include the cost of summer programs or issues such as timing, the inflexibility of work hours, or transportation to activities.

Development: This criterion assesses the reading level improvement that low SES students gain over their peers through the course of each intervention. This measure will be estimated using data from similar programs, including Davies and Aurini (2012) as well as White, Kim, Kingston and Foster (2014). Options are ranked as substantial improvement, moderate improvement, or low improvement.

Stakeholder acceptance: This criterion assesses the level of acceptability for each policy option from the key stakeholder—parents and families of low SES children. In an interview, Davies mentions that families were supportive of the idea of summer programming but bristled after the Toronto Star framed the SLP as a program for poor families (S. Davies, personal communication, January 12, 2018). He also mentioned that parents and administrators were extremely resistant to a five- to six-week long program and held fast to the three- to four-week compromise. Cynthia Ford reiterates this point, as she mentions that some parents were resistant to a regimented reading program taking place in the summer (C. Ford, personal communication, January 30, 2018). Both key informants suggest that parents were resistant to an inflexible program taking up a significant amount of time during the summer. This criterion will measure stakeholder acceptance, trying to understand how issues of stigma and summer inflexibility may harm stakeholder acceptance. Based off the scope of this capstone follow up interviews with families and potential participants were not carried out. Therefore, stakeholder acceptance is estimated using this proxy measure.

Budgetary Impact: This criterion assesses the cost to government for each potential policy option. Lacking concrete details, this criterion is estimated and ranked as high cost, medium cost, or low cost.

8.3. Policy options

Policy options have been selected to address the significant gaps in how BC addresses academic achievement gaps caused by the summer setback (outlined in Chapter 4). Any chosen policy option must include phases of data gathering and analysis. It has become clear throughout this research that the province lacks information on the quantity and quality of summer learning in regions across BC. The province should look to the example in Ontario, where yearly reports were released to the public by Davies and Aurini.

Each of the three policy options provides a program that is open only to students from families below a given income threshold. This allows policy to explicitly target students most at risk of a summer setback. Policy options must also consider timing—successful programs in the past have focused on transitional years, such as the summer between elementary and secondary school.

Any policy option that is selected must also include a degree of flexibility, allowing local operators to adapt the program to meet their community's needs. This sentiment is noted by both Cynthia Ford and Scott Davies (S. Davies, personal communication, January 12, 2018; C. Ford, personal communication, January 30, 2018). Both of their respective summer learning programs provide local coordinators with the autonomy to adapt programming to meet community needs.

Several policy options are out of consideration; most notable is the idea of extending the school year while maintaining the number of instructional days. Although supported by notable researchers such as Charles Pascal, this policy option has not been adequately researched in Canada and proposing it as a province-wide solution would be inappropriate. It is best to continue to allow individual school boards to adopt year-round calendars.

8.3.1. Summer learning programs in a few key schools.

This policy option proposes a summer education program, similar to what was originally created in Ontario in 2011. This program would operate solely in low-performing, urban schools in BC. Potential schools could include: Cassie Hall in Terrace (ranked 947 out of 956 elementary schools) or Quinson (950) and Harwin (946) in Prince George (Cowley & Easton, 2017). This policy option could focus solely on schools in central and Northern BC, with other low-performing schools situated in Quesnel, Fraser Lake, and other northern cities.⁵ This program would be targeted at struggling readers and students with a demonstrated financial need. This program would not be open to all students, but would operate with a direct focus on closing achievement gaps by targeting low SES students. Teachers would play a role in nominating prospective children and encouraging them to attend. Programming would be provided throughout the day, five days a week, for eight weeks of the summer. This policy option would also target elementary-school-aged students. This works under the assumption that achievement gaps grow with time and are easier to close when students are still young.

This program would exist independently. Special consideration would be given to barriers for parents and families, with classes taking place in schools across the

⁵ See Appendix A. for a weighted ranking of schools and communities across the province.

province. By operating solely in large towns and cities, this program would have more control over barriers and external factors such as transportation and the location of programs. This program would work to make community partnerships with organizations such as the YMCA or park boards of various cities to provide recreational activities. The Vancouver Park Board already provides subsidized swimming lessons for students under the Swim to Survive program, a program that could be expanded into the summertime. This option should maintain a recreational approach to provide families with alternatives to summer camp, while keeping a focus on academics and reading level improvement.

The summer program would maintain the feel of a summer camp, but without the price tag. As mentioned previously, the program would include phases of data capture and analysis, with results used to better understand the summer setback in the province. Funding would come exclusively from the provincial government.

This policy option includes four of the five key characteristics discussed in Chapters 6 and 7. This option: 1) attempts to create partnerships with community organizations; 2) targets exclusively low SES and struggling students; 3) is provided free of charge and makes a note of reducing barriers for families; and 4) provides programming through the summer. However, teachers are not explicitly given extra training, although opportunities may arise for young teachers to be hired and gain experience.

8.3.2. Summer learning programs across BC.

This policy option would expand the previous policy option to school boards across the province. This would significantly increase the cost of the summer program, and in some cases barriers such as transportation in rural areas could be significant barriers for families. Programs operating in rural settings may face issues creating community partnerships. This option: 1) attempts to make partnerships with community organizations; 2) targets exclusively low SES and struggling students; 3) is provided free of charge; and 4) provides programming through the summer. However, teachers are not explicitly given extra training, and some barriers may not be addressable given the size of the prospective program. Issues may arise related to transportation in rural areas, and flexibility surrounding timing may be an issue given the increased size and cost of

the program. The duration of the program may need to be shortened to make up for the number of school boards that the program would be operating in.

8.3.3. Expand summer programs in libraries.

This policy option would expand upon the existing Summer Reading Club operated by the BCLA. The existing summer reading program has a proven record of reaching a substantial number of BC children. However, the current program has several shortcomings that are a result of low funding and staffing issues. This policy option would expand on the current program, increasing sessions from once a week to five days a week. The same types of children would still be recruited, with a focus on younger elementary-school-aged students from any socio-economic background. This option would also provide a permanent staffing solution, moving away from its reliance on the Canada Youth Works program (C. Ford, personal communication, January 30, 2018). Permanent funding would be given to hire summer students. Issues may arise with targeting low SES students, as the current program is open to students of all socio-economic backgrounds and tends to attract more eager readers.

This option only addresses three of the key characteristics. This option: 1) makes partnerships between government, libraries and local schools; 2) provides programming free of charge; and 3) provides programs throughout the summer. Teachers are not given extra training, and programs would not explicitly be able to only target low SES children.

Chapter 9.

Analysis of policy options

9.1. Policy option 1: Summer learning programs in a few key schools.

Effectiveness: By design, this option would not be open to every student across the province, and for this reason it would not substantially increase enrolment in summer programming. However, this policy option provides summer programming in a more targeted manner, directly servicing a greater proportion of low SES students and struggling readers. For this reason, this policy option is given two opposite scores. Similar programs have been used to address the summer setback in Aboriginal communities—Frontier College operates summer literacy programming in 83 communities across the country (Flanagan et al., 2013). These have been shown to be effective, although special care would need to be taken to maintain that programming remains culturally appropriate.

Equity: Following the example set by the Ontario Summer Learning Program (SLP), this program is provided free of charge and operates on a full-day basis in a central school location. This allows parents to easily enrol their children in the program, reducing the number of barriers that parents face in bringing their children on a daily basis. Because this program would run out of existing school locations, transportation would likely not be a problem, although arrangements would need to be made to operate school buses throughout the summer.

Development: Davies and Aurini (2012) demonstrate that students who attended the Ontario SLP lost one less month of reading compared to their peers. Qualitative evidence from their study points to increased attendance for children in the year following the SLP, as well as greater enjoyment and engagement with school in general (S. Davies, personal communication, January 12, 2018). Teachers and parents note that children in the program took more risks and showed greater enthusiasm for school.

Stakeholder acceptance: This policy option is targeted towards low SES students but is designed to resemble summer camp, providing children with a recreation focus on top of their academic activities. In this way, the program is not framed as a remedial summer school. However, reserving enrolment for students below an income threshold could create issues of stigma. At the same time, parents may object to the length of this program, because for it to have a significant impact, it should last upwards of six to eight weeks. Teachers and administrators may object to the length of the program, operating throughout the summer leaves little time for school maintenance. However, teachers should be supportive of this option, as it provides new opportunities for jobs in the summer, and more experience for young teachers. This leaves less time for parents to take advantage of their children's time off. For these reasons this option receives only a medium stakeholder acceptance score.

Budgetary impact: This program may come with a steep price tag, but due to the targeted nature and the impact of community partnerships, costs will remain within a reasonable range. If the ten worst-performing districts were selected, approximately 26 classes would be operated at a total cost of \$1,040,000. See Appendix E for more details on pricing.

9.2. Policy option 2: Summer learning programs across BC.

Effectiveness: This policy option provides every school board across the province with the opportunity to run a summer learning program. Because this policy option would operate on a significantly larger scale, there may be a number of students who benefit from the program who are not members of the target population. At this scale, it may be difficult to control enrolment. This creates redundancy, meaning that some of the students enrolled in the program would not be part of the target population. As with option 1 if this program was expanded in Aboriginal communities, care should be taken to ensure that programming is provided in a culturally appropriate manner.

Equity: Once again this program is offered free of charge, and would provide full-day child-care for parents, removing barriers for parents in the summer. However, shifting the program into rural areas and away from a dense urban setting creates some problems surrounding transportation. Either parents or the program operators would

need to take on a larger transportation burden, and it is unlikely that school buses could operate to pick up only a few children each morning.

Development: This program follows the same format as Option 1, which has shown a demonstrated benefit to low SES children over the summer.

Stakeholder acceptance: This policy option faces the same stakeholder acceptance benefits and issues as Option 1.

Budgetary impact: To reduce the prohibitive price of this type of program, operation would last three to four weeks, allowing time to perform yearly maintenance, and allowing parents opportunities to take time off. However, the cost of this type of program would be significant. If programs were offered in all 60 BC school districts, approximately 157 classes would be funded at a cost of \$2,355,000.

9.3. Policy option 3: Expand summer programs in libraries.

Effectiveness: The existing summer reading program in BC has already shown an ability to reach a significant number of children. In 2017, 82,000 BC students were registered in the BC Summer Reading Club (BCSRC), with closer to 177,000 actually interacting with it. However, these are not necessarily the targeted students, as the existing program encourages students from low SES backgrounds to register but likely attracts a higher proportion of high-achieving students who already use the library. This program also does not target Aboriginal students, and it is unclear if this option would improve Aboriginal literacy and achievement. A similar program in New Zealand had success directly linking summer programming in the library with a local public elementary school. These types of partnerships should be encouraged, to better target low SES students.

Equity: This option also provides free or subsidized programming to students, providing a good summer option for low-income parents. The existing program would be expanded to provide at least half-day sessions. However, this type of program would not provide full-day childcare and would not provide transportation. Expanding the program to full day would require a substantial budget and staffing increase, as well as issues with operating programs in already crowded libraries. This policy option allows parents flexibility in how they use their summers, but it places strains on parents who would still

need to rely on family or other social connections to transport and take care of their children.

Development: This option provides daily reading programs but also encourages children to come back to the library with their families. This may not have the same impact as a more intense summer program (Options 1 and 2), but it likely would have longer-term benefits encouraging parents and children to engage with learning.

Stakeholder acceptance: This option ranks high in terms of stakeholder acceptance. By maintaining a universal approach, this option is not distributed as a form of charity, thereby reducing issues of stigma. This option allows parents flexibility in how they use the summertime—classes are free and voluntary. This option does not rely on using school space, but it also does not provide employment opportunities for teachers in the summertime.

Budgetary impact: This option is the least expensive of the three proposals. It builds off an already existing program and only provides extra funding for permanent summer student staff. Hiring one summer student for every BC library would cost approximately \$363,520.

Table 5 summarizes the outcomes of the policy analysis.

Table 5. Policy analysis.

	Option 1:	Option 2:	Option 3:
	Key schools only	Across the province	Expand library programming
Effectiveness			
Number of students impacted	Key schools only <i>Medium = 2</i>	Across the province <i>High = 3</i>	Across the province <i>High = 3</i>
Percentage of enrolled students that are members of target population	100% <i>High = 3</i>	100% <i>High = 3</i>	0-50% <i>Low = 1</i>
Weighted Total	2.5	3	2
Equity			
Weekly cost to families	\$0 <i>Low = 3</i>	\$0 <i>Low = 3</i>	\$0 <i>Low = 3</i>
Daily duration	Full-day <i>High = 3</i>	Half-day <i>Low = 1</i>	Half-day <i>Low = 1</i>
Extent of other major barriers	Minimal <i>Low = 3</i>	Moderate <i>Medium = 2</i>	Moderate <i>Medium = 2</i>
Weighted Total	3	2	2
Development			

Reading level improvement	Substantial improvement <i>High = 3</i>	Substantial improvement <i>High = 3</i>	Moderate improvement <i>Medium = 2</i>
Stakeholder acceptance			
Parents and families of low SES children	Medium <i>Medium = 2</i>	Medium <i>Medium = 2</i>	High <i>High = 3</i>
Teachers' associations in BC	Medium <i>Medium = 2</i>	Medium <i>Medium = 2</i>	Medium <i>Medium = 2</i>
Weighted Total	2	2	2.5
Budgetary impact			
Cost of intervention	Medium <i>Medium = 2</i>	High <i>High = 1</i>	Low <i>Low = 3</i>
Total	12.5	11	11.5

9.4. Policy Recommendation

In the results, Options 2 and 3 finished with nearly identical scores, while Option 1 ranked the highest. There are trade-offs between these options. Creating summer learning programs across the province provides an effective form of summer learning for all BC students. However, reducing the scope of this program keeps costs more manageable and more directly fits the intention of this capstone research. For these reasons, Option 1 scored high in the equity and budgetary impact categories. This policy option also includes the greatest number of key characteristics as determined by the case study analysis. For these reasons I recommend creating targeted summer education programs in key, low-performing schools across BC. Table 6 summarizes the results of the policy analysis.

Table 6. Policy analysis summary.

	Option 1:	Option 2:	Option 3:
	Key schools only	Across the province	Expand library programming
Effectiveness	2.5	3	2
Equity	3	2	2
Development	3	3	2
Stakeholder acceptance	2	2	2.5
Budgetary impact	2	1	3
Total	12.5	11	11.5

Chapter 10.

Conclusion

This capstone attempts to address educational inequality among children of differing socio-economic backgrounds. In addition, when examining the summer setback, it is shown to contribute to the growth of achievement gaps in British Columbia (BC). A literature review and background section provide a better understanding of the summer setback in Canada and BC. However, BC lacks direct research outlining this trend. Due to BC's severe rates of child poverty and greater issues of inequality between schools, the literature suggests summer learning inequality is a major concern. An analysis of case studies identifies what factors should be taken into account. The analysis indicates that successful jurisdictions: 1) engage with community organizations; 2) exclusively target low SES students; 3) operate free of charge; 4) provide programming throughout the summer; and 5) provide training and opportunities to collaborate for teachers. This process allows three policy options to be decided.

Three policy options are considered: 1) providing targeted summer learning programs in key low SES schools across the province; 2) providing province-wide summer learning programs to any school board showing interest; and 3) expanding existing summer learning programs in libraries. These options are assessed using a criteria and measures approach, and I determine that providing targeted learning opportunities in key low SES schools is the most effective method to reduce the growth of achievement gaps through the summer setback.

This analysis is sound but, of course, not perfect. This capstone was carried out over the course of two semesters, and, due to time constraints, only a few interviews were carried out. Future research should engage with stakeholders and gain data on summer learning rates across the whole province of BC.

But it is clear that BC faces serious issues of child poverty and educational inequality. Schools tell children that they can work hard and succeed in school. In that context, many children all across the province start at a disadvantage and are being let down by the current education system. Thus, the recommendations provided by this capstone fill the gap in educational attainment created by the summer setback.

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Appendix A.

Weighted elementary school rankings

Table A1 ranks communities across BC. Scores from elementary schools are weighted to provide a standard score for each community. Every school in every community counts towards the weighted average. The data from this analysis is taken from the Fraser Institute.

Table A1. Weighted elementary school ranking, 2015 / 2016.

Community	Weighted average school rating	Ranking (Out of 158)
West Vancouver	9.4	1
Lister	8.6	2
Fort Nelson	8.5	3
Bowen Island	8.3	4
Hudson's Hope	8.1	5
Lantzville	8.0	6
Baldonnel	7.9	7
Nakusp	7.9	8
Telkwa	7.7	9
Sicamous	7.4	10
Whistler	7.3	11
Richmond	7.2	12
Halfmoon Bay	7.2	13
Jaffray	7.2	14
Pender Island	7.2	15
Rossland	7.2	16
Burnaby	7.1	17
Fernie	7.1	18
North Vancouver	7.0	19
Vancouver	7.0	20
Coldstream	7.0	21
Port McNeill	6.9	22
Canoe	6.8	23
Cobble Hill	6.8	24
Princeton	6.8	25
Nelson	6.7	26
Windermere	6.7	27
Smithers	6.7	28

Community	Weighted average school rating	Ranking (Out of 158)
Abbotsford	6.6	29
Fort Langley	6.6	30
Roberts Creek	6.6	31
Port Moody	6.6	32
Nanoose Bay	6.5	33
Rosedale	6.5	34
Skidegate	6.5	35
Anmore	6.4	36
Charlie Lake	6.4	37
New Westminster	6.4	38
Chilliwack	6.3	39
Kaleden	6.3	40
Summerland	6.3	41
Fort St John	6.3	42
Penticton	6.2	43
Edgewater	6.2	44
Invermere	6.2	45
Sidney	6.2	46
Kamloops	6.2	47
Comox	6.1	48
Gibsons	6.1	49
Coquitlam	6.1	50
Fruitvale	6.1	51
Kitimat	6.1	52
North Saanich	6.1	53
Okanagan Falls	6.1	54
Surrey	6.1	55
Westbank	6.1	56
Langley	6.1	57
Victoria	6.1	58
Sechelt	6.1	59
Squamish	6.0	60
Oliver	5.9	61
Osoyoos	5.9	62
Royston	5.9	63
Duncan	5.9	64
White Rock	5.9	65
Delta	5.8	66
Vernon	5.8	67
Clearwater	5.8	68

Community	Weighted average school rating	Ranking (Out of 158)
Cowichan Bay	5.8	69
Port Coquitlam	5.8	70
Barriere	5.7	71
Garibaldi Highlands	5.7	72
Salt Spring Island	5.7	73
Aldergrove	5.6	74
Cawston	5.6	75
Hope	5.6	76
Revelstoke	5.6	77
150 Mile House	5.5	78
Brentwood Bay	5.5	79
Cumberland	5.5	80
Golden	5.5	81
Kelowna	5.5	82
Salmon Arm	5.5	83
Houston	5.4	84
Maple Ridge	5.3	85
Tumbler Ridge	5.3	86
Ucluelet	5.3	87
Powell River	5.3	88
Brackendale	5.2	89
Lazo	5.2	90
Prespatou	5.2	91
Taylor	5.2	92
Valemount	5.2	93
Winfield	5.2	94
Dewdney	5.1	95
Dawson Creek	5.1	96
Cranbrook	5.0	97
Errington	5.0	98
Grand Forks	5.0	99
Kimberley	5.0	100
Lone Butte	5.0	101
Lumby	5.0	102
Mission	5.0	103
Terrace	4.9	104
Port Alberni	4.9	105
100 Mile House	4.9	106
Elkford	4.9	107
Pemberton	4.9	108

Community	Weighted average school rating	Ranking (Out of 158)
Trail	4.9	109
Castlegar	4.9	110
Williams Lake	4.8	111
Lower Nicola	4.8	112
Campbell River	4.7	113
Courtenay	4.7	114
Prince George	4.7	115
Cherryville	4.6	116
Parksville	4.6	117
Rock Creek	4.6	118
Merritt	4.6	119
Crescent Valley	4.5	120
Merville	4.5	121
Tappen	4.5	122
Ladysmith	4.5	123
Vanderhoof	4.4	124
Prince Rupert	4.3	125
Nanaimo	4.3	126
Sparwood	4.2	127
Chetwynd	4.1	128
Black Creek	4.1	129
Qualicum Beach	4.1	130
Lillooet	4.1	131
Agassiz	3.9	132
108 Mile Ranch	3.8	133
Chase	3.8	134
Creston	3.8	135
Gold River	3.8	136
Sorrento	3.8	137
Chemainus	3.7	138
Cultus Lake	3.7	139
Mackenzie	3.6	140
Shawnigan Lake	3.6	141
Crofton	3.5	142
Pitt Meadows	3.5	143
Armstrong	3.4	144
Ashcroft	3.4	145
Bowser	3.4	146
Oyama	3.3	147
Tofino	3.3	148

Community	Weighted average school rating	Ranking (Out of 158)
Fort St James	3.1	149
New Hazelton	2.7	150
Quesnel	2.4	151
Port Hardy	1.9	152
Erickson	1.6	153
Hazelton	1.6	154
Sooke	1.5	155
Burns Lake	1.2	156
Enderby	1.0	157
Fraser Lake	0.0	158

Source: Cowley & Easton (2017)

Appendix B.

List of key informants

This appendix outlines when key informant interviews were conducted. Two key informant interviews were conducted to gather background information and confirm the suitability of the key criteria found through the analysis.

Key Informant	Position	Date of Consultation
Scott Davies	Canada Research Chair in Data, Equity and Policy in Education	January 12, 2018
Cynthia Ford	Provincial Coordinator, BC Summer Reading Club	January 30, 2018

Appendix C.

Timing of the school year

The structure and timing of the school year plays an important role in creating socio-economic academic achievement gaps. The public education system in Canada is a provincial responsibility. School is compulsory until the age of 16 in every province but Ontario, Manitoba, and New Brunswick where school is compulsory until 18 (Council of Ontario Directors of Education, 2014). The province sets the curriculum and the number of hours that schools must stay in session. The majority of elementary and secondary schools start in September and finish by the end of June.

Appendix D.

Baltimore

Following the community snapshot, administrators in Baltimore used the NSLA's Community Indicators of Effective Summer Learning Systems framework to guide summer learning policy. This framework includes six key indicators: shared vision and city-wide coordination, engaged leadership, data management, continuous quality improvement, sustainable resources, marketing and communications.

The workgroups decided on a number of key themes to address in future policy. The workgroups specifically mentioned the need for collaboration between stakeholders in order to create a larger year-round conversation regarding summer education. Relevant to this goal, Baltimore Public Schools launched a "partnership-brokering" effort, which involved creating partnerships between local community organizations, using a working group of key stakeholders including the Public Library system and the Department of Parks and Recreation. This type of partnership allows fundraising to be carried out collectively and creates shared economies of scale. Lessons can be taken from the intense organization and community planning that was carried out across the city.

Appendix E.

Pricing

The Ontario SLP operates at \$15,000 per class, with a minimum of 15 students in each class (Council of Ontario Directors of Education, 2017). Children are in class for three weeks, either full or half days, equaling 45 hours to 90 hours over the course of the summer. This comes out to \$5,000 per week. The program becomes more efficient when more children are enrolled in each class. In its first year, 71 classes in 27 school boards were offered (Davies & Aurini, 2010). This comes out to 2.62 classes per school board.

Policy Option 1 expands programming to eight weeks, six hours a day, which comes out to 240 hours over the course of the summer. Taking the assumptions from the Ontario SLP, this program would cost at least \$40,000 per class (\$5000 per week * 8 weeks). If the ten worst performing districts were chosen, 26 BC summer learning program would be offered, at a cost of \$1,040,000.

Policy Option 2 keeps the same funding structure as the Ontario SLP, guaranteeing 45 hours of class time, and \$15,000 per class. Assuming that all 60 BC school boards take part, in its first year 157 BC summer learning programs would be offered, requiring a budget of \$2,355,000.

Policy Option 3 requires extra funding to provide a permanent staffing solution for each individual library. There are 71 public libraries across BC. The average wage for a BC summer student in the government is approximately \$16 per hour (Province of British Columbia, 2018). Hiring one full-time student for eight weeks in each library would cost a total of \$363,520.